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

F

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

July 10, 2007

Mr. Satya Sinha
Chevron Environmental Management Co.
P.O. Box 6012, Room K2256
San Ramon, CA 94583

Mr. Shaddrick Small, Oakland Housing Authority
1805 Harrison St.
Oakland, CA 94612

Dear Messrs. Sinha and Small:

Subject: Fuel Leak Case RO0000143 & Global ID T0600100304, Chevron #9-0020, 1633 Harrison St., Oakland, CA 94612

Alameda County Environmental Health (ACEH) has spoke with your consultant, CRA and reviewed their 7/10/07 e mail response regarding the post excavation sampling of the proposed northeast excavation. We concur with the proposed sampling/screening approach and conditionally approve the June 28, 2007 Remedial Action Plan for this site. Prior to closure consideration, we shall require additional post-excavation soil vapor sampling, your Remedial Action Plan Report, and off-site plume delineation and risk assessment

If you have any questions, please call me at (510) 567-6765.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

cc: files, D. Drogos
Ms. Charlotte Evans, CRA, 5900 Hollis St., Suite A, Emeryville, CA 94608
Ms. Jeriann Alexander, FugroWest, Inc., 1000 Broadway, Suite 200, Oakland, CA 94607

7_10_07 1633 Harrison St

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

F

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

July 5, 2007

Mr. Satya Sinha
Chevron Environmental Management Co.
P.O. Box 6012, Room K2256
San Ramon, CA 94583

Mr. Shaddrick Small, Oakland Housing Authority
1805 Harrison St.
Oakland, CA 94612

Dear Messrs. Sinha and Small:

Subject: Fuel Leak Case RO0000143 & Global ID T0600100304, Chevron #9-0020, 1633 Harrison St., Oakland, CA 94612

Alameda County Environmental Health (ACEH) has reviewed the files for the subject site including the June 28, 2007 Vapor Probe Survey Report and the June 28, 2007 Remedial Action Plan for the referenced site prepared by Conestoga-Rovers & Associates (CRA). The first report provides soil and soil vapor sampling results evaluating petroleum and chlorinated solvent releases. The second report provides a work plan proposing on-site remediation to address the soil vapor results and the impacted area near MW-7, which may affect the off-site contamination release. Please address the following technical comments when performing the proposed work.

TECHNICAL COMMENTS

1. Post Excavation Sampling- Although no samples are proposed for sampling from the excavation in the northeast corner of the site, (excavation is proposed below estimated depth to groundwater and prior soil data predicts no impact), we request that minimally some type of screening method be performed to estimate the amount of residual petroleum contamination remaining after your bucket augering soil excavation. Please describe what type of screening method will be performed on the post-excavation samples and the frequency of this screening.

2. Excavation of Former Used Oil Tank Pit- The excavation of the former waste oil tank pit is not based upon past analytical data but rather on the suspicion of contamination since no sampling in this area was originally done and the most elevated soil vapor sample, VP-1, was detected in this location. Therefore, the limits of the proposed excavation (5'x10'x10') should be expanded as necessary to define the lateral and vertical extents of contamination.

3. Post-Excavation Monitoring Well Installation- Because MW-7 will be decommissioned during the proposed excavation at least one replacement well will be required to monitor the results of the remediation. Locations within the sidewalk or parking lane are acceptable. Please provide a work plan for the replacement well(s) in your excavation report.

4. Additional soil vapor sampling will be done after the remediation plus another risk assessment based on the new results. Please provide the location(s) of the new soil vapor well(s) in your excavation report.

5. We concur that any other contamination encountered during site development should be defined, remediated and sampled. In the absence of encountering additional contamination during the excavation and development activities, no additional on-site remediation will be required by our office.

6. Off-site Investigation shall be performed as requested below.

TECHNICAL REPORT REQUEST

We understand the exact schedule of this work is tied to the beginning of the proposed construction. Please submit the following technical reports according to the following schedule:

- July 12, 2007- Notification of Screening Method and Frequency of Screening
- 60 days after site excavation- Excavation Report, work plan for off-site monitoring well installation and soil vapor well(s).
- 60 days after site excavation - Work plan for off-site plume delineation and off-site risk evaluation.

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board for more information at (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

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.

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.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

If you have any questions, please call me at (510) 567-6765.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

cc: files, D. Drogos
Ms. Charlotte Evans, CRA, 5900 Hollis St., Suite A, Emeryville, CA 94608
Ms. Jeriann Alexander, FugroWest, Inc., 1000 Broadway, Suite 200, Oakland, CA 94607

7_3_07 1633 Harrison St

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

June 6, 2007

Mr. Satya Sinha
Chevron Environmental Management Co.
P.O. Box 6012, Room K2256
San Ramon, CA 94583

Mr. Shaddrick Small, Oakland Housing Authority
1805 Harrison St.
Oakland, CA 94612

Dear Messrs. Sinha and Small:

Subject: Fuel Leak Case RO0000143 & Global ID T0600100304, Chevron #9-0020, 1633 Harrison St., Oakland, CA 94612

Alameda County Environmental Health (ACEH) has reviewed the files for the subject site including the May 2, 2007 Risk Assessment and Proposed Vapor Survey prepared by Conestoga-Rovers & Associates (CRA). The work plan responds to the May 11, 2007 County e mail requesting soil vapor sampling and evaluation of the off-site release at the subject site. An on-site risk assessment of volatile organic compounds (VOCs) was also performed, although halogenated VOCs were not evaluated. To evaluate for halogenated VOCs and obtain current TPH and VOC data for evaluation, soil vapor sampling is proposed. Although we have no objections with this work we request you address the following technical comments when performing the proposed work.

TECHNICAL COMMENTS

1. Vapor Probes and Sampling- Four vapor probe locations are proposed along 17th St and Harrison Street beneath the proposed building. Since it is unclear the source(s) of the HVOCs, we request that two additional soil vapor locations be added to the investigation, one near former well MW-4 and one between former wells MW-2 and MW-3. Two soil vapor probes are proposed, one at 5'bgs and one at 10' bgs in a nested well. We are concerned about the ability to obtain an acceptable seal between the vapor probes, therefore, discrete boreholes are recommended for your probes. Soil samples are proposed to be taken for analysis, however, their depths are not stated. A hand auger sample from soil samples collected above 8' bgs is proposed. We recommend screening one hole for volatiles its entire length and then sampling undisturbed soil in an adjacent hole at the apparent impacted depths. One hole would have the shallow probe and the other the deeper.

2. Extent of contamination- We have previously requested, however your work plan does not address, the delineation of the plume off-site and the determination if on-site remediation is necessary. An evaluation of risk to off-site receptors must also be performed. Please provide this technical information as requested below.

TECHNICAL REPORT REQUEST

Please submit the following technical reports according to the following schedule:

- July 6, 2007- Revised work plan addressing additional vapor probes, vapor probe construction and soil sampling
- July 6, 2007- Work plan for off-site plume delineation and off-site risk evaluation.

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board for more information at (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

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.

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.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

If you have any questions, please call me at (510) 567-6765.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

cc: files, D. Drogos
Ms. Charlotte Evans, CRA, 5900 Hollis St., Suite A, Emeryville, CA 94608
Ms. Jeriann Alexander, FugroWest, Inc., 1000 Broadway, Suite 200, Oakland, CA 94607

6_6_07 1633 Harrison St

Alameda County Department of Environmental Health
Hazardous Materials Division

RO143

Meeting Attendees

Subject 1633 Harrison St - Oakland

Date 5-8-07

Location ACEH

	Name	Affiliation	Phone # / FAX # /email
1	Barney Chan	ACEH	567-6765 / 337-9335
2	Donna Drogos	ACEH donna.drogos@acgov.org	567-6721 567-6760
3	Jeniam Alexander	Figure	510-267-4401
4	Charlotte Evans	CRA	510-420-3351
5	Robert Foss	CRA	510-420-3348
6	Thad Small	OHA	(510) 587-2144/587-2145
7	SATYA SINHA	CHEVRON EMC	925-842-9876
8			/
9			/
10			/
11			/
12			/
13			/
14			/
15			/
16			/
17			/

HM MtgAttendees 1/94 mk

Fugro West, Inc.
1000 Broadway, Suite 200
Oakland, California 94607-4099
Direct Line : 510-267-4401
Phone : 510-268-0461
Fax : 510-268-0137
E-Mail : jalexander@fugro.com
Internet : www.fugrowest.com

JERIANN N. ALEXANDER, P.E., R.E.A.
principal engineer

SHADRICK H. SMALL
HOUSING DEVELOPMENT
PROGRAM MANAGER

Housing Authority
of the City of
Oakland, California

1805 Harrison Street Oakland, California 94612
Phone (510) 587-2144 • FAX (510) 587-2145
Email: ssmall@oakha.org

CONESTOGA-ROVERS
& ASSOCIATES

Charlotte Evans
5900 Hollis Street, Suite A
Emeryville, CA 94608
Office: 510.420.0700
Direct: 510.420.3351
Fax: 510.420.9170
cevans@CRAworld.com
Cell: 510.386.0387

www.CRAworld.com
Worldwide Engineering, Environmental, Construction, and IT Services

Ro143

Chan, Barney, Env. Health

To: Shad Small; Sinha, Satya P

Cc: Drogos, Donna, Env. Health

Subject: 1633 Harrison St., Oakland

Mr. Small: Because the site is proposed for senior housing, residential exposure evaluation must be done. Because of past halogenated solvent concentrations in groundwater, past gasoline benzene and toluene concentrations in groundwater and residual gasoline in soil, shallow soil vapor sampling will be required prior to onsite residential development concurrence. In addition, because of off-site contamination, an evaluation of whether on-site remediation is required as part of the requested feasibility study and corrective action plan (FS/CAP). Additional off-site investigation and risk evaluation will be required for site closure. If this jeopardizes your project, you may not be able to meet your HUD deadlines. We can discuss this next week, Tues PM or Wed AM if you like.

Sincerely,

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

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

April 27, 2007

Mr. Satya Sinha
Chevron Environmental Management Co.
P.O. Box 6012, Room K2256
San Ramon, CA 94583

Mr. Shaddrick Small, Oakland Housing Authority
1805 Harrison St.
Oakland, CA 94612

Dear Messrs. Sinha and Small:

Subject: Fuel Leak Case RO0000143 & Global ID T0600100304, Chevron #9-0020,
1633 Harrison St., Oakland, CA 94612

Alameda County Environmental Health (ACEH) has reviewed the files for the subject site including the April 23, 2007 Workplan for Additional Soil Impact Definition prepared by Conestoga-Rovers & Associates (CRA). The work plan proposes to delineate the assumed source of petroleum contamination in the northeast corner of this site by drilling 2-3 borings up-gradient of MW-7 and sampling soil and groundwater. Although we have no objections with this work we request you address the following technical comments when performing the proposed work.

TECHNICAL COMMENTS

1. Proposed boring depths- We request that you attempt to determine the lateral and vertical extent of contamination. Therefore, you should if necessary increase the number of borings and the depth of the borings to accomplish this request.
2. Proposed boring samples- We request that you minimally sample and screen soil at 5' depth intervals, at changes in lithology and at signs of contamination. Samples should be analyzed at any sign of contamination.
3. Extent of contamination- We believe the contamination detected in off-site well MW-16 is from the release from this site. MW-16 is down-gradient of the known contamination area. Future actions should include the further delineation of the plume off-site and determination if remediation is necessary. An evaluation of impact and risk to off-site receptors must also be performed.

TECHNICAL REPORT REQUEST

Please submit the following technical reports according to the following schedule:

- May 28, 2007- Soil and Groundwater Investigation Report
- May 28, 2007- Risk Assessment and Feasibility Study

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline

the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board for more information at (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

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.

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.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

If you have any questions, please call me at (510) 567-6765.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

cc: files, D. Drogos
Ms. Charlotte Evans, CRA, 5900 Hollis St., Suite A, Emeryville, CA 94608
Ms. Jeriann Alexander, FugroWest, Inc., 1000 Broadway, Suite 200, Oakland, CA 94607

4_26_07 1633 Harrison St

Ro 143

State Water Resources Control Board

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

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

JUN 16 2006

CHEVRON PRODUCTS COMPANY
STACIE HARTUNG-FRERICHS
P O BOX 6004 BLDG V
SAN RAMON, CA 94583-0804

UNDERGROUND STORAGE TANK CLEANUP FUND (FUND), CLAIM NO. 005784, FOR SITE ADDRESS: 1633 HARRISON 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 $54,671. 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.

All invoices must be billed in claimants name and checks paying for invoices must come from the claimant as listed on the application. Any other invoicing and payment arrangements must be received and approved by the Fund or cost may not be reimbursed.

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. If you have any questions about 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 and Information packages. **Retain these packages 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:**
Signature(s) on the application will be the signature(s) required for all future Fund documents.

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 Ginny Lagomarsino at (916) 341-5722.

Sincerely,

Ronald M. Duff, Manager
Underground Storage Tank Cleanup Fund

Enclosures

cc: Mr. Chuck Headlee
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

CAMBRIA

February 25, 2005

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

RE: 1633 Harrison St, Oakland
ACHSCA RO#: 0000143

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 #: 90020

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

November 18, 2003

Ms. Karen Streich
Chevron USA, Inc.
PO Box 6004
San Ramon, CA 94583-0904

Mr. Martin Zone
Oakland Housing Authority
1805 Harrison St.
Oakland, CA 94612

Subject: Fuel Leak Case No. RO0000143, Chevron #9-0020, 1633 Harrison St., Oakland, CA

Dear Ms. Streich & Mr. Zone:

Alameda County Environmental Health staff has reviewed "Additional Investigation Workplan" dated August 6, 2003 by Cambria Environmental Technology, Inc., "Re: Additional Investigation Workplan" from Oakland Housing Authority dated August 26, 2003, and "OHA Comments on Additional Investigation Work Plan" from ChevronTexaco dated August 28, 2003. Please incorporate the supplemental work stated in the ChevronTexaco letter dated August 28, 2003. Your Work Plan is approved if you are agreeable to our comments. We request that you address the following technical comments, perform the requested work, and send us the technical reports requested below.

TECHNICAL COMMENTS

1. Soil Boring by MW-7: Relocate the proposed boring so as to be downgradient (east) of MW-7. 50,000 ppm TPHg was reported in a sample collected at 23.5 fbg in well MW-7. Cambria's boring will be sampled at depths concurrent with the previously reported hydrocarbon impacts (19 fbg and 23.5 fbg).
2. Boring Depths: Increase the depths to 30 fbg. The bottom of MW-6 was at 26 fbg where slight to moderate odors were observed.
3. Collection of Soil Samples: Instead of collecting soil boring samples every 5 ft., as proposed, soil samples shall be collected at a minimum of every 5 ft., including at changes of lithology, at the soil/groundwater interface, and at areas of obvious contamination.
4. Soil Sample ES-8C: In January 1992, hydrocarbon impacted soil was removed from the vicinity of MW-4. The confirmation soil sample collected from the south excavation wall at 8 ft. bgs contained detectable hydrocarbons, TPH-G at 310 ppm and TPH-D at 270 ppm. Please install a boring downgradient (east) of ES-8C.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Don Hwang), according to the following schedule:

- 60 days after Work Plan approval – Soil and Water Investigation Report

If you have any questions, call me at (510) 567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist
Local Oversight Program

C: Robert Foss, Cambria Environmental Technology, Inc. 5900 Hollis St, Suite A, Emeryville, California 94608

File

Environmental Management Company
6001 Bollinger Canyon Rd, L4050
P.O. Box 6012
San Ramon, CA 94583-2324
Tel 925-842-1589
Fax 925-842-8370

Karen Streich
Project Manager

ChevronTexaco

August 28, 2003

Mr. Martin Zone
Oakland Housing Authority
1805 Harrison Street
Oakland, CA 94612

Re: OHA Comments on Additional Investigation Work Plan
Former Chevron Service Station #9-0020 1633 Harrison Street, Oakland

Dear Martin,

We received the copy of your letter to Don Hwang at Alameda County Health Care Services (ACHCS) dated August 26, 2003 with comments on the referenced work plan. I apologize for not providing you with a draft of the work plan prior to submittal to the agency. I thought it was fairly straightforward and incorporated what we discussed in our meeting with Don on June 10, 2003. However, I will have you review future draft reports before they are submitted.

In response to your comments:

1. *The ACDEH letter referenced in the first paragraph is actually dated September 10, 2002.*
Agreed

2. *To clarify the ownership it should be noted that the Oakland Housing Authority owns the subject property. To assist in the redevelopment of the downtown area, OHA is pursuing government assisted financing for the development of this site, which is being considered for a multi-story senior housing facility. It is anticipated that parking will be included in the project.*
Agreed

3. *The property is currently leased by OHA to a parking lot management firm that operates a "fee" based parking business. The lot is paved and striped, and is in heavy daily use.*
Agreed

4. *ACDEH requested that the effectiveness of the previous ORC groundwater remediation/ treatment activities be included in this work plan. However, the proposed scope only addresses the ORC effectiveness in one well (MW-7), as that is the only existing onsite well. Use of the data obtained from well MW-7 may or may not be representative of existing conditions throughout the site. This finding will be critical in the evaluation of potential risks posed, and as such the collection of additional groundwater samples may be required.*

   Groundwater samples were collected for multiple years between 1988 and 1995 at multiple wells well distributed across the site (MW-1 through MW-8). Specific dates and results are provided in the attached quarterly monitoring report, which is routinely distributed to Mr.

Howard Davis at your office. The results for all wells except MW-7 were consistently below laboratory reporting limits, with occasional detections of total petroleum hydrocarbons as gas (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX) near the reporting limits. All wells except MW-7 have been destroyed with the approval of ACHCS because of the consistent results. Additional groundwater sampling at this site is not warranted.

The re-development of MW-7 and the additional soil samples collected near MW-7 will be adequate to assess the risk in the area of the site where past data indicate there may be elevated concentrations of petroleum constituents.

5. *The chemical analyses suite proposed is abbreviated from the list of analytes requested by ACDEH in its September 10, 2002 letter. The requested testing program was to include Halogenated Volatile Organic Compounds in addition to a broader screening of fuel additives.*

ACHCS acknowledged in a letter dated November 4, 1992 that halogenated volatile organic compounds (HVOCs) are not associated with past service station operations. However, we will use past groundwater data for HVOCs for the risk evaluation. Historical analytical results indicate that HVOCs are not present in site soils. However, we will analyze selected soil samples collected during work plan implementation for HVOCs to provide data for waste disposal characterization and which can be incorporated into the risk evaluation.

6. *As discussed at the June 10, 2003 meeting, the risk evaluation should include an assessment of risks posed to both construction workers and future residential occupants of the facility. Further, the ACDEH indicated that the risk evaluation should take into consideration both the RWQCB and City of Oakland risk based screening levels.*

We will evaluate the risk to construction workers as well as the future occupants of the facility.

7. *ACDEH needs to be aware that the final work schedule and ensuing logistics need to be worked out with OHA and its tenant. Both parties will need sufficient and timely notification of the proposed work schedule so that we can work within the framework of the existing lease, or hold off until the expiration of the lease on December 2, 2003, at which time the lease will become a month-to-month lease. Toward this end:*

- *OHA needs to be informed as to whether the site needs to be completely or partially vacated,*

  You and I discussed the issue of communication and logistics and I agreed that Cambria would work closely with you on the site work schedule so that we can work within the lease agreement with the parking company.

- *OHA needs to be informed as to the duration of time that will be necessary to conduct the proposed work,*
  Same as previous.

- *OHA needs to know where the wastes derived from the investigation will be staged and for how long,*

  Soil cuttings and water will be drummed and labeled and will be staged at the site for 1 to 2 weeks while we get analytical results and can arrange for disposal. The drums will not take up more space than approximately 1 parking space.

- *OHA needs to be kept informed as to the content of such waste material and the hazards and liability such material might present, and*

  Based on previous site data, wastes will be nonhazardous and will be labeled accordingly. Chevron will accept liability for managing the wastes.

- *Proper and sufficient notification regarding the scheduling of the waste removal will be required.*

  Cambria will notify OHA of the waste removal schedule.

I hope that your future review of draft documents will allow us to work these issues out before involving ACHCS. As soon as we receive approval of the work plan by Don Hwang, Cambria will contact you and work with you as they schedule the work.

Please call me if you have any questions or want to discuss any of these issues further. My number is 925-842-1589.

Sincerely,

Karen Streich

Karen Streich
Project Manager

Copy to:
Mr. Don Hwang, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Suite 250, Alameda , CA 94502-6577
Mr. Bob Foss, Cambria Environmental, 5900 Hollis St, Suite A, Emeryville, CA 94608

Environmental Management Company
6001 Bollinger Canyon Rd, L4050
P.O. Box 6012
San Ramon, CA 94583-2324
Tel 925-842-1589
Fax 925-842-8370

Karen Streich
Project Manager

August 28, 2003

ChevronTexaco

Mr. Martin Zone
Oakland Housing Authority
1805 Harrison Street
Oakland, CA 94612

Re: OHA Comments on Additional Investigation Work Plan
Former Chevron Service Station #9-0020 1633 Harrison Street, Oakland

Dear Martin,

We received the copy of your letter to Don Hwang at Alameda County Health Care Services (ACHCS) dated August 26, 2003 with comments on the referenced work plan. I apologize for not providing you with a draft of the work plan prior to submittal to the agency. I thought it was fairly straightforward and incorporated what we discussed in our meeting with Don on June 10, 2003. However, I will have you review future draft reports before they are submitted.

In response to your comments:

1. *The ACDEH letter referenced in the first paragraph is actually dated September 10, 2002.*
Agreed

2. *To clarify the ownership it should be noted that the Oakland Housing Authority owns the subject property. To assist in the redevelopment of the downtown area, OHA is pursuing government assisted financing for the development of this site, which is being considered for a multi-story senior housing facility. It is anticipated that parking will be included in the project.*
Agreed

3. *The property is currently leased by OHA to a parking lot management firm that operates a "fee" based parking business. The lot is paved and striped, and is in heavy daily use.*
Agreed

4. *ACDEH requested that the effectiveness of the previous ORC groundwater remediation/ treatment activities be included in this work plan. However, the proposed scope only addresses the ORC effectiveness in one well (MW-7), as that is the only existing onsite well. Use of the data obtained from well MW-7 may or may not be representative of existing conditions throughout the site. This finding will be critical in the evaluation of potential risks posed, and as such the collection of additional groundwater samples may be required.*

Groundwater samples were collected for multiple years between 1988 and 1995 at multiple wells well distributed across the site (MW-1 through MW-8). Specific dates and results are provided in the attached quarterly monitoring report, which is routinely distributed to Mr.

Howard Davis at your office. The results for all wells except MW-7 were consistently below laboratory reporting limits, with occasional detections of total petroleum hydrocarbons as gas (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX) near the reporting limits. All wells except MW-7 have been destroyed with the approval of ACHCS because of the consistent results. Additional groundwater sampling at this site is not warranted.

The re-development of MW-7 and the additional soil samples collected near MW-7 will be adequate to assess the risk in the area of the site where past data indicate there may be elevated concentrations of petroleum constituents.

5. *The chemical analyses suite proposed is abbreviated from the list of analytes requested by ACDEH in its September 10, 2002 letter. The requested testing program was to include Halogenated Volatile Organic Compounds in addition to a broader screening of fuel additives.*

ACHCS acknowledged in a letter dated November 4, 1992 that halogenated volatile organic compounds (HVOCs) are not associated with past service station operations. However, we will use past groundwater data for HVOCs for the risk evaluation. Historical analytical results indicate that HVOCs are not present in site soils. However, we will analyze selected soil samples collected during work plan implementation for HVOCs to provide data for waste disposal characterization and which can be incorporated into the risk evaluation.

6. *As discussed at the June 10, 2003 meeting, the risk evaluation should include an assessment of risks posed to both construction workers and future residential occupants of the facility. Further, the ACDEH indicated that the risk evaluation should take into consideration both the RWQCB and City of Oakland risk based screening levels.*

We will evaluate the risk to construction workers as well as the future occupants of the facility.

7. *ACDEH needs to be aware that the final work schedule and ensuing logistics need to be worked out with OHA and its tenant. Both parties will need sufficient and timely notification of the proposed work schedule so that we can work within the framework of the existing lease, or hold off until the expiration of the lease on December 2, 2003, at which time the lease will become a month-to-month lease. Toward this end:*

- *OHA needs to be informed as to whether the site needs to be completely or partially vacated,*

You and I discussed the issue of communication and logistics and I agreed that Cambria would work closely with you on the site work schedule so that we can work within the lease agreement with the parking company.

- *OHA needs to be informed as to the duration of time that will be necessary to conduct the proposed work,*
  Same as previous.

- *OHA needs to know where the wastes derived from the investigation will be staged and for how long,*

  Soil cuttings and water will be drummed and labeled and will be staged at the site for 1 to 2 weeks while we get analytical results and can arrange for disposal. The drums will not take up more space than approximately 1 parking space.

- *OHA needs to be kept informed as to the content of such waste material and the hazards and liability such material might present, and*

  Based on previous site data, wastes will be nonhazardous and will be labeled accordingly. Chevron will accept liability for managing the wastes.

- *Proper and sufficient notification regarding the scheduling of the waste removal will be required.*

  Cambria will notify OHA of the waste removal schedule.

I hope that your future review of draft documents will allow us to work these issues out before involving ACHCS. As soon as we receive approval of the work plan by Don Hwang, Cambria will contact you and work with you as they schedule the work.

Please call me if you have any questions or want to discuss any of these issues further. My number is 925-842-1589.

Sincerely,

Karen Streich

Karen Streich
Project Manager

Copy to:
Mr. Don Hwang, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Suite 250, Alameda , CA 94502-6577
Mr. Bob Foss, Cambria Environmental, 5900 Hollis St, Suite A, Emeryville, CA 94608

CAMBRIA

Fax

To:	Don Hwang
Company:	ACHCSA
Fax:	337-9335
Phone:	
From:	Robert Foss
Phone:	(925) 973-3126
Pages:	6 (including cover sheet)
Date:	10/30/03
Re:	Oakland Housing Authority letter: August 26, 2003 Chevron Response letter: August 28, 2003 Re: Additional Investigation Workplan, 8/7/03

Don:

Attached are the two letters referenced above. Ms. Karen Streich has sent you an email discussing the conference call today between Mr. Martin Zone of Oakland Housing Authority (OHA), his consultant Jeriann Alexander of Fugro, Karen Streich and myself. In that call we discussed the issues presented in the August 26 letter. The OHA and their consultant were satisfied with the responses presented in Chevron's August 28 letter. At this time all outstanding issues are resolved between the parties and we await writtne approval of the workplan from your office.

Upon receipt of your approval, we will begin the process of scheduling, permitting the field work and coordination with the OHA's tenant.

Sincerely,
CAMBRIA ENVIRONMENTAL TECHNOLOGY

Robert Foss

Robert Foss, R.G.
Senior Project Geologist

cc: Ms. Karen Streich, ChevronTexaco

OAKLAND HOUSING AUTHORITY

DEVELOPMENT DEPARTMENT
1805 HARRISON STREET
OAKLAND, CA 94612
FAX : 510.587.2145

August 26, 2003

Don Hwang
Hazardous Materials Specialist
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

RE: Additional Investigative Work Plan
Former Chevron SS #9-0020
1633 Harrison Street, Oakland, CA

Cambria Submittal of August 7, 2003

Dear Mr. Hwang:

On August 7, 2003, Mr. Robert Foss, Senior Project Geologist, Cambria Environmental Technology Inc. (Cambria), submitted to your office, the referenced Work Plan on behalf of Chevron Texaco (Chevron). The Work Plan, dated August 6, 2003, was the result of a meeting held in your office at the Alameda County Department of Environmental Health (ACDEH) on June 10, 2003 with Karen Streich of Chevron; Mr. Foss of Cambria; Jeriann Alexander of Fugro West, Inc., consultants to the Oakland Housing Authority (OHA); and, Martin Zone of OHA. At OHA's request, Ms. Alexander reviewed the Work Plan and has provided a number of comments in response to that Plan.

In general, the work plan appears to address the issues raised at the June 10th meeting with the following exceptions. Those exceptions are discussed below.

1. The ACDEH letter referenced in the first paragraph is actually dated September 10, 2002.
2. To clarify the ownership it should be noted that the Oakland Housing Authority owns the subject property. To assist in the redevelopment of the downtown area, OHA is pursuing government assisted financing for the development of this site, which is being considered for a multi-story senior housing facility. It is anticipated that parking will be included in the project.
3. The property is currently leased by OHA to a parking lot management firm that operates a "fee" based parking business. The lot is paved and striped, and is in heavy daily use.
4. ACDEH requested that the effectiveness of the previous ORC groundwater remediation/treatment activities be included in this work plan. However, the proposed

scope only addresses the ORC effectiveness in one well (MW-7), as that is the only existing onsite well. Use of the data obtained from well MW-7 may or may not be representative of existing conditions throughout the site. This finding will be critical in the evaluation of potential risks posed, and as such the collection of additional groundwater samples may be required.

5. The chemical analyses suite proposed is abbreviated from the list of analytes requested by ACDEH in its September 10, 2002 letter. The requested testing program was to include Halogenated Volatile Organic Compounds in addition to a broader screening of fuel additives.

6. As discussed at the June 10, 2003 meeting, the risk evaluation should include an assessment of risks posed to both construction workers and future residential occupants of the facility. Further, the ACDEH indicated that the risk evaluation should take into consideration both the RWQCB and City of Oakland risk based screening levels.

7. ACDEH needs to be aware that the final work schedule and ensuing logistics need to be worked out with OHA and its tenant. Both parties will need sufficient and timely notification of the proposed work schedule so that we can work within the framework of the existing lease, or hold off until the expiration of the lease on December 2, 2003, at which time the lease will become a month-to-month lease. Toward this end:

    - OHA needs to be informed as to whether the site needs to be completely or partially vacated,
    - OHA needs to be informed as to the duration of time that will be necessary to conduct the proposed work,
    - OHA needs to know where the wastes derived from the investigation will be staged and for how long,
    - OHA needs to be kept informed as to the content of such waste material and the hazards and liability such material might present, and
    - Proper and sufficient notification regarding the scheduling of the waste removal will be required.

Please contact me if you have any questions regarding the concerns expressed above.

Sincerely,

Martin A. Zone
Program Manager

cc: Karen Streich, Chevron Texaco
Robert Foss, Cambria Environmental
Phil Neville, Director of Development

R143

CAMBRIA

Alameda County

FEB 26 2003

Environmental Health

February 21, 2003

Mr. Don Hwang
Hazardous Materials Specialist
Alameda County Health Care Services Agency-
Environmental Health Services (ACHCSA-EHS)
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-9335

Re: **Future Actions Regarding Risk Assessment**
Former Chevron SS #9-0020
1633 Harrison Street
Oakland, California
Cambria Project no. 31D-1956

Dear Mr. Hwang:

On behalf of Chevron Products Company, Cambria is writing this letter to advise you that Karen Streich, Chevron's project manager for Alameda County sites, has changed consultants on her projects from Delta Environmental to Cambria. We have been advised that Delta Environmental had been conducting a Risk Based Corrective Action (RBCA) evaluation based on residual hydrocarbon data from beneath the site. From our initial review of site data it appears that the site has not been impacted by MTBE and no benzene was detected in a previous vapor survey.

We are aware of recent changes at ACHSCA-EHS. We are meeting with Ms. Donna Drogos on Wednesday, February 24, to introduce ourselves and to gain an understanding of the direction your organization may be taking as a result of these changes. We are, therefore, recommending holding off further work on the RBCA until after meeting with Ms. Drogos and yourself. We will be in contact to schedule a time to meet with you soon.

Thank you. Please call me at (925) 973-3126 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.

Robert Foss

Robert Foss, R.G..
Senior Project Geologist

cc: Ms. Karen Streich, Chevron Products Company

I:\9-0020 Oakland\90020 Reg Resp 2-03.wpd

Oakland, CA
San Ramon, CA
Sonoma, CA

Cambria Environmental Technology, Inc.

2680 Bishop Drive
Suite 290
San Ramon, CA 94583
Tel (925) 275-3200
Fax (925) 275-3204

OAKLAND HOUSING AUTHORITY

DEVELOPMENT DEPARTMENT
1805 HARRISON STREET
OAKLAND, CA 94612
FAX: 510.587.2145

February 19, 2003

Ms. Karen Streich
Chevron USA, Inc.
P.O. Box 6004
San Ramon, CA 94583-0904

Subject: Correspondence from Don Hwang,
Alameda County Health Care Services, September 10, 2002

Re: Fuel Leak Case No. RO0000143, Chevron #9-0020,
1633 Harrison St., Oakland, CA

On September 10, 2002, Mr. Don Hwang, Hazardous Materials Specialist for the Local Oversight Program of Alameda County, sent us the referenced letter. This was a response to two risk evaluations prepared by Chevron's consultants, Delta Environmental Consultants, Inc. and Gettler-Ryan, Inc., for 1633 Harrison Street, Oakland, CA, a former Chevron gasoline station site. Mr. Hwang provided seven technical comments regarding the risk evaluation studies. These included requests for additional work and technical reports.

One item, "3. Future Residential Development," asked for building construction specifications. Since I have not heard from your office or your consultants I have decided to send you the information we have available so that your consultants may proceed with this portion of their response to the County. As you know, the Oakland Housing Authority (OHA) obtained the subject property expressly for the purpose of residential construction. We intend to develop a multi-story senior housing project on the site. This will complement the ten floors of senior housing that sit atop the three floors of our main office located on the adjacent property at 1619 Harrison Street.

The information I have enclosed includes several sheets of the original plans for 1619 Harrison, with its semi-below ground parking. I am also enclosing the schematics for the proposed building at 1633 Harrison including one page that shows a basement parking level. I believe this information should provide the County and your consultants with the background information necessary for

completing the risk evaluation to the requirements of the County. If, however, more information is needed, please let me know.

The Oakland Housing Authority is extremely interested in a response to the County that will result in a speedy resolution of the County's concerns and in our ability to develop the intended project. Toward this end, please let me know what progress has been made in responding to the County's letter.

Finally, in regard to the site, I have two questions. First, a Board member has asked if we have any certificates of removal for the tanks that have been removed from the site. Since we do not have this information, could you please provide me with such documentation, and any certificates of installation as well? Second, the purchase agreement refers to debris buried on the site. However, we do not know the location of this "pit." Can you please inform me of its location?

If there is any additional information or assistance that we may provide please let me know as soon as possible. I can be reached by phone at 510.587.2147, or by e-mail at mzone@oakha.org.

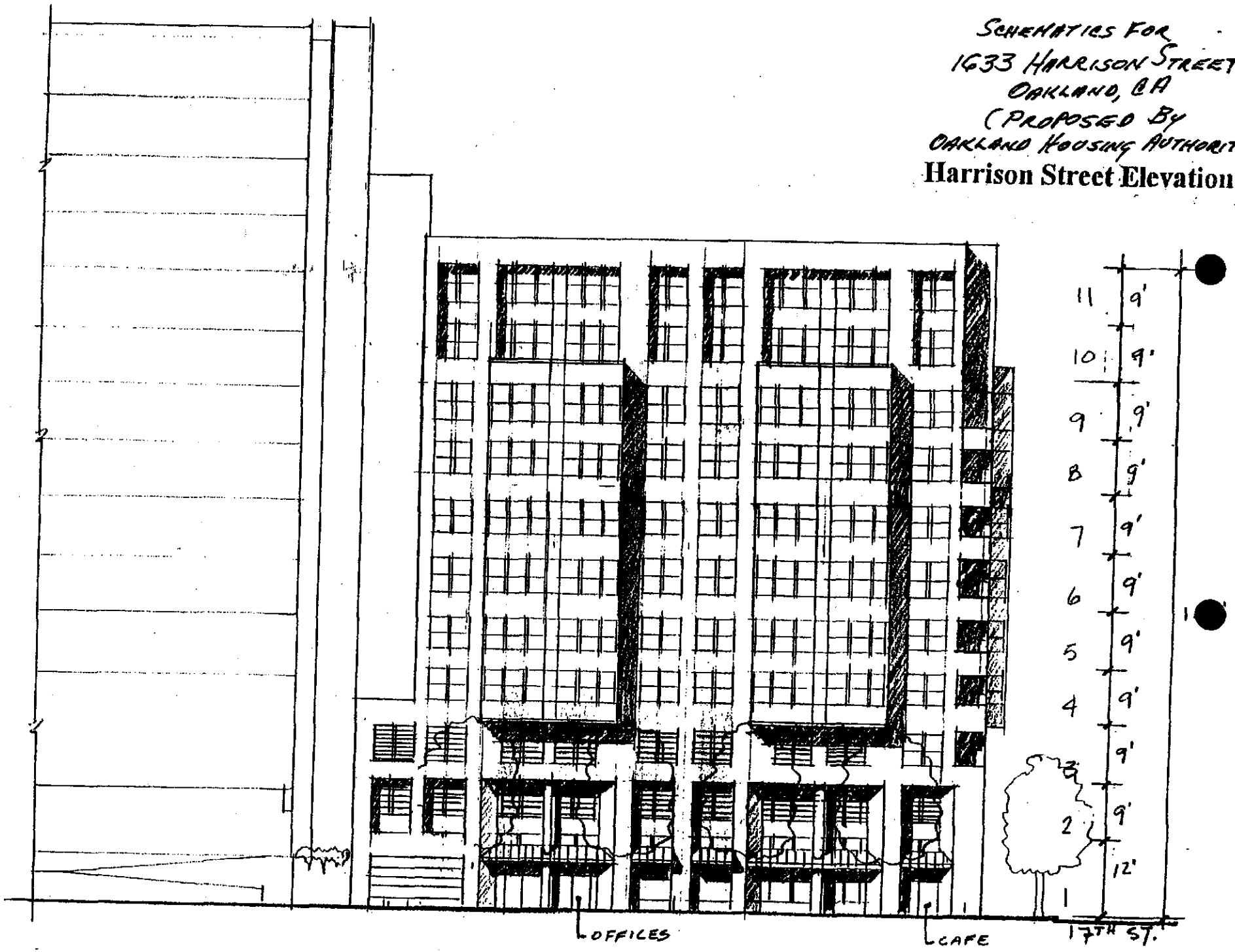
Sincerely,

Martin A. Zone
Program Manager

Attachments: Schematics for 1633 Harrison Street, Oakland, CA.
Plans for 1619 Harrison Street, Oakland, CA.

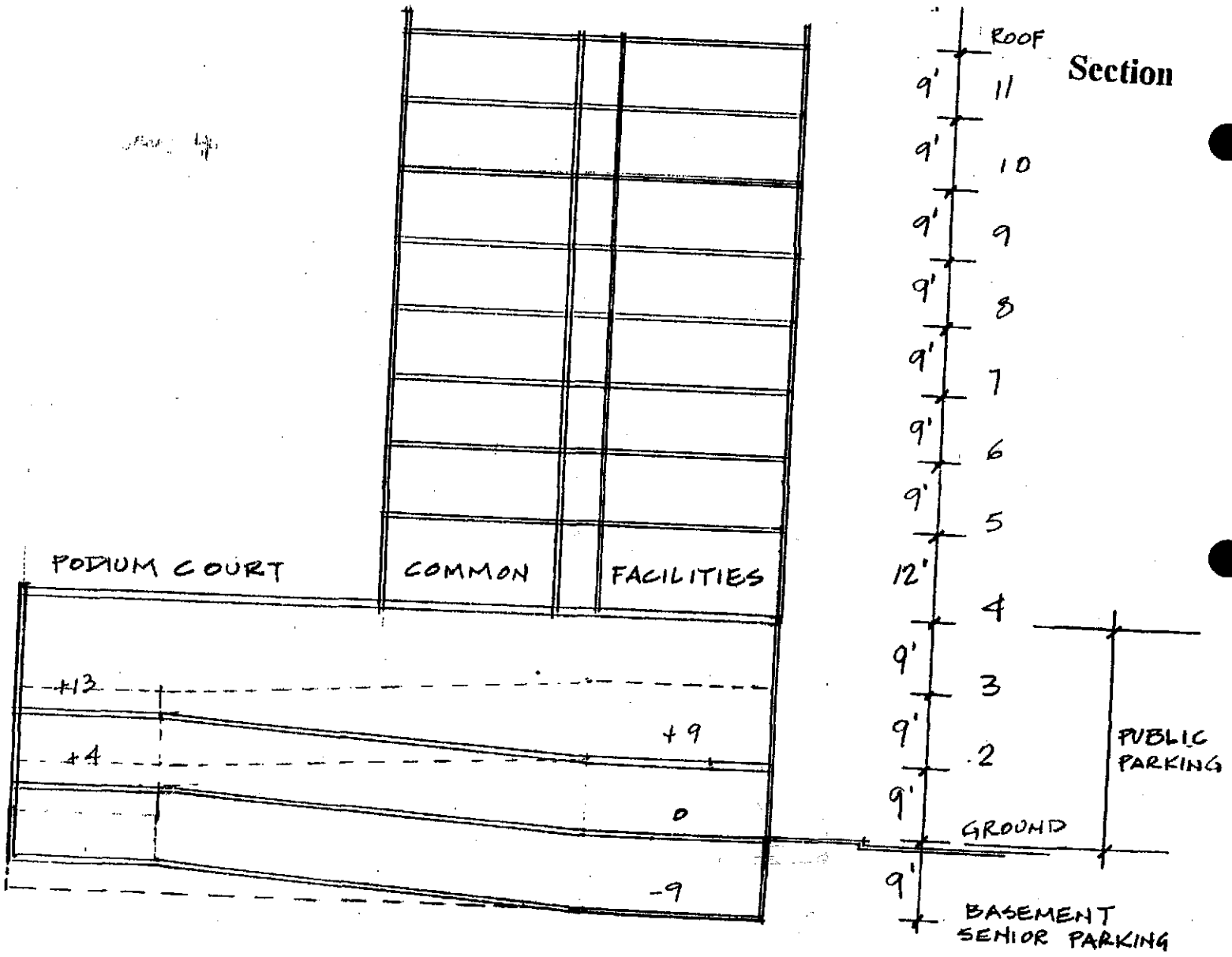
SCHEMATICS FOR
1633 HARRISON STREET
OAKLAND, CA
(PROPOSED BY
OAKLAND HOUSING AUTHORITY)

Harrison Street Elevation

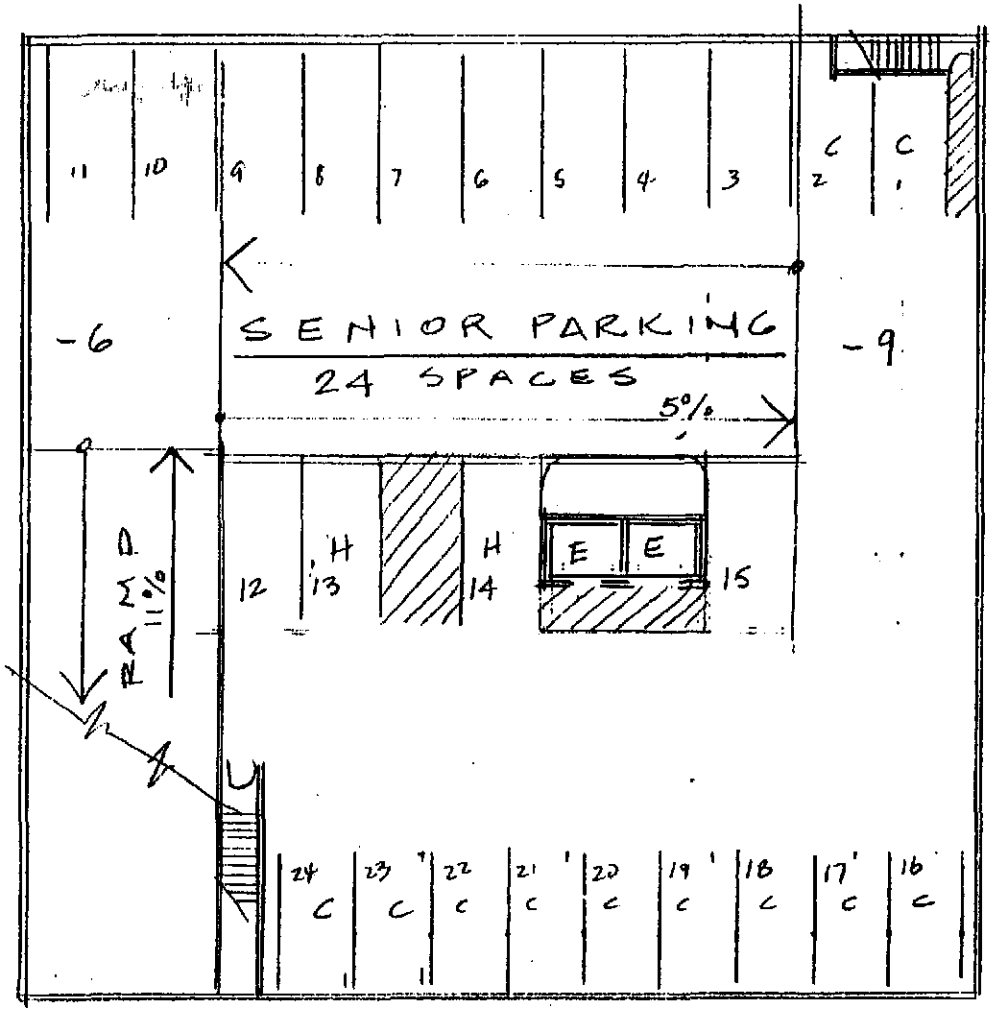


Architect: Pyatok Associates 1629 Telegraph Avenue Oakland CA 94612 510 465 7010

Section



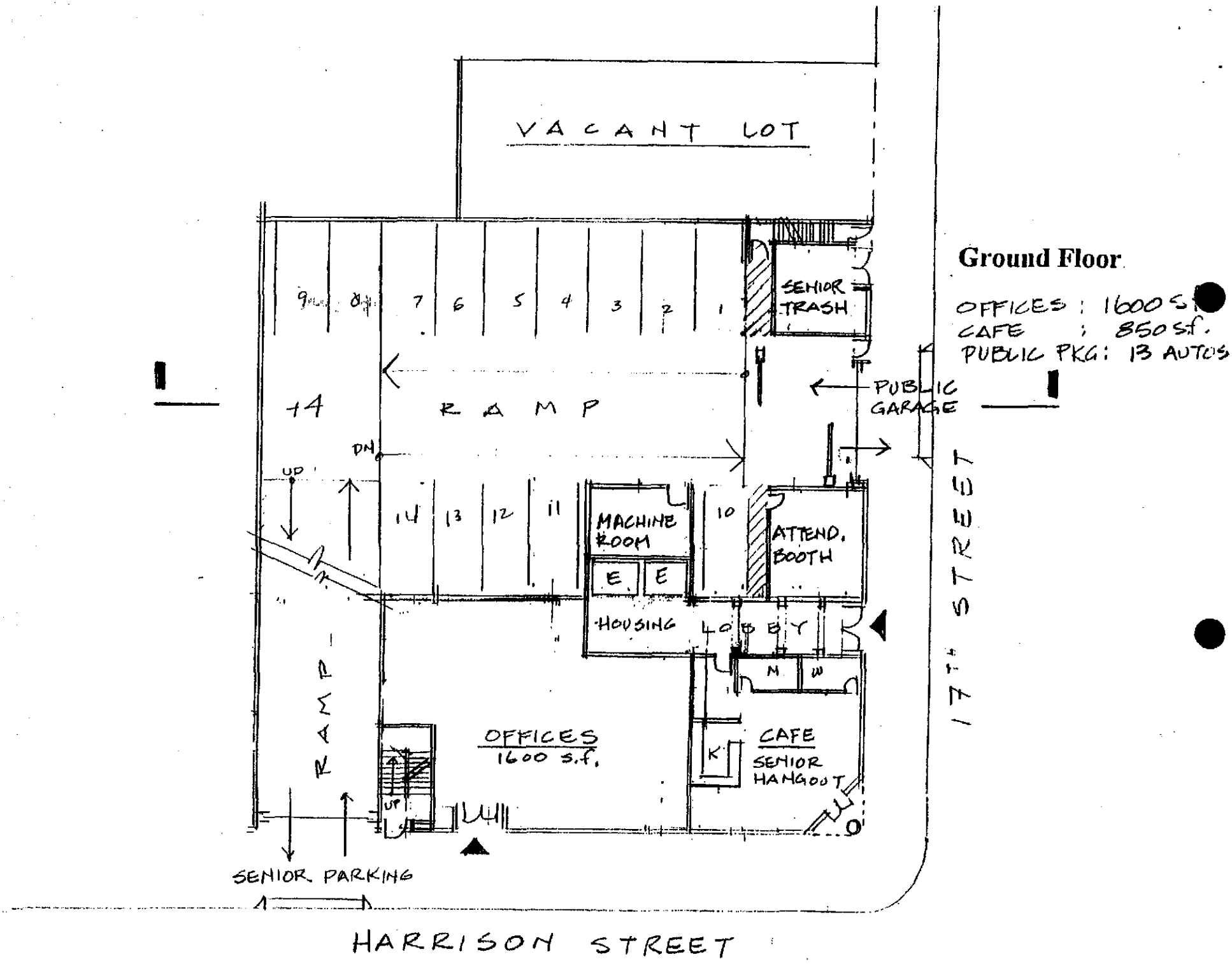
Architect: Pyatok Associates 1629 Telegraph Avenue Oakland CA 94612 510 465 7010



Basement

24 AUTOS FOR SENIOR

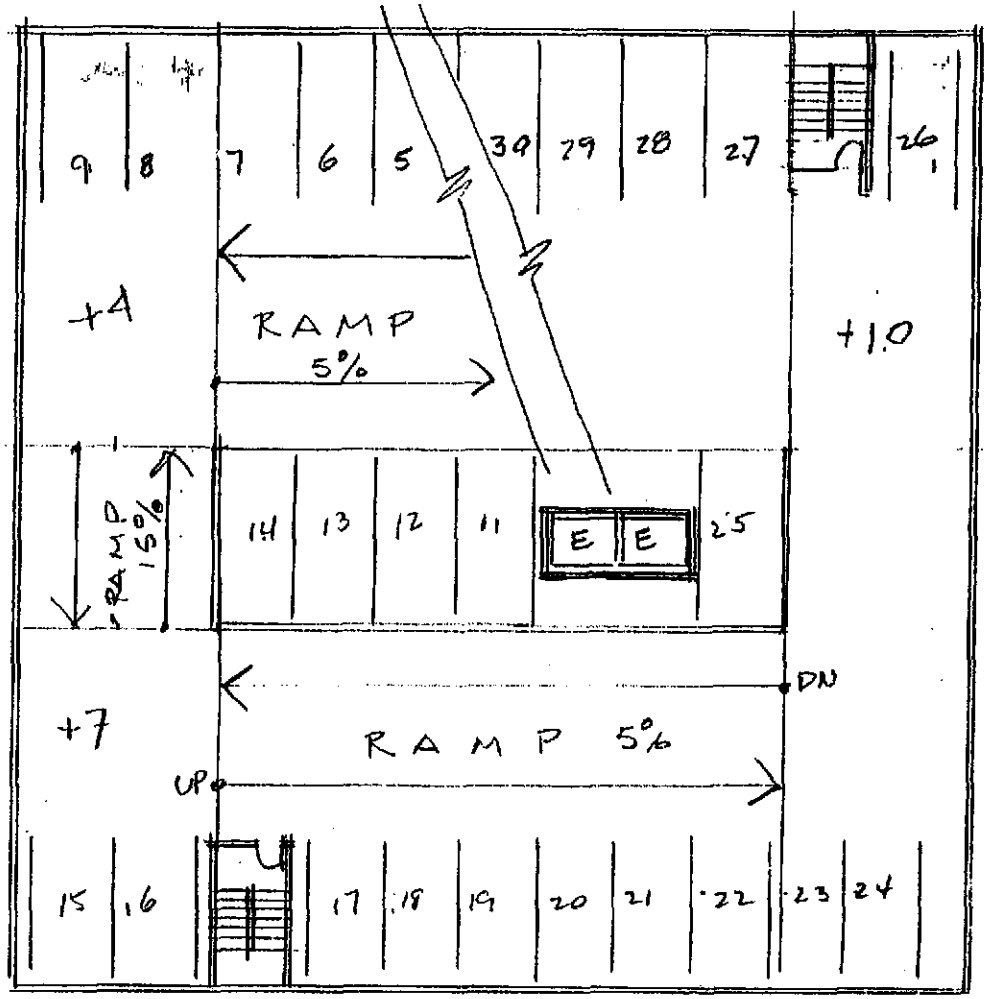
Architect: Pyatok Associates 1629 Telegraph Avenue Oakland, CA 94612 510-465-7010



Ground Floor

OFFICES : 1600 S.F.
CAFE : 850 S.F.
PUBLIC PKG: 13 AUTOS

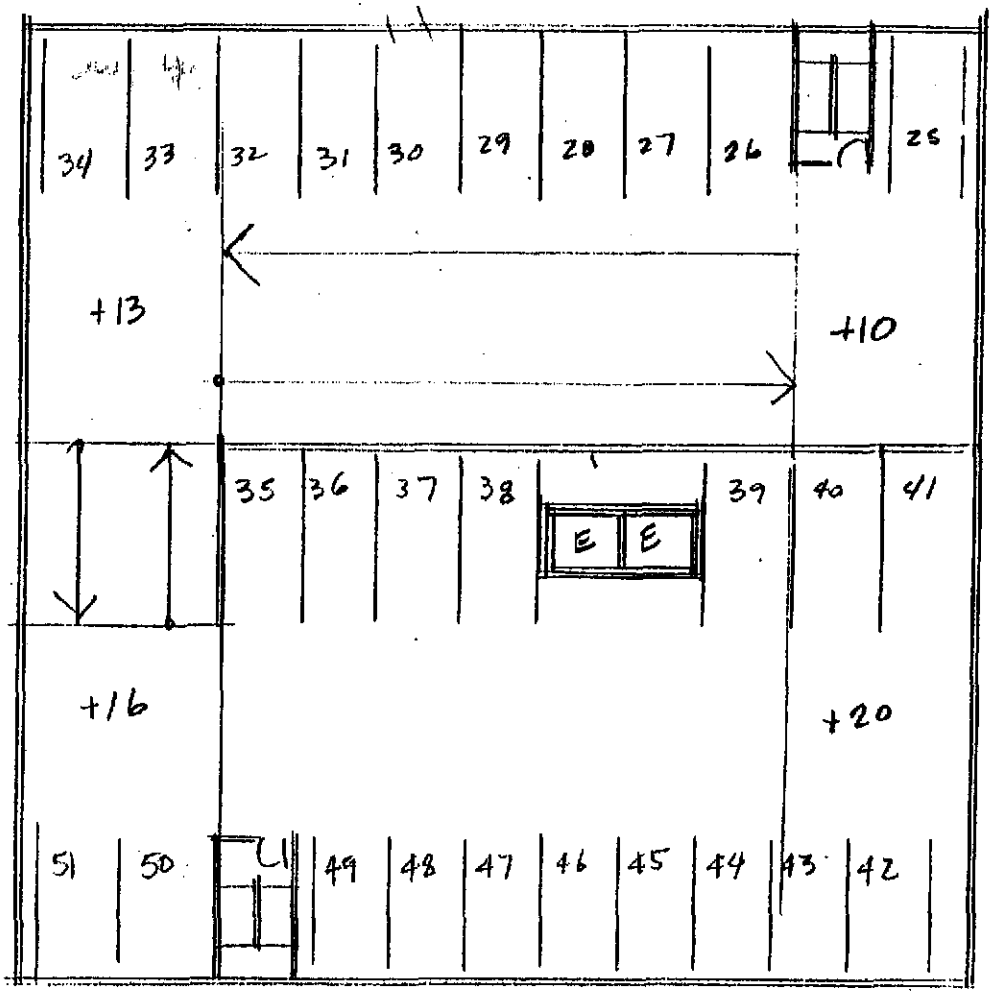
Architect: Pyatok Associates 1629 Telegraph Avenue Oakland, CA 94612 510-465-7010



Second Floor

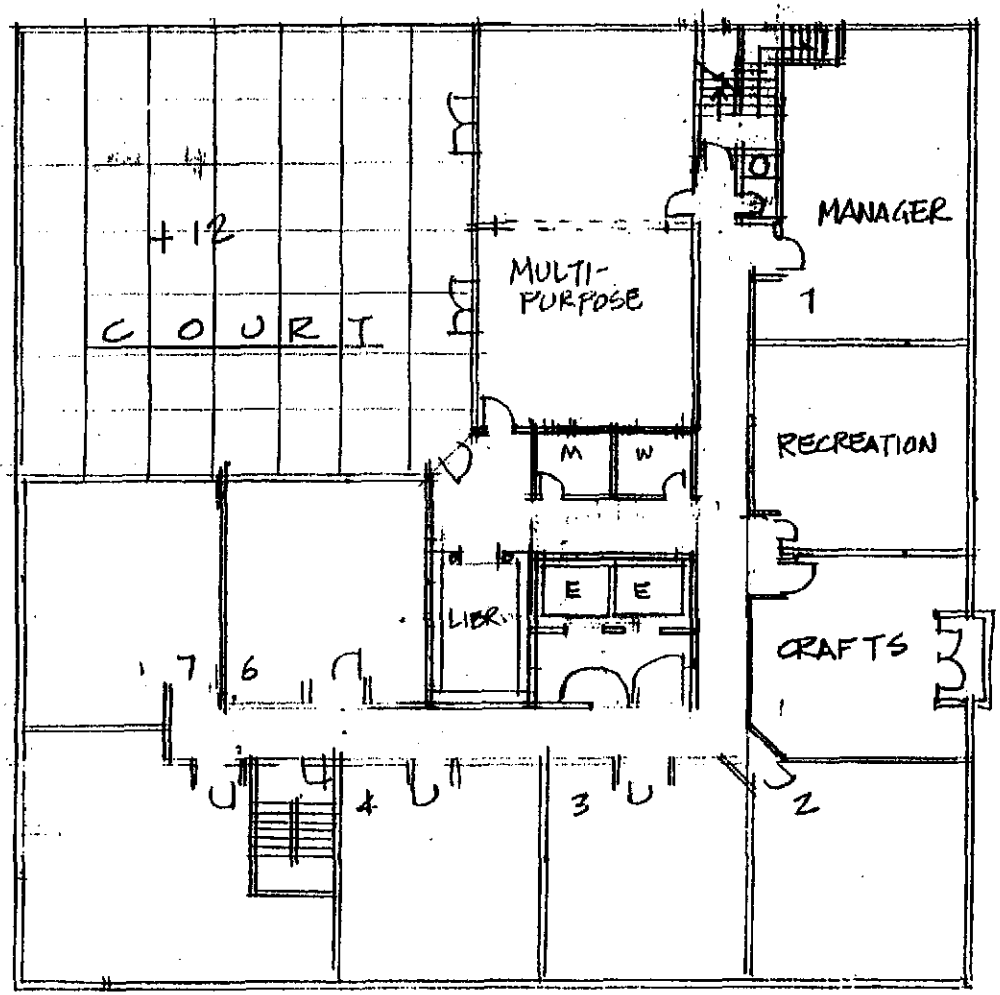
PUBLIC PKG 19

Architect: Pyatok Associates 1629 Telegraph Avenue Oakland, CA 94612 510-465-7010



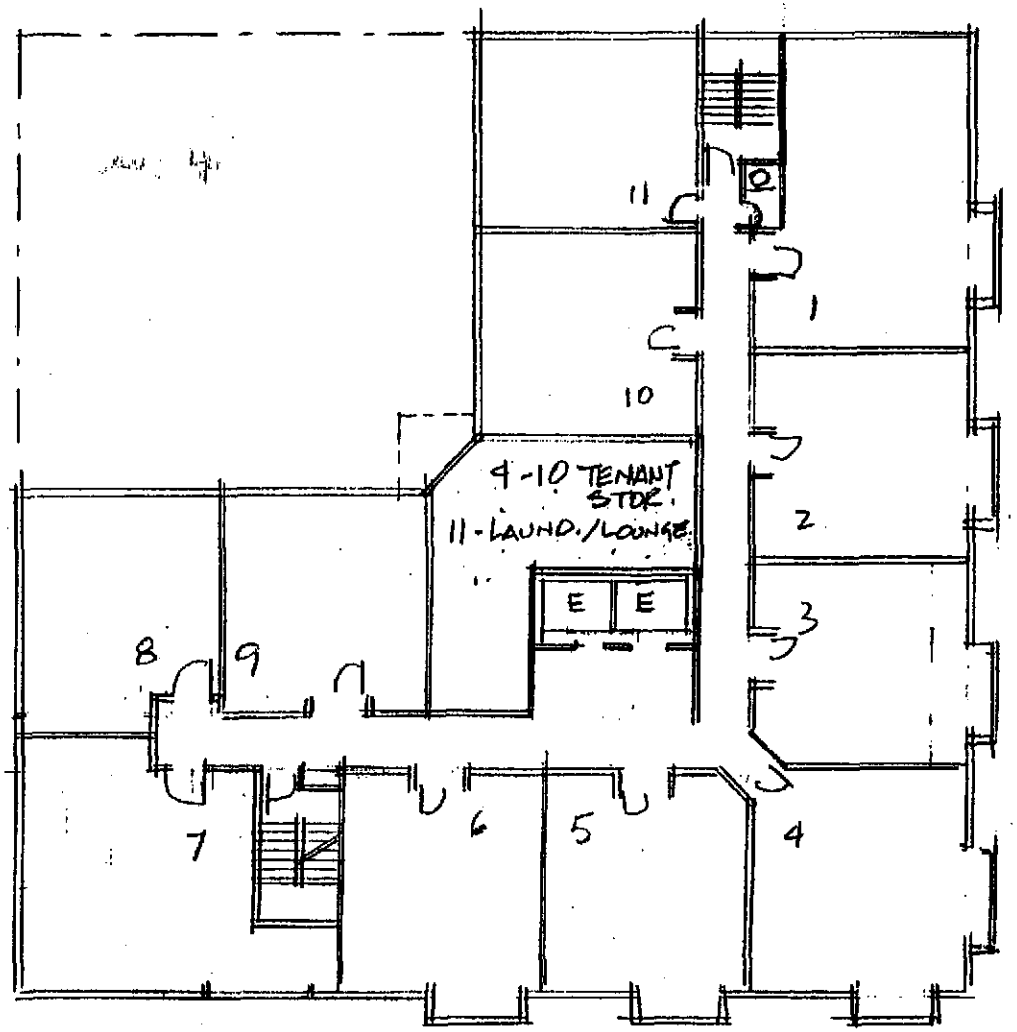
Third Floor

PUBLIC PKG 19



Fourth Floor

- COMMON FACILITIES
- 7 UNITS



Fifth-Eleventh Floors

7 × 11 = 77 UNITS

Architect: Pyatok Associates 1629 Telegraph Avenue Oakland, CA 94612 510-465-7010

R143

Delta Environmental Consultants, Inc.

3164 Gold Camp Drive, Suite 200
Rancho Cordova, California 95670
Phone: (916) 851-7342
Fax: (916) 638-8385

FAX TRANSMITTAL

DATE: 10-29-02
RECIPIENT: Don Hwang
COMPANY: Alameda County Environmental Health Services
RECIPIENT FAX NO: (510) 337-9335
SENDER: Todd DeLaFleur
NO. OF PAGES TO FOLLOW: —
SUBJECT: S-0020 1633 Harrison St.
DELTA PROJECT NO: Da90-020

Urgent ☐ For Review ☐ Please Comment ☐ Per Request ☐ Please Reply ☐

Message:

Mr Hwang: Delta requests a 30-day extension of the Workplan request in your letter dated September 10, 2002. The new due date will be November 30, 2002.

Inogen Environmental Alliance

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

September 10, 2002

Ms. Karen Streich
Chevron USA, Inc.
PO Box 6004
San Ramon, CA 94583-0904

Mr. Martin Zone
Oakland Housing Authority
1805 Harrison St.
Oakland, CA 94612

Subject: Fuel Leak Case No. RO0000143, Chevron #9-0020, 1633 Harrison St., Oakland, CA

Dear Ms. Streich & Mr. Zone:

Alameda County Environmental Health staff has reviewed "Tier 1 RBCA Evaluation Addendum" dated November 14, 2001, by Delta Environmental Consultants, Inc. (Delta) and the case file for the subject site. We request that you address the following technical comments, perform the requested work, and send us the technical reports requested below.

TECHNICAL COMMENTS

1. **Risk Evaluation** - Two risk evaluations were prepared by Delta for the subject site. The June 27, 2000, "Site Conceptual Model and Risk-Based Corrective Action Evaluation," evaluated the site under a commercial use scenario using the historic highest benzene detection of 810 micrograms/liter (ug/l) in groundwater to evaluate the worst case exposure scenario. When a residential land use scenario was evaluated for the site, another risk evaluation was performed in the "Tier 1 RBCA Evaluation Addendum," dated November 14, 2001, prepared by Delta. Rather than using the historical high benzene concentrations used in the commercial scenario, the residential risk evaluation used an average concentration over four semi-annual events. We do not believe that concentrations can be averaged when evaluating a residential exposure scenario. Please refer to "Application of Risk-Based Screening Levels and Decision Making to Sites With Impacted Soil and Groundwater", Section 2.2 (Step 7) of Volume 1. Additionally, the groundwater data used were from monitoring wells containing Oxygen Release Compound (ORC). We are concerned that the data from monitoring wells containing ORC are not representative of site conditions. Please address these concerns in the work plan requested below.

2. **TPH Risk-Based Screening Levels (RBSLs)** – The Massachusetts Department of Environmental Protection's cleanup standards for total petroleum hydrocarbons (TPH) contamination in groundwater and soil were referenced in the evaluation of total petroleum hydrocarbons as gasoline (TPHG) concentrations at this site. We request that you instead refer to the Regional Water Quality Control Board San Francisco Bay Region's (RWQCB-SF) RBSLs for TPHG screening values for your site. Include your proposal for addressing TPHG risk evaluation levels in the work plan requested below.

3. **Future Residential Development** – We understand that the site is being considered for residential housing. Data for your site indicates that residual contamination remains in place. As part of your risk evaluation, please indicate the location of the proposed building in relation to residual contamination on a map of your site including soil boring and monitoring well locations showing contamination concentrations and depths. Also, provide surface and subsurface building construction specifications, i.e., foundation type, basements, crawl space. Include your map and building construction specifications and your proposal on how they are protective from the residual contamination in the work plan requested below.

4. **ORC Interim Remediation** – ORC was applied in monitoring wells. Please submit your proposal for verification monitoring to evaluate the its effectiveness in the work plan requested below.

5. **Groundwater Analysis** – Please analyze groundwater samples for TPHG, Benzene, Toluene, Ethyl Benzene, Xylene (BTEX) and by EPA Method 8260 for Methyl tert Butyl Ether (MTBE), tert Amyl Methyl Ether (TAME), Ethyl tert Butyl Ether (ETBE), Diisopropyl Ether (DIPE), tert Butyl Alcohol (TBA), Ethylene Dibromide (EDB), and Ethylene Dichloride (EDC). Additionally, Halogenated Volatile Organic Compounds (HVOC's) have historically been present at this site and have not been analyzed since 1992. The presence of HVOC's need to be considered as a more restrictive land use is being proposed. Please include the listed analyses in the work plan requested below. Also, please include procedures for sampling of monitoring wells with ORC which will yield results representative of site conditions.

6. **Soil Sampling** – The gasoline additive EDC has been detected in groundwater in source area(s) at this site. As part of your risk evaluation we request that soil samples be collected and analyzed for EDC and EDB. Also, we recommend that a laboratory grain size analysis be performed on soil samples from your site in accordance with applicable guidance for application of SF-RWQCB and City of Oakland RBSL criteria. Please include your proposal for this work in the work plan requested below.

7. **Offsite Monitoring Well** - Groundwater concentrations of TPHG in MW-16 have been increasing over time. Previously, your consultant has suggested that the source may be from another site. Please provide evidence and identify possible offsite sources.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Don Hwang), according to the following schedule:

- October 30, 2002 – Work Plan
- October 30, 2002 – Quarterly Monitoring Report for the Third Quarter 2002
- 60 days after Work Plan approval – Risk Evaluation & Verification Monitoring
- January 30, 2003 – Quarterly Monitoring Report for the Fourth Quarter 2002

If you have any questions, call me at (510) 567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist
Local Oversight Program

C: David Herzog, Delta Environmental Consultants, Inc., 3164 Gold Camp Dr., Suite 200, Rancho Cordova, CA 95670-6021

✓File

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

August 2, 2001

Tom Bauhs
Chevron USA, Inc., Site Assessment & Remediation
6001 Bollinger Canyon Rd. V1132
PO Box 6004
San Ramon, CA 94583-0904

Re: Former Chevron Service Station #9-0020, 1633 Harrison St., Oakland, CA; RO0000143

Dear Mr. Bauhs:

"Response to ACHCSA letter of May 23, 2001..." dated June 27, 2001 by Delta Environmental Consultants, Inc., was reviewed. "Site Conceptual Model and Risk-Based Corrective Action Evaluation" dated June 27, 2000 by Delta Environmental Consultants, Inc., was also reviewed. A comparison was made of site representative contaminant concentrations to Oakland Risk-Based Screening Levels (RBSLs). The contaminant concentrations were shown to not exceed the RBSLs for a commercial/industrial receptor. However, a comparison of the contaminant concentrations for a residential receptor showed that the benzene concentrations exceeded the RBSLs. The representative concentration for benzene of 0.810 mg/l exceeded the Oakland Tier 1 RBSL for inhalation of indoor air vapors, residential receptor, carcinogenic risk, of 0.11 mg/l. Therefore, unless further evaluation shows that the benzene concentrations do not exceed a site-specific remediation concentration, or the affected media is remediated to the Tier 1 limits, or a less conservative concentration is justified, then a deed restriction will be issued. Also, no evaluation was made of the concentrations of total petroleum hydrocarbons as gasoline (TPH-G) found onsite. Such an evaluation is needed.

When our staff reexamined the reports on halogenated volatile compounds (HVOC) at the site, we determined that additional groundwater sampling for HVOC was not necessary.

The field data sheet for MW-16 did note why this well was again inaccessible for sampling. However, when the field data sheets with the comments highlighted were copied, the highlighted comments had portions which were blocked out. Therefore, instead of the comments being recognized as highlighted, they were viewed as crossouts.

However, when the field data sheets with the comments highlighted were copied, the highlighted comments had portions which were blocked out. Therefore, instead of the comments being recognized as highlighted, they were viewed as crossouts.

If you have any questions, call me at (510) 567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist

C: Stephen Carter, Delta Environmental Consultants, Inc., 3164 Gold Camp Dr., Suite 200, Rancho Cordova, CA 95670-6021
file

Delta
Environmental
Consultants, Inc.

3164 Gold Camp Drive
Suite 200
Rancho Cordova, California 95670-6021
916/638-2085
FAX: 916/638-8385

June 27, 2001

Mr. Don Hwang
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **Response to ACHCSA letter of May 23, 2001, for the Former Chevron Station #9-0020, 1633 Harrison Street, Oakland, CA.**

Mr. Hwang:

At the request of Chevron Products Company, Delta Environmental Consultants, Inc. network associate Gettler-Ryan Inc. (GR) has prepared this response to your letter dated May 23, 2001. You wrote your letter after reviewing GR's *Third Quarter Event of September 18, 2000, Groundwater Monitoring and Sampling Report* (dated November 21, 2000). Your letter asked why well MW-16 was not sampled. GR was unable to sample well MW-16 because a car was parked over the well during the entire time our field technician was at the site. The technician was able to crawl under the car and measure the depth to water, but was not able to purge the well or collect a groundwater sample. The field data sheet for well MW-16 included in the report notes these conditions.

Your letter also indicated that additional sampling of the groundwater for halogenated volatile compounds will be required to show that concentrations of these compounds in the groundwater beneath the site have dropped to acceptable levels. As discussed in GR's *Site Conceptual Model and Risk-Based Corrective Action Evaluation* (dated June 27, 2000), a Tier 1 Risk-Based Corrective Action (RBCA) analysis indicated that volatilization to outdoor and indoor air from groundwater (commercial and construction worker receptor) were the only complete exposure pathways. Chemicals of concern included in the City of Oakland's Tier 1 Risk-Based Screening Levels (RBSLs) table that are also present at the subject site include benzene, toluene, ethylbenzene, xylenes, 1,1,1-trichloroethane (1,1,1-TCA), and trichloroethylene (TCE). Concentrations of 1,1,1-TCA and TCE in June 1992 (the last time groundwater samples were analyzed for halogenated volatile compounds) did not exceed Oakland's Tier 1 RBSLs. My files indicate that to date we have not received a response to the *Site Conceptual Model.*

The *Site Conceptual Model* concluded that concentrations of fuel hydrocarbons and halogenated volatile compounds in the groundwater beneath the site did not exceed City of Oakland Tier 1 RBSLs, and that site conditions and RBCA analysis indicated additional investigation was not warranted. The most recent groundwater sampling indicates fuel hydrocarbon concentrations remain below RBSLs for the identified exposure pathways. During the next monitoring and sampling event, the wells will also be sampled for halogenated volatile compounds. If the concentrations of halogenated volatile compounds detected during the next sampling event do not exceed RBSLs for the complete exposure pathways, we will again request that the environmental investigation at this site be closed.

DG90020B.3C99

Please call us at 916.631.1300 if you have questions.

Sincerely,
DELTA ENVIRONMENTAL CONSULTANTS, INC.
Network Associate Gettler-Ryan Inc.

Stephen J. Carter, R.G.
Senior Geologist

cc: Mr. Tom Bauhs, Chevron Products Company, P.O. Box 6004, San Ramon, CA 94583
Mr. Jim Brownell, Delta Environmental Consultants, Inc., 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA 95670-6021

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

July 25, 2001

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

Tom Bauhs
Chevron USA, Inc.
Site Assessment & Remediation
6001 Bollinger Canyon Rd., V1132
PO Box 6004
San Ramon, CA 94583-0904

Re: Former Chevron Service Station #9-0020, 1633 Harrison St., Oakland, CA; RO0000143

Dear Mr. Bauhs:

This office has reviewed "1st Semi-Annual Event of March 27, 2001, Groundwater Monitoring and Sampling Report" dated May 1, 2001 by Gettler-Ryan, Inc., for the facility referenced. Oxygen releasing compound (ORC) was placed into monitoring wells MW-7 and MW-9 during this sampling period. Monitoring well MW-16 was again unsampled due to inaccessibility. MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-8, MW-10, MW-11, MW-12, and MW-14, were abandoned. In MW-7, MW-13, and MW-15, the concentrations of total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethyl benzene, and xylene (BTEX), were less than detection limits. The concentrations in MW-9 were low or less than detection limits.

1) Explain why MW-16 was again inaccessible for sampling.
2) The March 12, 2001 letter from Delta Environmental Consultants, Inc., stated that the need for additional assessment necessary to present a risk-based closure plan was being evaluated.
3) Please note that additional groundwater sampling for halogenated volatile compounds (HVOC) will be required to show that the concentrations found onsite are at safe concentrations even if the source may have come from offsite. Until groundwater sampling for HVOC was discontinued in 1992, several of the HVOC exceeded maximum contaminant levels (MCL).

If you have any questions, call me at (510) 567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist

C: Jim Brownell, Delta Environmental Consultants, Inc., 3164 Gold Camp Dr., Suite 200, Rancho Cordova, CA 95670-6021

file

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

May 23, 2001

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

Tom Bauhs
Chevron USA, Inc.
Site Assessment & Remediation
6001 Bollinger Canyon Rd., Bldg. L
PO Box 6004
San Ramon, CA 94583-0904

Re: Former Chevron Service Station #9-0020, 1633 Harrison St., Oakland, CA; RO0000143

Dear Mr. Bauhs:

This office has reviewed "3rd Quarter Event of September 18, 2000, Groundwater Monitoring and Sampling Report" dated November 21, 2000 by Gettler-Ryan, Inc., for the facility referenced. Oxygen releasing compound (ORC) was placed into monitoring wells MW-7, MW-9, and MW-16 during this sampling period. Monitoring well MW-16 was again unsampled. In MW-7 and MW-9, the concentrations of total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethyl benzene, and xylene (BTEX), were low or less than detection limits. MW-15 has consistently resulted in concentrations, which are less than detection limits. These results are within the range of previous samples from MW-16. Concentrations in MW-13 showed a small increase from prior sampling events but the concentrations found were low with the exception of TPH-G with a concentration of 1,300 ug/l.

1) Explain why MW-16 was again inaccessible for sampling.
2) The March 12, 2001 letter from Delta Environmental Consultants, Inc., stated that the need for additional assessment necessary to present a risk-based closure plan is being evaluated. Please note that additional groundwater sampling for halogenated volatile compounds (HVOC) will be required to show that the concentrations found onsite are at safe concentrations even if the source may have come from offsite. Until groundwater sampling for HVOC was discontinued in 1992, several of the HVOC exceeded maximum contaminant levels (MCL).

If you have any questions, call me at (510) 567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist

C: Jim Brownell, Delta Environmental Consultants, Inc., 3164 Gold Camp Dr., Suite 200, Rancho Cordova, CA 95670-6021
Deanna Harding, Gettler-Ryan, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568
file

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

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9432

December 15, 1999

Brett Hunter, Project Manager
Chevron USA, Inc.
Site Assessment & Remediation
6001 Bollinger Canyon Rd., Bldg. L
P.O. Box 6004
San Ramon, CA 94583-0904

Re: Former Chevron Service Station #9-0020, 1633 Harrison St., Oakland, CA; STID 3812

Dear Mr. Hunter:

This office has reviewed the 3rd quarter 1999 groundwater monitoring report dated December 2, 1999 by Blaine Tech Services, Inc., for the above noted facility. The September 29, 1999 sample from MW-16 found 5,480 PPB total petroleum hydrocarbons as gasoline (TPH-G), 717 PPB benzene, 45.3 PPB toluene, 44 PPB ethyl benzene, and 100 PPB xylene (BTEX). These results are within the range of previous samples from MW-16.

You indicated that you did not plan to use ORC and instead would submit an alternative proposal. A Corrective Action Plan, which includes an assessment of impacts, a feasibility study, and applicable cleanup levels, is required. Submit a Corrective Action Plan, which incorporates your findings within 30 days.

If you have any questions, call me at (510) 567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist

C: file
L.G.

Chevron

June 2, 1999

Chevron Products Company
6001 Bollinger Canyon Road
Building L, Room 1080
PO Box 6004
San Ramon, CA 94583-0904

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

Mr. Don Hwang
Hazardous Materials Specialist
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: Certified List of Record Fee Title Owners
For: Former Chevron Service Station # 9-0020
1633 Harrison Street, Oakland, California

Dear Mr. Hwang:

In accordance with section 25297.15(a) of Chapter 6.7 of the Health & Safety Code, Chevron Products Company, certify that the following is a complete list of current record fee title owners and their mailing addresses for the above site:

The Oakland Housing Authority
Attn: Mr. Howard Davis
1619 Harrison Street
Oakland, CA 94612

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manger

CC. Ms. Bette Owen, Chevron

Chevron

January 25, 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

Mr. Don Hwang
Hazardous Materials Specialist
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Former Chevron Service Station #9-0020
1633 Harrison Street
Oakland, California

Dear Mr. Hwang:

This is in response to your letter of January 14, 1999, requesting an explanation why an investigation could not be conducted any closer than 400 feet downgradient of monitoring well MW-16.

Monitoring well MW-16 is located on Harrison Street in the parking lane about 20 feet northeasterly of 17th Street. The next street northeasterly of 17th is 19th there is no 18th street. The block from 17th to 19th and Harrison to Alice (see enclosed map) is built upon by office buildings. It is physical impossible to install a monitoring well downgradient of MW-16 in this block. The closest location would be on 19th Street and I believe now it would be approximately 600 feet downgradient of MW-16.

My previous determination was based on scaling the enclosed map, but after driving down Harrison from 17th to 19th, the odometer registered 0.1 mile, which calculates to about 528 feet. In this distance it would be expected that hydrocarbons would be effected by sorption and natural attenuation and the results from any downgradient well would be below method detection limits.

It appears that we should allow the Oxygen Releasing Compound (ORC) added to monitoring well MW-16 and to well MW-7 to work, by increasing the availability of oxygen for natural attenuation surrounding and downgradient of both wells. Additional sampling events will be required to confirm this.

To determine if the ORC has increased the availability of oxygen for natural attenuation, I have requested that wells MW-7 and MW-16 are sampled for dissolved oxygen (DO) in the next sampling event. If the DO reading is less than 2.0 mg/l, additional ORC will be added.

If you have any questions please call me at (925) 842-9136.

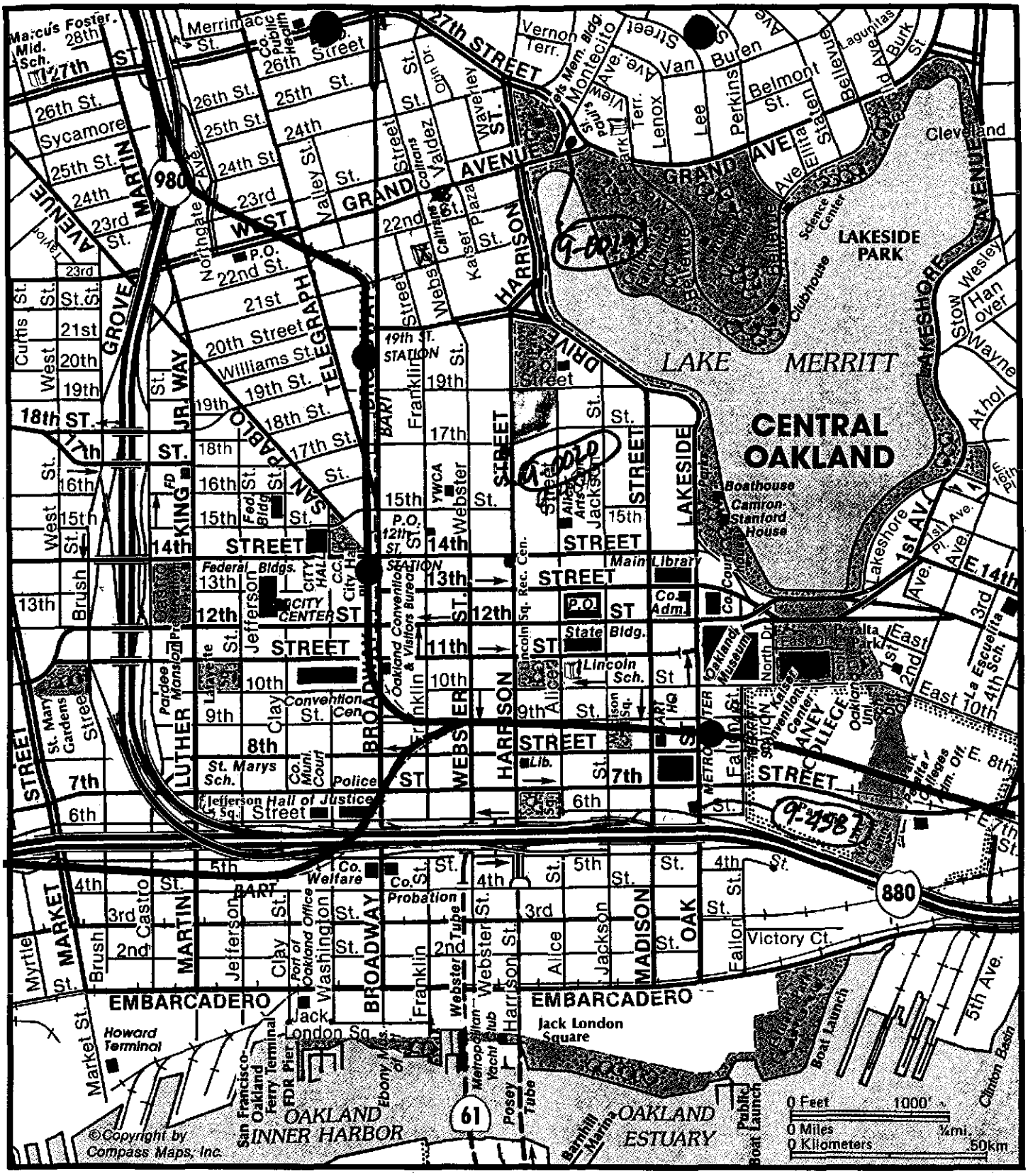
Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

Cc: Ms. Bette Owen, Chevron

The Oakland Housing Authority
Attn: Mr. Howard Davis
1619 Harrison Street
Oakland, CA 94612 (copy of Mr. Hwang letter enclosed)


LAKE MERRITT
CENTRAL OAKLAND
LAKESIDE PARK
OAKLAND INNER HARBOR
OAKLAND ESTUARY
Jack London Square
Howard Terminal
Jack London Sq.
Boathouse
Camron-Stanford House
Lakeside Park
Cleveland
Victory Ct.
EMBARCADERO
BROADWAY
GRAND AVENUE
MARTIN LUTHER KING JR. WAY
TELEGRAPH AVENUE
HARRISON STREET
WEBSTER STREET
FRANKLIN STREET
LAKESHORE AVENUE
MADISON STREET
OAK STREET
MARKET STREET
880
980
61
0 Feet 1000'
0 Miles ¼mi.
0 Kilometers 50km
©Copyright by Compass Maps, Inc.

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)

January 14, 1999

Philip Briggs, Project Manager
Chevron USA Inc.
Site Assessment & Remediation
Bldg. L, Rm. 1110
P.O. Box 6004
San Ramon, CA 94583-0904

Re: Chevron USA Inc., 1633 Harrison St., Oakland, CA 94612;
STID 3812

Dear Mr. Briggs:

This office has reviewed the "3rd Quarter Groundwater Monitoring Report" dated October 6, 1998 by Blaine Tech Services, Inc., for the above noted facility and your cover letter dated October 8, 1998.

Your letter stated that Oxygen Releasing Compound (ORC) was added to monitoring well, MW-16, on July 23, 1998, and monitoring well, MW-7, on August 11, 1998. A review of the "3rd Quarter Groundwater Monitoring Report" did not note any appreciable change in contaminant concentrations. In fact, for some contaminants, the concentrations increased. Please submit your proposal to show that ORC has increased the availability of oxygen for natural attenuation.

The letter from our office dated June 10, 1998, noted that an assessment down gradient of MW-16 may be warranted since the extent of the contaminant plume appears to extend beyond MW-16. Your letter stated that the closest location down gradient of MW-16, where an investigation could be conducted, is 400 feet away on 19th St. Please explain why a closer location is not possible.

If you have any questions, call me at (510) 567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist

Files

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 10, 1998
STID 3812 b

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

re: 1633 Harrison St., Oakland, CA 94612

Dear Philip Briggs:

This office has reviewed a First Quarter Groundwater Monitoring Report dated March 31, 1998 by Blaine Tech Services, Inc. for the above site. Your cover letter was dated April 13, 1998.The following are comments concerning this report.

1. Your request to use hydrogen peroxide should be sent to this office and also Chuck Headlee of the Regional Water Quality Control Board in the form of a workplan. We would need to know the concentration, method of injection, quantity, time period, method of detecting effect, and locations. The Regional Board will then assist us in reviewing your proposal.

2. The use of ORC is acceptable in MW-16, except that there will be no way of knowing what this will do down gradient. It appears from the history that we are seeing a plume of contamination pass this point and there is no reason to think that the plume ends there. Additional investigation may be warranted in the down gradient direction to assess plume stability or degradation. This situation is continuing and was mentioned before.

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

Sincerely,

Thomas F. Peacock, Manager
Division of Environmental Protection

c: Dick Pantages, Chief - **files**

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

September 8, 1997
STID 3812

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

1633 Harrison St. LOP

Dear Philip Briggs:

This office has reviewed a First Quarter Groundwater Monitoring Report for 1997, dated April 9, 1997 by Blaine Tech Services, Inc. for the above site. You have also made written and telephonic requests concerning this site. The following are comments concerning this report and your requests.

1. Your request to close 11 monitoring wells out of 16 is certainly acceptable, provided this pertains to those wells that have not been monitored because they have no contaminants, specifically MW's 1 - 6 , 8 - 12, and 14.

2. The use of ORC is acceptable in MW-16, except that there will be no way of knowing what this will do down gradient. It appears from the history that we are seeing a plume of contamination pass this point and there is no reason to think that the plume ends there. Additional investigation may be warranted in the down gradient direction to assess plume stability or degradation.

This site does not have a regular case worker but you may call me with any questions at (510) 567-6782.

Sincerely,

Thomas F. Peacock, Manager
Division of Environmental Protection

c: Gordon Coleman, Chief - files

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

March 6, 1997
STID 3812
page 1 of 2

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

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

RE: former Chevron station #9-0020, 1633 Harrison St., Oakland CA 94612

Dear Mr. Briggs,

Since my last letter to Chevron dated July 22, 1996, I have received the following documents:

1) "2nd Quarter 1996 Monitoring at 9-0020," prepared by Blaine Tech Services (BTS), dated 7/24/96, under Chevron cover letter dated 7/25/96;

2) "Quarterly Groundwater Treatment System Compliance Report," prepared by Geraghty & Miller, dated 7/8/94, under Chevron cover letter dated 7/23/96;

3) "3rd Quarter 1996 Monitoring at 9-0020," prepared by BTS, dated 10/15/96, under Chevron cover letter dated 2/17/97; and

4) "4th Quarter 1996 Monitoring at 9-0020," prepared by BTS, dated 1/20/97, under Chevron cover letter dated 2/17/97.

Your cover letter dated 2/17/97 proposed to bail well MW-16 once more, then introducing an oxygen releasing compound (ORC), for the purpose of reducing the hydrocarbons encountered therein. **This proposal is acceptable.** You also indicated that contaminated surface runoff may be entering MW-16, and thus be responsible for the increase in hydrocarbons in the fourth quarter. Under this scenario, the contamination would have to travel approximately 20 feet bgs, which is the depth to water.

Lastly, **it would be acceptable to reduce the sampling frequency from quarterly to semi-annually.** This is due to the long history of quarterly sampling (since 1989), and the relative stability and low concentrations of contaminants.

If you have any questions, please contact me at 510-567-6761.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: James Keller, Blaine Tech Services, 1680 Rogers Ave., San Jose CA 95112
J. Eberle/file

je.3812-C

LOP - RECORD CHANGE REQUEST FORM

printed: 09/08/97

Mark Out What Needs Changing and Hand to LOP Data Entry
(Name/Address changes go to Annual Programs Data Entry)

Insp: TP

AGENCY # : 10000 SOURCE OF FUNDS: F SUBSTANCE: 8006619
StID : 3812 LOC:
SITE NAME: Chevron U.S.A. DATE REPORTED : 12/31/87
ADDRESS : 1633 Harrison St DATE CONFIRMED: 12/31/87
CITY/ZIP : Oakland 94612 MULTIPLE RPs : N

SITE STATUS

CASE TYPE: O CONTRACT STATUS: 7 PRIOR CODE:2A4 EMERGENCY RESP:
RP SEARCH: S DATE COMPLETED: 03/20/92
PRELIMINARY ASMNT: U DATE UNDERWAY: 10/27/88 DATE COMPLETED: 12/01/91
REM INVESTIGATION: U DATE UNDERWAY: 12/01/91 DATE COMPLETED: 07/21/93
REMEDIAL ACTION: U DATE UNDERWAY: 07/22/93 DATE COMPLETED:
POST REMED ACT MON: DATE UNDERWAY: DATE COMPLETED:

ENFORCEMENT ACTION TYPE: 1 DATE ENFORCEMENT ACTION TAKEN: 03/20/92
LUFT FIELD MANUAL CONSID: 3HSCAWG
CASE CLOSED: DATE CASE CLOSED:
DATE EXCAVATION STARTED : 01/01/72 REMEDIAL ACTIONS TAKEN: ED,VE

RESPONSIBLE PARTY INFORMATION

RP#1-CONTACT NAME: Phil Briggs
COMPANY NAME: Chevron U.S.A Inc.
ADDRESS: P O Box 5004
CITY/STATE: San Ramon, C A 94583

INSPECTOR VERIFICATION:

NAME _____ SIGNATURE _____ DATE _____

DATA ENTRY INPUT:

Name/Address Changes Only

ANNPGMS _____ LOP _____ DATE _____

Case Progress Changes

LOP _____ DATE _____

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

1131 Harbor Bay Pkwy
Alameda CA 94502
510/567-6700

II, III

Site ID # _____ Site Name former Chevron Today's Date 7/30/96

Site Address 1633 Harrison St

City Oak Zip 94612 Phone _____

_____ MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:

_____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
_____ II. Hazardous Materials Business Plan, Acutely Hazardous Materials
_____ III. Underground Storage Tanks

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments: 8:03 arrived onsite. Met Phil Briggs, Rick Spencer & BTS. Looked at MW16. BTS rep Fred V. already removed the water from inside the wellbox. He said the water level was below well cap, & had rainbow sheen. I saw a small amt of liquid w/rainbow sheen. MW16 is situated below where the car engines are parked at the parking meter. The top of Christy box & surrounding asphalt have signs of contamination. Asphalt is eaten away in this area near most parking meters. There are 2 small streaks of discoloration going down inside of casing starting from the top. ~~Rick proposed purging ~10 well~~ volumes prior to next QS. We also looked at remediation equipmt enclosure & MW7 (extraction/vapor well).

9:05 left site

Contact Paul R Briggs

Title Site Assess & Remediation Mgr.

Signature Phil R Briggs

Inspector Jennifer Eberle

Signature Jennifer Eberle

II, III

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

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

July 22, 1996
STID 3812

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

RE: former Chevron station #90020, 1633 Harrison St., Oakland CA 94612

Dear Mr. Briggs,

Since my last letter to Chevron dated 7/1/96, I have received the following documents:

a) "1st Quarter 1996 Monitoring at 9-0020" report, prepared by Blaine Tech Services, dated 3/29/96, under your cover letter dated 7/15/96;

b) "Quarterly Groundwater Treatment System Compliance Report," prepared by Geraghty and Miller (G&M), dated 10/25/93; and

c) "Quarterly Groundwater Treatment System Compliance Report," prepared by Geraghty and Miller (G&M), dated 1/26/94.

In addition, I am in receipt of a fax from Rick Spencer of Geraghty and Miller (G&M) today, requesting approval to remove the existing remediation equipment from the site. Attached to the fax is a letter from G&M to EBMUD, dated 7/8/94, indicating that the "groundwater extraction and treatment system. . .was shut down in December 1993 due to low flow rates." The treatment system is being removed not only due to inefficient operation, but also due to safety and urban blight concerns. **It is acceptable to remove the existing treatment system.**

The data from the 3/29/96 quarterly report indicate that first quarter contaminant concentrations have decreased by approximately one-half in downgradient, offsite well MW16. We have set a meeting time for 7/30/96 at 8:00 am to open this well cover and observe the condition of this well. I look forward to meeting you then.

If you have any questions, please contact me at 510-567-6761.

7-24

Post-It™ brand fax transmittal memo 7671	# of pages ▸ 2
To Rick	From J. Eberle
Co. Spencer	Co.
Dept.	Phone #
Fax # 273-3209	Fax #

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Rick Spencer, Geraghty and Miller, 1050 Marina Way South, Richmond CA 94804
Acting Chief/file

je.3812-B

GERAGHTY & MILLER, INC.
Environmental Services

A Heidemij company

PAGE 1 OF 2
(Including cover sheet)

FAX TRANSMITTAL

TO Alameda County Environmental Protection Div.
Ms. Jennifer Eberle: Hazardous Materials Specialist

FROM Ricky Spencer - Master Technician/Proj. Manag.

GERAGHTY & MILLER, INC.
RICHMOND, CALIFORNIA OFFICE

Chevron/Harrison
S.S.#9-0020

DATE 7-22-96

JOB # RC0136.003

FAX # 510-337-9335

TELEPHONE # 510-567-6761

COMMENTS: Dear Ms. Eberle,

On behalf of Chevron Products Co. U.S.A., Geraghty & Miller Inc. is requesting your review and consideration to approve the removal of the groundwater Remediation and Soil Vapor extraction treatment systems, which have not operated since December 1993 as stated in the July 8, 1994, Quarterly Groundwater treatment System Compliance Report at the above referenced Former Service Station, due to low soil & groundwater flow rates.

I am looking forward to meeting you on July 30, 1996 to further evaluate the 1633 Harrison st. Oakland, Ca. Site.

Sincere Thanks,
R Spencer

IF YOU DO NOT RECEIVE ALL PAGES INDICATED ABOVE, PLEASE CALL (510) 233-3200.

COPY OF THIS PAGE TO CORRESPONDENCE BINDER ✪✪; COPY OF ALL PAGES TO CORRESPONDENCE BINDER ✪✪

1050 Marina Way South • Richmond, California 94804 • (510) 233-3200 • FAX (510) 233-3204

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

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

CC4580

July 1, 1996
STID 3812

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

RE: former Chevron station #90020, 1633 Harrison St., Oakland CA 94612

Dear Mr. Briggs,

Since my last letter to Chevron dated 7/21/95, the following documents have been received in this office:

1) "2nd Quarter 1995 Monitoring at 9-0020" report, prepared by Blaine Tech Services (BTS), dated 7/24/95, under cover letter from Mark Miller dated 8/22/95;

2) "3rd Quarter 1995 Monitoring at 9-0020" report, prepared by BTS, dated 11/3/95, under cover letter from Mark Miller dated 12/13/95; and

3) "4th Quarter 1995 Monitoring at 9-0020" report, prepared by BTS, dated 2/6/96, under cover letter from Mark Miller dated 2/22/96.

It has been noted that succeeding quarterly reports have not been received. Therefore, you are requested to forward succeeding quarterly reports within 30 days, or by August 1, 1996. Groundwater was last sampled on 12/30/95, so it should have been sampled by late March or early April 1996. This report (1st quarter 1996) should have been completed by now. I understand that you took over for Mark Miller in March or April 1996, so I expected the quarterly reports to be a bit late. Therefore, I do not expect the 2nd quarter 1996 report to be ready yet.

I received a telephone call from Rick Spencer of Geraghty and Miller today. He wanted to know if they could remove the remediation equipment from the site, due to safety and urban blight concerns. This prompted a review of the file, upon which it was discovered that a remediation update has not been received since December 1993. A cover letter was received from Mark Miller, dated 12/8/93, in which he noted that the dewatering system and the soil vapor extraction (SVE) system were started up in July 1993. SVE flow rates were lower than anticipated. There were plans to install two additional SVE wells. (These wells were apparently not installed.) A copy of the "Quarterly Groundwater Treatment System Compliance Report," dated 10/25/93 was also included.

Due to the lack of remediation updates, you are requested to document the current status of the remediation system(s), within 30 days or by August 1, 1996. This information, along with updated quarterly reporting, will enable us to discuss future remediation at this site.

It has been noted that downgradient, offsite MW16 continues to show elevated levels of hydrocarbons. The December 1995 data indicate concentrations of 770 ppb benzene and 3100 ppb TPHg, which represents the highest benzene concentration reported in that well. I am concerned that gasoline runoff may be entering the well, and therefore **would like to be present onsite during the next quarterly sampling event. Please contact me by telephone at least 3 business days in advance of the next quarterly sampling event**, so that I may note the condition of this well.

If you have any questions, please contact me at 510-567-6761.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Rick Spencer, Geraghty and Miller, 1050 Marina Way South, Richmond CA 94804
Jim Carmody, Weiss Associates, 5500 Shellmound St., Emeryville CA 94608-2411
Acting Chief/file

je.3812-A

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

July 21, 1995
STID 3812

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

RE: former Chevron station #90020, 1633 Harrison St., Oakland CA 94612

Dear Mr. Miller,

Since my last letter to you dated 2/17/94, the following documents have been received in this office:

1) "Groundwater Monitoring and Sampling Activities" report, prepared by Groundwater Technology Inc (GTI), dated 1/28/94

2) "Groundwater Monitoring and Sampling Activities" report, prepared by GTI, dated 4/15/94

3) "Groundwater Monitoring and Sampling Activities" report, prepared by GTI, dated 7/15/94

4) "Groundwater Monitoring and Sampling Activities" report, prepared by GTI, dated 9/26/94

5) "Comprehensive Site Evaluation and Proposed Future Action Plan," prepared by Weiss Associates, dated 12/20/94, DRAFT and unsigned

6) "4th Quarter 1994 Monitoring" report, prepared by Blaine Tech Services (BTS), dated 1/5/95

7) your letter dated 2/8/95 with attached groundwater results for MW7 from 1/17/95

8) fax from BTS, dated 1/24/95, with groundwater results for MW7 from 1/17/95

9) "1st Quarter 1995 Monitoring" report, prepared by BTS, dated 5/11/95

As you recall, a meeting was conducted in this office on 1/26/95. Attendees included Kevin Graves of the RWQCB, yourself, and myself. We discussed the proposal for shutdown of the remedial extraction system, a reduction in frequency in well sampling, and establishment of a Non-Attainment Zone (NAZ), as outlined in the "Comprehensive Site Evaluation and Proposed Future Action Plan," prepared by Weiss Associates.

We decided that this site was not yet ready for NAZ, due to the sudden increase in concentrations of TPHg and BTEX in downgradient well MW-16. We also decided to continue quarterly monitoring and sampling, but only in wells MW7, MW9, MW13, MW15, and MW16. We also noted that the proposed trigger concentrations for benzene were too high (2,000 and 200 ppb in MW7 and MW13, respectively).

It has been noted that concentrations of TPHg and BTEX have decreased between November 1994 and March 1995, even though the groundwater elevation increased by 0.6 feet. Perhaps the June 1995 results will show a continued downward trend. The NAZ proposal can be re-evaluated after more data are submitted.

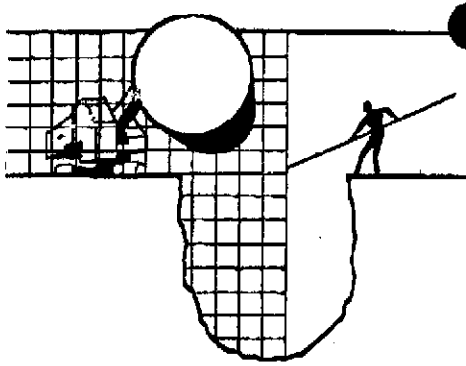
If you have any questions, please contact me at 510-567-6761.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Kevin Graves, RWQCB
Jim Carmody, Weiss Associates, 5500 Shellmound St., Emeryville CA 94608-2411
Tom Peacock/file

je.3812



BLAINE TECH SERVICES INC.

985 TIMOTHY DRIV
SAN JOSE, CA 951
(408) 995-55
FAX (408) 293-87

DATE 1/24/95

Total pages including cover sheet 2

TO JENNIFER EBERLE

OF ALAMEDA COUNTY HEALTH

FROM FRANCIS THIE

REMARKS: MARK MILLER @ CHEVRON ASKED ME TO FAX YOU THIS. THIS IS THE RESULT OF 1/17/95 SAMPLING OF MW-7 @ 1633 HARRISON ST. OAKLAND (CUSA # 9-0020)

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Technical Services	Client Proj. ID: 950117-L1, Chevron 9-0020	Sampled: 01/17/95
985 Timothy Drive	Sample Descript: MW-7	Received: 01/18/95
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 01/20/95
Attention: Jim Keller	Lab Number: 9501919-01	Reported: 01/23/95

QC Batch Number: GC012095BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	2700
Benzene	5.0	140
Toluene	5.0	65
Ethyl Benzene	5.0	44
Xylenes (Total)	5.0	200
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	88

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Suzanne Chin
Project Manager

GERAGHTY & MILLER, INC.
Environmental Services

July 8, 1994
Project No. RC0136.003

Mr. Safa Toma
Source Control Division
East Bay Municipal Utility District
EBMUD Mail Slot #702
P.O. Box 24055
Oakland, California 94623

SUBJECT: Quarterly Groundwater Treatment System Compliance Report, Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California.

Dear Mr. Toma:

Geraghty & Miller, Inc. (Geraghty & Miller) is submitting this system compliance report for the reporting period from April 1 through June 30, 1994, on behalf of Chevron U.S.A. Products Company (Chevron).

The groundwater extraction and treatment system at the above-referenced site was shut down in December 1993 due to low flow rates. Once the system is restarted, further sampling of the system will continue on a monthly basis, per permit requirements. A restart date has not been established at this time.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Geraghty & Miller is submitting this information on behalf of Chevron U.S.A. Products Company. If you have any questions, please do not hesitate to contact the undersigned at (510) 233-3200.

Sincerely,
GERAGHTY & MILLER, INC.

Kent O'Brien
Project Scientist/Project Manager

cc: Mark Miller, Chevron U.S.A. Products Company

1050 Marina Way South • Richmond, California 94804 • (510) 233-3200 • FAX (510) 233-3204

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

July 14, 1993
STID 3812

Nancy Vukelich
Chevron USA Inc.
PO Box 5004
San Ramon CA 94583

RE: former Chevron station
1633 Harrison St.
Oakland CA 94612

Dear Ms. Vukelich,

We are in receipt of the Quarterly Monitoring and Sampling Report, prepared by Groundwater Technology, Inc., dated 5/12/93, submitted with your cover letter dated 6/2/93. Your letter requests a suspension of sampling in 7 monitoring wells. This request is acceptable for MW5, MW6, MW8, MW12, and MW14. MW10 should continue to be monitored and sampled because it defines the edge of the plume. MW11 should continue to be monitored and sampled because it only has two consecutive quarters of non-detectable concentrations. Therefore, you may suspend sampling and monitoring in 5 of the 7 requested wells. The sampling frequency should be **quarterly**. If you have any questions, please contact me at 510-271-4530.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Groundwater Technology, Inc., 4057 Port Chicago Highway, Concord CA 94520
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 17, 1994
STID 3812

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

RE: Former Service Station
1633 Harrison St., Oakland CA 94612

Dear Mr. Miller,

We are in receipt of the 11/13/93 Groundwater Monitoring and Sampling Activities report prepared by Groundwater Technology Inc., under your cover letter dated 12/8/93. This report documents the sampling of wells in September 1993. You requested that MW-11 be discontinued from the sampling matrix, since MW-3 is in an upgradient position from MW-11, and since both wells have been ND for hydrocarbons for the past 4 quarters. This request is acceptable.

We look forward to your workplan for the installation of two additional SVE wells. If you have any questions, please contact me at 510-271-4530. Please note that with the exception of closure reports, routine reports and documents no longer need to be copied to the Regional Water Quality Control Board.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Ed Howell/file

je

LOP - RECORD CHANGE REQUEST FORM

printed: 02/17/94

Mark Out What Needs Changing and Hand to LOP Data Entry
(Name/Address changes go to Annual Programs Data Entry)

AGENCY # : 10000 SOURCE OF FUNDS: F SUBSTANCE: 8006619
StID : 3812
SITE NAME: Chevron U.S.A. DATE REPORTED : 12/31/87
ADDRESS : 1633 Harrison St DATE CONFIRMED: 12/31/87
CITY/ZIP : Oakland 94612 MULTIPLE RPs : N

see 6-17-92 ltr from Chevron in Cfile

SITE STATUS

CASE TYPE: G CONTRACT STATUS: 7 PRIOR CODE:2A4 EMERGENCY RESP:
RP SEARCH: S DATE COMPLETED: 03/20/92
PRELIMINARY ASMNT: U DATE UNDERWAY: 10/27/88 DATE COMPLETED: 12/01/91
REM INVESTIGATION: U DATE UNDERWAY: 12/01/91 DATE COMPLETED: 07/21/93
REMEDIAL ACTION: U DATE UNDERWAY: 07/22/93 DATE COMPLETED:
POST REMED ACT MON: DATE UNDERWAY: DATE COMPLETED:

ENFORCEMENT ACTION TYPE: 1 DATE ENFORCEMENT ACTION TAKEN: 03/20/92
LUFT FIELD MANUAL CONSID: 3HSCAWG
CASE CLOSED: DATE CASE CLOSED:
DATE EXCAVATION STARTED : 01/01/72 REMEDIAL ACTIONS TAKEN: ED,VE

RESPONSIBLE PARTY INFORMATION

RP#1-CONTACT NAME: Nancy Vukelich
COMPANY NAME: Chevron Usa Inc.
ADDRESS: Po Box 5004
CITY/STATE: San Ramon Ca 94583

INSPECTOR VERIFICATION:

NAME _____ SIGNATURE _____ DATE _____

DATA ENTRY INPUT:

Name/Address Changes Only

ANNPGMS _____ LOP ____ DATE _____

Case Progress Changes

LOP _____ DATE _____

Chevron

June 2, 1993

Chevron U.S.A. Products Company
2410 Camino Ramon
San Ramon, CA 94583

Marketing Department
Phone 510 842 9500

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

Re: Former Chevron Service Station #9-0020
1633 Harrison, Oakland

Dear Ms. Eberle:

Enclosed we are forwarding the Quarterly Monitoring and Sampling Report dated May 12, 1993, prepared by our consultant Groundwater Technology, Inc. for the above referenced site. As indicated in the report, ground water samples were collected and analyzed for total petroleum hydrocarbons and BTEX. Benzene was detected in monitor wells MW-7, MW-9 and MW-13 only at concentrations of 1.4, 51 and 72 ppb, respectively. Depth to ground water was measured at approximately 20-feet below grade, and the direction of flow is to the east.

Chevron typically samples ground water on a quarterly basis at their operating or former service stations. However, a review of data for this site indicates that some of the monitor wells warrant sampling frequency modification for ground water monitoring. The California Water Quality Control Board (CWQCB) ground water monitoring guidelines also support frequency changes for ground water monitoring. CWQCB guidelines state that "Quarterly (ground water) monitoring is the maximum sampling interval typically allowed when ground water contamination is present unless other arrangements are made with the Regional Water Quality Control Board (RWQCB) staff." RWQCB-San Francisco Bay Region personnel have indicated that the Board will allow reduction of the sampling frequency on a site-specific basis, if the frequency modification is justified by site conditions.

A review of the referenced site data indicates the following:

* In 1972, the station was abandoned with all improvements including the underground storage tank system.

* A total of sixteen (16) monitor wells and eight (8) soil borings have been installed on and off-site through a number of phases of assessment work. Soil samples reported concentrations of TPH-Gasoline in wells MW-4, MW-7 and boring B-D. MW-4 reported a concentration of 600 ppm at sample depths of 4.5 and 9.6-feet below grade, MW-7 reported concentrations of 600 ppm at 17-feet and 50,000 ppm at 23.5-feet below grade and B-D reported a concentration of 120 ppm at 25-feet below grade.

* A soils excavation program was implemented to excavate and aerate the soils in the vicinity of MW-4. Approximately 150 cubic yards of soils were excavated and disposed of off-site in an approved landfill. Final excavation samples collected were analyzed for TPH-Gasoline, TPH-Diesel and BTEX. In addition, three (3) excavation samples were analyzed for halogenated volatile organics. All the samples reported non-detectable concentrations of these constituents with the exception of a sample collected from the southern sidewall at a depth of 8-feet below grade. This sample reported concentrations of TPH-Gasoline and TPH-Diesel of 310 and 270 ppm, respectively. Benzene was not detected in this sample. Laboratory analysis reported that the TPH-Diesel chromatograph was of a non-standard diesel pattern. They highly suspect this to be a result of weathered gasoline as diesel was never marketed at this site. Further excavation laterally to the south was precluded due to the presence of an adjacent building foundation wall. However, no hydrocarbon contaminants were detected in the adjacent 10-foot and 5-foot depth samples collected from the southern sidewall. The excavation extended to a depth of approximately 14-feet below grade.

A review of the referenced site data indicates the following:

* **1972** - Site abandoned prior to 1972. Site has since been used as a parking lot.

* **10/88** - Investigation was initiated in preparation for future sale of property. Three (3) ground water monitor wells were installed designated MW-1 through MW-3. Soil samples collected from the drill cuttings reported non-detectable concentrations of TPH-G and BTEX. Ground water samples collected were analyzed for TPH-G, BTEX, and volatile organic compounds. All samples reported ND concentrations of TPH-G and BTEX. However, various halocarbons TCE, chloroform, 1,2 DCE were reported at concentrations up to 84 ppb.

* **11/89** - Nine (9) borings were advanced with five (5) being completed into ground water monitor wells designated MW-4 through MW-8. Analytical testing of the soils detected TPH-G at a concentration of 50,000 ppm from MW-7 (B-11) at 23.5' and a concentration of 600 ppm from MW-4 at sample depths of 4.5 and 9.6 feet below grade.

* **6/90** - Four (4) borings were advanced and completed into ground water monitor wells designated MW-9 through MW-12 in an attempt to delineate the extent of the plume. All soil samples collected reported ND concentrations of hydrocarbon contaminants. Halocarbons were detected in all the newly installed wells with the exception of MW-9 (down-gradient).

* **11/91** - Two (2) additional off-site wells designated MW-13 and MW-14 were installed to delineate the extent of the plume and to investigate the possibility of an off-site up-gradient source for the halocarbons. Also, four (4) borings were installed to delineate the extent of the subsurface contamination in the vicinity of MW-7. All soil samples reported non-detectable hydrocarbon concentrations. An off-site investigation was performed to assess if the Hallmark Cleaners, located directly up-gradient, performed on-site cleaning. The search indicated that the Hallmark Cleaners does not perform any cleaning on the premisesand that clothes are sent to another location for dry cleaning. However, other businesses in the immediate vicinity which may use or store halocarbons (industrial inks, solvents and degreasers commonly contain halocarbons) include printers, dry-cleaners, machine shops and manufacturers. A large number of printers are found in the immediate vicinity of the site, a knitwear manufacturer is located up-gradient a short distance, and various automobile repair facilities are located nearby. The number of business in the immediate vicinity up-gradient of the site which may be potential sources of halogenated volatile organics appears to be extensive.

* **1/92** - A soils excavation program was implemented to excavate and aerate the soils in the vicinity of MW-4. Approximately 150 cubic yards of soils were excavated and disposed of off-site an an approved landfill. Final excavation samples collected were analyzed for TPH-Gasoline, TPH-Diesel, and BTEX. In addition, per the request of Mr. Smith, three (3) excavation samples were analyzed for halogenated volatile organics. All the samples reported non-detectable concentrations of these constituents with the exception of a sample collected from the southern sidewall at a depth of 8-feet below grade. This sample reported concentrations of TPH-Gasoline and TPH-Diesel of 310 and 270 ppm, respectively. Benzene was not detected in this sample. Laboratory analysis reported that the TPH-Diesel chromatogram was of a non-standard diesel pattern. They highly suspect this to be a result of weathered gasoline as diesel was never marketed at this site. Further excavation laterally to the south was precluded due to the presence of an adjacent building foundation wall. However, no hydrocarbon contaminants were detected in the adjacent 10-foot and 5-foot depth samples collected from the southern sidewall. The excavation extended to a depth of approximately 14-feet below grade.

INTRODUCTION

At the request of Chevron, U.S.A (Chevron) Weiss Associates (WA) has prepared this site evaluation for Chevron Service Station #9-0020, located at 1633 Harrison Street, Oakland, California. The objectives of this evaluation are to: 1) Summarize all investigative and remedial actions performed at the site to date; 2) evaluate whether the site meets the Regional Water Quality Control Board-San Francisco Bay Region (RWQCB) criteria for establishment of a non-attainment area; and 3) outline a recommended future action plan. The site-specific information presented in this evaluation was compiled from the reports listed in the References Section of this report.

SITE HISTORY

SITE SETTING

The former service station is located at the southwest corner of the intersection of 17th and Harrison Streets in Oakland, California. The site is located in a mixed retail, office, residential and light industrial area of downtown Oakland. The aboveground structures of the former station, including the pump island foundations, have been removed. According to Chevron records, the service station facilities, including underground storage tanks and lines, were removed prior to 1972. The site has apparently been occupied and operated as a parking lot since December 1, 1975.

The area is underlain by Quaternary marine and non-marine alluvial deposits consisting of layers of sand and gravel interspersed with thick sections of sand and clay. The uppermost strata in this area is the Merritt Sand, which underlies the site. The aquifers in the area are predominantly unconfined. Ground water flow direction at the site is northeastward toward Lake Merritt, a lagoon on the eastern edge of the San Francisco Bay. Lake Merritt and the tidal inlet connecting the lake to the Alameda Estuary are the nearest surface drainages to the site, with Lake

Merritt located less than 1,500 ft east of the site. The surface elevation at the site is approximately 30 ft above mean sea level (msl).

SITE INVESTIGATIONS

1988 Soil Vapor Survey: In January 1988, EA Engineering, Science, and Technology, Inc. of Lafayette, California, performed a soil vapor survey at the site. Total volatile hydrocarbons were detected in concentrations from 1 to 140 parts per million volume (ppmv) in 22 soil vapor samples collected from 11 locations. Laboratory analysis indicated that the compounds detected in these vapor samples were primarily low-boiling compounds (peaks eluting prior to benzene) which appeared to be composed predominantly of a single polar compound, most probably methanol. Methanol is a common product of bacterial metabolism. The highest concentration of the low-boiling compound (140 ppmv) was found near the waste oil tank.

1988 Well Installation: In October 1988, Western Geologic Resources, Inc. (WGR) of San Rafael, California installed onsite ground water monitoring wells MW-1 (B-1), MW-2 (B-2) and MW-3 (B-3) to a depth of approximately 30 feet below ground surface (bgs). Total fuel hydrocarbons (TFH) were detected at 12 parts per million (ppm) in one soil sample collected at a depth of 19 ft bgs from boring B-2. No TFH were detected in any other soil samples. No aromatic hydrocarbons were detected in any soil samples. Neither TFH nor aromatic hydrocarbons were detected in any of the ground water samples. However, the following halocarbons were detected in ground water samples: carbon tetrachloride in MW-1 (18 ppb), MW-2 (3 ppb) and MW-3 (8 ppb); tetrachloroethylene (PCE) in MW-2 (34 ppb) and MW-3 (84 ppb); trichloroethylene (TCE) in MW-2 (3 ppb) and MW-3 (3 ppb); trans-1-2-Dichloroethylene (1,2-DCE) in MW-2 (10 ppb) and MW-3 (5 ppb). Summary tables of concentrations detected in soil and ground water during this investigation are presented in Appendix B, and the boring logs for wells MW-1, MW-2 and MW-3 are presented in Appendix C.

1989 Subsurface Investigation: Between April 11 and 19, 1989, WGR supervised the drilling of nine soil borings (B-4 through B-12) to further assess the horizontal and vertical extent of petroleum hydrocarbons and halocarbons in the subsurface. Five of the soil borings (B-8 through

B-12) were completed as ground water monitoring wells MW-4 through MW-8, respectively, to depths between 26 and 33 feet. Borings B-4 through B-7 were drilled to the top of the water table to investigate the vadose zone along the upgradient property line. Hydrocarbon odors were noted in soil samples from borings B-4, B-8, B-9, B-10, B-11 and B-12, most notably in the vadose zone from 10 to 21 ft below ground surface (bgs) and just above first water, at about 21 ft bgs.

Total purgeable petroleum hydrocarbons, reported as diesel (TPH-D), were detected in unsaturated soil samples from boring B-8/MW-4 and B-11/MW-7. TPH-G was detected at 600 ppm in soil samples collected from B-8/MW-4 at depths of 4.5 ft and 9.6 ft bgs. 1,1,1-trichloroethane (TCA) was detected at 0.1 ppm in the soil sample collected from boring B-8/MW-4 at 9.6 ft bgs. Oil and grease were detected at 80 ppm in a saturated soil sample collected at 21 ft bgs from boring B-9/MW-5. No hydrocarbons were detected in any other unsaturated soil samples. Up to 50,000 ppm TPH-G were detected in saturated soil samples from boring B-11/MW-7 at 23.5 ft below grade. The sample collected from 21 ft bgs from B-9/MW-5 was also analyzed for total chromium (Cr), zinc (Zn), cadmium (Cd), and total lead (Pb). None of these metals were detected at concentrations exceeding the Total Threshold Limit Concentration (TTLC).

Ground water samples collected on April 23, 1989 from monitoring well MW-7, located downgradient from the former underground fuel tanks, showed TPH-G at 8,400 ppb and benzene at 100 ppb. No TPH-G was detected in the ground water samples collected from any other well. Total oil and grease was detected at 3 ppm in ground water samples collected from monitoring wells MW-7 and MW-8 but was not detected in any other well. Carbon tetrachloride was detected from 2 ppb to 35 ppb in ground water samples collected from all of the monitoring wells, with the highest concentration detected in the sample from well MW-4. Chloroform was detected at 7 ppb to 11 ppb in samples from all of the monitoring wells, with the highest concentration detected in the sample from well MW-4. PCE and 1,2-DCE were detected in ground water samples from wells MW-2 (38 ppb and 10 ppb, respectively), MW-3 (110 ppb and 11 ppb, respectively), MW-5 (4 ppb and 2 ppb, respectively) and MW-8 (3 ppb and 4 ppb, respectively). TCE was detected in samples from wells MW-2 and MW-3, both at a concentration of 3 ppb. Cd was detected at 0.008 ppm in the ground water sample collected from well MW-8. Cr was detected in samples from all wells at low levels ranging from 0.005 ppm to 0.031 ppm. Pb was detected in samples from wells

MW-1 (0.018 ppm), MW-7 (0.18 ppm) and MW-9 (0.007 ppm). Zn was detected in samples from all of the wells at concentrations ranging from 0.087 ppm to 7.5 ppm. Analytic results for soil and ground water sampling are presented in Appendix B, and the boring logs for wells MW-4 through MW-8 are presented in Appendix C.

1990 Offsite Subsurface Investigation and Well Survey: From June 18 through 21, 1990, WGR installed offsite ground water monitoring wells MW-9, MW-10, MW-11 and MW-12 to a maximum depth of 29.5 ft bgs, cross- and downgradient from the Chevron site. No TPH-G, benzene, toluene, ethylbenzene and total xylenes (BTEX) or halocarbons were detected in any of the soil samples collected and analyzed from borings B-13 through B-16. TPH-G and BTEX were detected at 5,700 ppb and 47 ppb, respectively, in ground water samples collected from MW-9 only, located downgradient from the site. Halocarbons, including carbon tetrachloride, chloroform, PCE, TCE and 1,2-DCE, were detected in ground water samples collected from wells MW-10, MW-11 and MW-12 with a maximum concentration of 73 ppb PCE detected in samples collected from MW-11, located cross-gradient from the site.

A search of registered wells within one-half mile of the site was conducted by the County of Alameda Public Works Agency using their computer database. Ninety-six wells were located within a one-half mile radius of the site. Most of these wells are monitoring or test wells. No drinking water wells and only one irrigation well were identified. The irrigation well is located more than one quarter of a mile southeast and cross gradient of the site. The locations of the wells are illustrated in a site map presented in Appendix A and the owners, well locations and uses are listed in tables presented in Appendix B.

1991 Additional Offsite Well Installation and Investigation: On October 3, 1991, Pacific Environmental Group, Inc. (PEG), installed downgradient ground water monitoring well MW-13 to evaluate the extent of petroleum hydrocarbons in the ground water, and upgradient monitoring well MW-14 to investigate suspected sources of halogenated volatile organic compounds (HVOCs). In addition, four soil borings (B-A through B-D) were drilled to assess the extent of hydrocarbons in the subsurface in the vicinity of monitor well MW-7. Soil samples collected from the drill cuttings were analyzed for TPH-G and BTEX; soil samples collected from MW-14 were also

analyzed for HVOCs. No HVOCs, BTEX compounds or halocarbons were detected in soil samples collected from wells MW-13 and MW-14. TPH-G at 120 ppm were detected in the 26 ft depth soil sample from boring B-D. No HVOCs were detected in ground water samples collected from MW-13 and low concentrations of HVOCs were detected in ground water samples collected from all other monitor wells during the routine quarterly monitoring event on November 15, 1991. TPH-G were detected in ground water samples collected from MW-4 (97 ppb), MW-7 (3,300 ppb), MW-9 (4,000 ppb) and MW-13 (3,100 ppb). Benzene was detected in ground water samples collected from MW-7 (150 ppb), MW-9 (8.8 ppb) and MW-13 (68 ppb). Analytic results for soil and ground water are presented in Appendix B and the boring logs for wells MW-13 and MW-14 are presented in Appendix C.

Upgradient Source Investigation: During the October 1991 investigation described above, PEG also performed a reconnaissance of possible upgradient sources of HVOCs. Hallmark Cleaners, a dry cleaning business located approximately 60 ft upgradient of the former Chevron service station, was identified in a previous WGR report as a possible source for carbon tetrachloride and other halocarbons detected in the on- and offsite monitoring wells. According to the Oakland Fire Marshalls' Office records, no permits are on file for an above or below-ground storage tank at Hallmark Cleaners but it was mentioned that permits are required only for the storage of flammable substances; carbon tetrachloride is not a flammable substance. The City of Oakland Building Department does not maintain records of storage tank installations. During a pre-field site inspection on September 30, 1991, PEG personnel visited Hallmark Cleaners and spoke to an employee of the business. It was determined that, presently, there are no above-ground storage tanks, and the dry cleaning does not occur at the site but that the clothes are sent to another location to be cleaned.

Other businesses in the immediate vicinity which may use or store halocarbons include printers, dry-cleaners, machine shops and manufacturers. A large number of printers are located in the vicinity of the site, a knitwear manufacturer is located upgradient of the site, and various automobile repair facilities are located nearby. The number of businesses in the immediate vicinity upgradient of the site which may be potential sources of halogenated volatile organics appears to be extensive.

1992 Excavation: Between January 7 and 22, 1992, PEG oversaw the excavation of 150 cubic yards of soil from the vicinity of MW-4. Soil samples were collected from the excavation bottom and sidewalls to determine the final extent of the excavation. Over-excavation was performed as necessary. Additionally, a 30-ft long trench extending 5 ft in depth was excavated across the area of the former underground storage tanks to confirm that the tanks had been removed from the site. No underground storage tanks were observed although construction debris, including piping and concrete slabs, was found beneath the surface in the area of the former tanks. Approximately 150 cubic yards of soil, including an estimated 27 cubic yards of discolored soil, were excavated and disposed of offsite at an approved landfill. The excavations were backfilled with compacted Class II aggregate road base rock. Final excavation samples were analyzed for TPH-G, TPH-D and BTEX. In addition, three excavation samples were analyzed for HVOCs. These constituents were identified in only one sample collected from the southern sidewall at 8 ft bgs, where 310 ppm TPH-G, 270 ppm TPH-D but no benzene were detected. Laboratory analysis indicated that the TPH-D chromatogram was of a non-standard diesel pattern and may indicate the presence of weathered gasoline. Diesel was never marketed at this site. Further excavation to the south was precluded by the foundation of an adjacent building that paralleled the excavation sidewall to a depth of about 10 ft. However, no hydrocarbons were detected in the 5 ft and 10 ft depth samples collected from the southern sidewall. The final dimensions of the soil excavation were approximately 20 ft by 12 ft by 14 ft deep. With the exception of the small area near the 8 ft depth sample from the southern excavation sidewall, all hydrocarbon-affected soil in the vicinity of MW-4 was removed.

1992 Evaluation of Chlorinated Hydrocarbon Distribution: In October 1992, Geraghty & Miller, Inc. (GM) of Richmond, California, reviewed documents pertaining to the presence of chlorinated hydrocarbons in the soil and ground water beneath the Chevron site. Their objective was to determine if the data suggested that the chlorinated hydrocarbons detected in ground water beneath the Chevron facility may have emanated from a source located hydraulically upgradient (west) of the site. GM presented the following observations:

1) The highest chlorinated hydrocarbon concentrations in ground water were detected in water samples collected from wells located along the upgradient property boundary.

2) 1,1,1-trichloroethane (TCA) is the only chlorinated hydrocarbon detected in soil samples collected at the site above the ground water table; the 9.6 ft depth sample collected from boring B-8 (MW-4) contained 0.1 ppm TCA.

3) Chlorinated hydrocarbons, including TCA, were not detected in soil samples collected after excavation of soil in the vicinity of boring B-8 (MW-4).

4) A number of potential sources of chlorinated hydrocarbons, e.g., dry-cleaning and automotive businesses, have been identified upgradient of the site.

Based on these observations, GM concluded that the source of chlorinated hydrocarbons in the ground water is probably located upgradient of the Chevron facility. In a letter from Jennifer Eberle, Hazardous Materials Specialist, ACDEH, to Nancy Vukelich, Chevron U.S.A., dated November 4, 1992, Ms. Eberle stated that the ACDEH accepted this conclusion. The site wells are therefore no longer sampled for HVOCs.

1992 Additional Environmental Assessment and Well Installation: Between November 11 and December 8, 1992, Groundwater Technology, Inc. (GTI) of Concord, California, installed offsite ground water monitoring wells MW-15 and MW-16 to delineate the extent of the hydrocarbon plume in the downgradient direction. No TPH-G or BTEX were detected in either soil or ground water samples collected from these wells. Ground water samples were also collected from the existing wells at this time. Benzene was detected only in monitor wells MW-7 (810 ppb), MW-9 (380 ppb) and MW-13 (1,400 ppb). TPH-G was detected in water samples collected from wells MW-7 (11,000 ppb), MW-9 (9,900 ppb) and MW-13 (87,000).

A database file review by Environmental Risk Information and Imaging Services (ERIIS) reported 67 leaking underground storage tanks (LUSTs) within a 1-mile radius of the site. According to the ERIIS map, illustrating the locations of Federal- and State-reported hazardous waste and toxic chemical sites, there are five LUST sites within two blocks of the Chevron site. The closest LUST site is at the Harrison Street Garage, 1432 Harrison Street, south of the Chevron site. The ERIIS map also shows four facilities that have registered hazardous waste activities under the Resource Conservation and Recovery Act.

1993 Dewatering and Soil Vapor Extraction (SVE) System Installation: In June 1993, GM installed a dewatering system and a SVE remediation system in wells MW-4 and MW-7 to mitigate

impacted soils in the vicinity of well MW-7 at approximately 22 ft below grade. GM began operating the system in July 1993. During the initial system startup, it was determined that the catalytic unit would not pass the initial startup criteria stated in the Bay Area Air Quality Management District (BAAQMD) air permit. The very low flow rate of less than 4 cubic ft per minute (cfm) and the rapid drop in concentrations caused an apparent destruction efficiency of less than 90%, the minimum efficiency required by the air permit. The low flow rate necessitates the dilution of the process air stream to bring the total flow up to approximately 35 scfm. This dilution of the influent is the cause of the apparent low destruction efficiency. The treatment system was shut off and discharge from the dewatering system ceased on December 12, 1993.

Discussion of Ground Water Sampling: Sixteen soil borings have been drilled onsite, eight of which have been converted to ground water monitoring wells (MW-1 through MW-8). Eight additional monitoring wells have been installed offsite (MW-9 through MW-16). Ground water samples have been collected and analyzed for petroleum hydrocarbons on a quarterly basis since November of 1988. Data from this monitoring program indicate that:

1) Hydrocarbons are present in ground water in the northeast corner of the site, extending offsite into Harrison Street, but do not appear to extend downgradient past MW-15.

2) The chlorinated hydrocarbons detected in ground water apparently originate from an unknown offsite source.

REMEDIAL ACTIONS

Excavation: The soil excavation program, as described above, removed as much of the hydrocarbon-impacted soil in the vicinity of well MW-4 as possible. With the exception of a narrow zone at the southern sidewall, where a soil sample collected at a depth of 8 ft bgs contained 310 ppm TPH-G but no benzene, all hydrocarbon-affected soil in the vicinity of well MW-4 was removed. No significant hydrocarbon concentrations were encountered in the unsaturated soil in any other area of the site.

Dewatering/SVE System Operation: As described above, an attempt to extract soil vapor from wells MW-4 and MW-7 was made in July 1993. The very low flow rate of less than 4 cfm and the rapid drop in concentrations caused an apparent destruction efficiency of less than 90%, the minimum efficiency required by initial startup air permit criteria. The dewatering system could also only extract low ground water yields: between system startup on July 1, 1993 and December 12, 1993, only 462 gallons of hydrocarbon-impacted ground water were removed at pumping rates ranging from 0.004 to 0.02 gallons per minute (gpm). The treatment system was shut off and dewatering system discharge ceased on December 12, 1993. Monthly ground water influent sampling indicated that TPH-G concentrations dropped from 4,400 ppb on July 15, 1993 to 220 ppb on September 9, 1993. Although the pump was shut down for a month and a half between the first and second sampling events, there was no significant increase in hydrocarbon concentration. Hydrocarbon concentrations remained relatively unchanged during the third and fourth sampling events. Ground water sampling results, average pumping rates, and influent concentrations for each month of system operation are presented in Appendix B.

The effectiveness of augmenting the existing SVE system with additional wells has been evaluated. However, it was determined that the low permeability sediments encountered at the site would still limit the effectiveness of the extraction system, and the limited benefit derived would not justify the additional cost.

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

November 4, 1992

STID 3812

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

RE: Former Chevron Station 90020
1633 Harrison St.
Oakland CA 94612

Dear Ms. Vukelich,

We are in receipt of the Evaluation of Chlorinated Hydrocarbon Distribution, prepared by Geraghty & Miller, Inc., dated 10/5/92, under your letter dated 10/20/92. This evaluation concluded that the Volatile Organic Compounds (VOC's) detected in groundwater beneath the Chevron site are emanating from an off-site, upgradient source. Upon a review of the data, this conclusion is hereby accepted. However, your responsibility does not end with this assessment. You must identify potential sources of the VOC contamination **by name and address** in order to aid our follow-up of these sites. This approach has been implemented with other Chevron sites under Kenneth Kan's purview. Please provide us with these names and addresses **within 30 days or by December 4, 1992.**

If you have any questions, please contact me at 510-271-4530.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Kent O'Brien, Geraghty & Miller, 1050 Marina Way South, Richmond CA 94804
Rich Hiett, RWQCB
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

October 9, 1992

STID 3812

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

RE: Former Chevron Station 90020
1633 Harrison St.
Oakland CA 94612

Dear Ms. Vukelich,

We are in receipt of your letter dated 8/26/92 with attached receipt copies for a total of 49 cubic yards of soil removed from the vicinity of monitor well MW-4. However, "approximately 150 cubic yards of soils were excavated and disposed of off-site at an approved landfill," according to your letter to us dated 6/17/92. This figure (150 cubic yards) is substantiated in the 6/2/92 letter report on soil excavation activities prepared by Pacific Environmental Group, Inc. Therefore, we request that you submit the remainder of receipts for soil disposal **within 30 days or by November 9, 1992.**

In addition, we are still concerned about the VOC plume in groundwater at the site. You have "surmised that the solvents are emanating from an off-site source" in previous letters. However, further assessment of the solvent distribution pattern has not yet been performed to support your theory. The source of the VOCs in groundwater remains unknown. You are required to identify which site(s) you believe are contributing to the VOC plume, with supporting data **within 30 days or by November 9, 1992. This is our second request for such an assessment.** The first request was by letter dated 8/19/92.

If you have any questions, please contact me at 510-271-4530.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Sandra Lindsey, Groundwater Technology, Inc., 4057 Port Chicago Highway, Concord CA 94520
Rich Hiett, RWQCB
Ed Howell/File

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

October 5, 1992

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

Re: Former Chevron Service Station #9-0020
1633 Harrison, Oakland

Dear Ms. Eberle:

Enclosed are the additional copies of the soil disposal receipts per your request. These receipts were inadvertently omitted from the documentation submitted to you on August 26, 1992.

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

Attachment

cc: Mr. Rich Hiett, RWQCB-Bay Area
File (9-0020-3)

total here is
141 yd3
orig. batch is 49 yd3
total = 190 yd3 ≠ 150 yd3.

REDWOOD LANDFILL INC.

8950 REDWOOD HIGHWAY
P.O. BOX 793
NOVATO, CALIFORNIA 94948
TEL: (415) 892-2851
FAX: (415) 898-1354

- PERSONS USING THESE PREMISES DO SO AT THEIR OWN RISK.
- CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES.
- NO RUMMAGING IN DUMP AREA.
- NO SMOKING ON DUMP SITE.
- PLEASE NOTIFY OFFICE OF ANY COMPLAINT.

X _____
DRIVER'S SIGNATURE

RK DP
RECEIVED BY

ACCOUNT NUMBER: 1807 CUSTOMER: CHEVRON U.S.A., INC.6496570
JOB NUMBER: 9-0020 DESC: OAKLAND
VEHICLE: BODINE TIME: 8:43:24 DATE: [redacted]

COMMODITY: O.C./P.C. DIRT/PLAST YARDS: 18.00 LOAD #: 103
PER YARD 14.00 FEE 252.00

TOTAL 252.00
INVOICE: 28167

BO/SO-O *** CHARGE INVOICE

REDWOOD LANDFILL INC.

8950 REDWOOD HIGHWAY
P.O. BOX 793
NOVATO, CALIFORNIA 94948
TEL: (415) 892-2851
FAX: (415) 898-1354

- PERSONS USING THESE PREMISES DO SO AT THEIR OWN RISK.
- CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES.
- NO RUMMAGING IN DUMP AREA.
- NO SMOKING ON DUMP SITE.
- PLEASE NOTIFY OFFICE OF ANY COMPLAINT.

X _____
DRIVER'S SIGNATURE

RK DP
RECEIVED BY

ACCOUNT NUMBER: 1807 CUSTOMER: CHEVRON U.S.A., INC.6496570
JOB NUMBER: 9-0020 DESC: OAKLAND
VEHICLE: BODINE TIME: 8:59:20 DATE: [redacted]

COMMODITY: O.C./P.C. DIRT/PLAST YARDS: 18.00 LOAD #: 106
PER YARD 14.00 FEE 252.00

TOTAL 252.00
INVOICE: 28170

B1/S1-1 *** CHARGE INVOICE

36 yd³

REDWOOD LANDFILL INC.

8950 REDWOOD HIGHWAY
P.O. BOX 793
NOVATO, CALIFORNIA 94948
TEL: (415) 892-2851
FAX: (415) 898-1354

- PERSONS USING THESE PREMISES DO SO AT THEIR OWN RISK.
- CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES.
- NO RUMMAGING IN DUMP AREA.
- NO SMOKING ON DUMP SITE.
- PLEASE NOTIFY OFFICE OF ANY COMPLAINT.

X M. Taylor
DRIVER'S SIGNATURE

RK DP
RECEIVED BY

ACCOUNT NUMBER: 1807 CUSTOMER: CHEVRON U.S.A., INC.6496570
JOB NUMBER: 9-0020 DESC: OAKLAND
VEHICLE: BODINE TIME: 10:29:24 DATE: 1/22/92

COMMODITY: O.C./P.C. DIRT/PLAST YARDS: 16.00 LOAD #: 147

PER YARD 14.00 FEE 224.00

TOTAL 224.00
INVOICE: 28194

BO/SO-0 *** CHARGE INVOICE

REDWOOD LANDFILL INC.

8950 REDWOOD HIGHWAY
P.O. BOX 793
NOVATO, CALIFORNIA 94948
TEL: (415) 892-2851
FAX: (415) 898-1354

- PERSONS USING THESE PREMISES DO SO AT THEIR OWN RISK.
- CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES.
- NO RUMMAGING IN DUMP AREA.
- NO SMOKING ON DUMP SITE.
- PLEASE NOTIFY OFFICE OF ANY COMPLAINT.

X Bodine
DRIVER'S SIGNATURE

RK DP
RECEIVED BY

ACCOUNT NUMBER: 1807 CUSTOMER: CHEVRON U.S.A., INC.6496570
JOB NUMBER: 9-0020 DESC: OAKLAND
VEHICLE: BODINE TIME: 10:53:21 DATE: 1/22/92

COMMODITY: O.C./P.C. DIRT/PLAST YARDS: 18.00 LOAD #: 158

PER YARD 14.00 FEE 252.00

TOTAL 252.00
INVOICE: 28202

BO/SO-0 *** CHARGE INVOICE

34 yd³

REDWOOD LANDFILL INC.

8950 REDWOOD HIGHWAY
P.O. BOX 793
NOVATO, CALIFORNIA 94948
TEL: (415) 892-2851
FAX: (415) 898-1354

- PERSONS USING THESE PREMISES DO SO AT THEIR OWN RISK.
- CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES.
- NO RUMMAGING IN DUMP AREA.
- NO SMOKING ON DUMP SITE.
- PLEASE NOTIFY OFFICE OF ANY COMPLAINT.

X _____
DRIVER'S SIGNATURE

RK DP
RECEIVED BY

ACCOUNT NUMBER: 1807 CUSTOMER: CHEVRON U.S.A., INC.6496570
JOB NUMBER: 19-0020 DESC: OAKLAND
VEHICLE: BODINE TIME: 11:30:56 DATE: 1/22/92

COMMODITY: O.C./P.C. DIRT/PLAST YARDS: 16.00 LOAD #: 168

PER YARD 14.00 FEE 224.00

TOTAL 224.00
INVOICE: 28207

B2/S2-2 *** CHARGE INVOICE

REDWOOD LANDFILL INC.

8950 REDWOOD HIGHWAY
P.O. BOX 793
NOVATO, CALIFORNIA 94948
TEL: (415) 892-2851
FAX: (415) 898-1354

- PERSONS USING THESE PREMISES DO SO AT THEIR OWN RISK.
- CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES.
- NO RUMMAGING IN DUMP AREA.
- NO SMOKING ON DUMP SITE.
- PLEASE NOTIFY OFFICE OF ANY COMPLAINT.

X M. Taylor
DRIVER'S SIGNATURE

RK DP
RECEIVED BY

ACCOUNT NUMBER: 1807 CUSTOMER: CHEVRON U.S.A., INC.6496570
VEHICLE: B11 TIME: 12:52: 3 DATE: 1/22/92

COMMODITY: O.C./P.C. DIRT/PLAST YARDS: 18.00 LOAD #: 202

PER YARD 14.00 FEE 252.00

TOTAL 252.00
INVOICE: 28219

B2/S2-2 *** CHARGE INVOICE

34 yd3

REDWOOD LANDFILL INC.

8950 REDWOOD HIGHWAY
P.O. BOX 793
NOVATO, CALIFORNIA 94948
TEL: (415) 892-2851
FAX: (415) 898-1354

- PERSONS USING THESE PREMISES DO SO AT THEIR OWN RISK.
- CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES.
- NO RUMMAGING IN DUMP AREA.
- NO SMOKING ON DUMP SITE.
- PLEASE NOTIFY OFFICE OF ANY COMPLAINT.

X _____
DRIVER'S SIGNATURE

RK DP
RECEIVED BY

ACCOUNT NUMBER: 1807 CUSTOMER: CHEVRON U.S.A., INC.6496570
JOB NUMBER: 9-0020 DESC: OAKLAND
VEHICLE: BODINE TIME: 13:12:32 DATE: 1/22/92
COMMODITY: O.C./P.C. DIRT/PLAST YARDS: 14.00 LOAD #: 206
PER YARD 14.00 FEE 196.00

TOTAL 196.00
B1/S1-1 *** CHARGE *** INVOICE INVOICE: 28220

REDWOOD LANDFILL INC.

8950 REDWOOD HIGHWAY
P.O. BOX 793
NOVATO, CALIFORNIA 94948
TEL: (415) 892-2851
FAX: (415) 898-1354

- PERSONS USING THESE PREMISES DO SO AT THEIR OWN RISK.
- CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES.
- NO RUMMAGING IN DUMP AREA.
- NO SMOKING ON DUMP SITE.
- PLEASE NOTIFY OFFICE OF ANY COMPLAINT.

X Chris McClard
DRIVER'S SIGNATURE

RK LZ DP
RECEIVED BY

ACCOUNT NUMBER: 1807 CUSTOMER: CHEVRON U.S.A., INC.6496570
JOB NUMBER: 50843
VEHICLE: BALCH TIME: 12: 1:29 DATE: 1/30/92
COMMODITY: O.C./P.C. DIRT YARDS: 5.00 LOAD #: 167
PER YARD 10.00 FEE 50.00

TOTAL 50.00
B0/S0-0 *** CHARGE *** INVOICE INVOICE: 29218

19 yd³

REDWOOD LANDFILL INC.

8950 REDWOOD HIGHWAY
P.O. BOX 793
NOVATO, CALIFORNIA 94948
TEL: (415) 892-2851
FAX: (415) 898-1354

- PERSONS USING THESE PREMISES DO SO AT THEIR OWN RISK.
- CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES.
- NO RUMMAGING IN DUMP AREA.
- NO SMOKING ON DUMP SITE.
- PLEASE NOTIFY OFFICE OF ANY COMPLAINT.

X M. Taylor

DRIVER'S SIGNATURE

RK DP

RECEIVED BY

ACCOUNT NUMBER: 1807 CUSTOMER: CHEVRON U.S.A., INC. 6496570

JOB NUMBER: 9-0020

VEHICLE: Bil TIME: 8:22:53 DATE: 1/22/92

COMMODITY: O.C./P.C. DIRT/PLAST YARDS: 18.00 LOAD #: 94

PER YARD 14.00 FEE 252.00

TOTAL 252.00

~~Ave~~ invoice #?

18 yd^3

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

August 26, 1992

STID 3512

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

Re: Former Chevron Service Station #9-0020
1633 Harrison, Oakland 94612

310 ppm TPH-g
270 TPH-d

Dear Ms. Eberle:

This letter is in response to your letter dated July 21, 1992, requesting copies of documentation for the disposal of the soils generated during the over excavation activities and submittal of a proposal for the delineation and remediation of affected soils that remain in the vicinity of monitor well MW-4. A copy of Redwood Landfill, Inc.'s acceptance tickets are attached.

Vertical and lateral delineation of the hydrocarbon-affected soils have been defined. Specifically, the soil samples collected from the southern sidewall. It appears that the vertical extent is confined at a depth of 8-feet below grade. This is supported by the analytical results of the samples collected in the adjacent 10-foot and 5-foot samples which reported non-detectable hydrocarbon concentrations. The lateral extent of the hydrocarbon-affected soils extends up to the adjacent building foundation encountered during the over excavation activities. This presence of this foundation precluded continued excavation laterally to the south.

With respect to your request for remediation of the soils in the vicinity of MW-4, we will tie in MW-4 as an additional extraction point to the soil vapor extraction system due to the minimal cost associated. This system was proposed in our work plan dated August 4, 1992, to mitigate the affected soils in the vicinity of MW-7. However, if other remedial work was not required at this site, additional soils remediation in the vicinity of MW-4 would not be performed as a significant presence of hydrocarbons does not exist in the soils as a result of prior excavation activities.

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

Attachment

cc: Mr. Rich Hiett, RWQCB-Bay Area
Ms. B.C. Owen
Mr. L.E. Jones, 225/1510
File (9-0020W3 Addendum)

REDWOOD LANDFILL INC.
8950 REDWOOD HIGHWAY
P.O. BOX 793
NOVATO, CALIFORNIA 94948
TEL: (415) 892-2851
FAX: (415) 898-1354

- PERSONS USING THESE PREMISES DO SO AT THEIR OWN RISK.
- CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES.
- NO RUMMAGING IN DUMP AREA.
- NO SMOKING ON DUMP SITE.
- PLEASE NOTIFY OFFICE OF ANY COMPLAINT.

X _____
DRIVER'S SIGNATURE

RK . LZ
RECEIVED BY

ACCOUNT NUMBER: 1907 CUSTOMER: CHEVRON U.S.A., INC.6496570
JOB NUMBER: OAKLAND DESC: 17TH ST.
VEHICLE: WOODAL TIME: 13: 3: 7 DATE: 5/ 7/92

COMMODITY: O.C./P.C. DIRT/PLAST YARDS: 18.00 LOAD # : 217

PER YARD 14.00 FEE 252.00

7-3462-9022

TOTAL 252.00
INVOICE: 40340

BO/S2-2 *** CHARGE *** INVOICE

00182382,001

REDWOOD LANDFILL INC.
8950 REDWOOD HIGHWAY
P.O. BOX 793
NOVATO, CALIFORNIA 94948
TEL: (415) 892-2851
FAX: (415) 898-1354

- PERSONS USING THESE PREMISES DO SO AT THEIR OWN RISK.
- CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES.
- NO RUMMAGING IN DUMP AREA.
- NO SMOKING ON DUMP SITE.
- PLEASE NOTIFY OFFICE OF ANY COMPLAINT.

X

DRIVER'S SIGNATURE

RK , LZ
RECEIVED BY

ACCOUNT NUMBER: 1807 CUSTOMER: CHEVRON U.S.A., INC.6496570
JOB NUMBER: OAKLAND DESC: 17TH ST.
VEHICLE: WOODALL TIME: 11: 4:47 DATE: 5/ 7/92

COMMODITY: O.C./P.C. DIRT/PLAST YARDS: 15.00 LOAD # : 171

PER YARD 14.00 FEE 210.00

7A346A-90020

TOTAL 210.00
INVOICE: 40321

B1/S1-1 *** CHARGE *** INVOICE

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 19, 1992

STID 3812

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

RE: Former Chevron Station 90020
1633 Harrison St.
Oakland CA 94612

Dear Ms. Vukelich,

We are in receipt of your letter dated 8/4/92 which requests a reduction in groundwater sampling frequency from quarterly to annual for eight monitoring wells. These wells have contained concentrations of volatile organic compounds (VOCs) as recently as June 1992. You have "surmised that the solvents are emanating from an off-site source" in previous letters. However, further assessment of the solvent distribution pattern has not yet been performed to support your theory. The source of the VOCs in groundwater remains unknown. Therefore, we request that you submit a workplan for a site assessment regarding the VOC plumes in groundwater **within 45 days** or by **October 4, 1992.**

We regret to deny your request for a reduction in sampling frequency. You must continue quarterly groundwater monitoring due to 1) VOC contamination, and 2) hydrocarbon (HC) contamination. As regards HCs in groundwater, you must show 4 consecutive quarters of non-detectable concentrations. Some of the wells have contained non-detectable concentrations for 2 consecutive quarters (MW-4, MW-14), and some for 3 consecutive quarters (MW-1, MW-3, MW-5, MW-6, MW-8, and MW-11).

We have also received the Soil Remediation Work Plan for Installation of a Soil Vapor Extraction System, prepared by Geraghty & Miller, Inc., dated 8/4/92. This work plan is approved; please submit quarterly progress reports including sampling results to this office.

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

Sincerely,

Susan L. Hugo

Susan Hugo
Senior Hazardous Materials Specialist

cc: Sandra L. Lindsey, Groundwater Technology, Inc., 4057 Port Chicago Highway, Concord CA 94520
Rich Hiett, RWQCB
File

je 3812-A

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

State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program

RAFAT A. SHAHID, Assistant Agency Director

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

July 21, 1992

STID 3812

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

RE: Former Chevron Station 90020
1633 Harrison St.
Oakland CA 94612

Dear Ms. Vukelich,

We are in receipt of your letter dated 7/13/92 which includes an addendum to the "Work Plan for Soil and Groundwater Assessment," prepared by Groundwater Technology, Inc., dated 6/17/92. We concur with this addendum to the Work Plan.

In addition, we request that you submit documentation of soil disposal from the overexcavation of soils in the vicinity of MW-4, as per your letter dated 6/17/92. Some soils with elevated levels of petroleum hydrocarbons were apparently left in place, as per the report by Pacific Environmental Group, Inc., dated 6/2/92. Specifically, soils with 310 ppm TPH-gasoline and 270 ppm TPH-diesel remain in the vicinity of MW-4. [Please note that there are errors for SP3 in Table 1 of the 6/2/92 report. TPH-diesel should read 71 ppm, toluene should read ND, ethylbenzene should read 0.014 ppm, and xylenes should read 0.025 ppm.] [Therefore, we request that you submit a proposal for the delineation and remediation of affected soils.]

As per your letter dated 3/20/92, a soil vapor extraction pilot test had been performed in the vicinity of MW-7, which contained 5200 ppb TPH-gasoline and 520 ppb benzene during the 2/20/92 sampling. Please submit the results of this pilot test to our office, as you indicated you would in the 3/20/92 letter, within 20 days from the date of this letter, or **by August 10, 1992.**

The last groundwater sampling event for which you submitted results to our office was 2/20/92. Please submit the next sequential quarterly report to this office within 20 days from the date of this letter, or **by August 10, 1992.**

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

Sincerely,

Susan L. Hugo

Susan Hugo
Senior Hazardous Materials Specialist

cc: Sandra L. Lindsey, Groundwater Technology, Inc., 4057 Port Chicago Highway, Concord CA 94520
Rich Hiett, RWQCB
File

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

92 JUL 14 AM 8:15

Marketing Department

July 13, 1992

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

STID 3812

Re: Former Chevron Service Station #9-0020
1633 Harrison, Oakland 94612

Dear Ms. Eberle:

This letter is being submitted as an addendum to the Groundwater Technology, Inc.'s Soil and Ground Water Assessment Work Plan dated June 17, 1992, for the above referenced site, as per our discussions of this date. The modifications to the work plan entail installation of one (1) additional monitor well to be located down-gradient of existing well MW-7. A revised map is attached plotting the location. ok

In addition, the following revisions are made to Task 4: Well Purging/Water Sampling/Analysis:

"Subsequent to groundwater monitoring, three to five well casing volumes of water will be removed from each well prior to sampling. Measurements of pH and conductivity will be taken prior to sampling. Groundwater Technology personnel will collect ground water samples from each *newly installed well*. Each water sample will be analyzed for BTEX, TPH-G, and halogenated volatile organics using EPA Methods 5030/8020/8015 and EPA Method *601*. In addition, the dissolved oxygen concentration of each water sample will be measured and recorded in the field. All work will be conducted according to Groundwater Technology's SOP (Attachment A)."

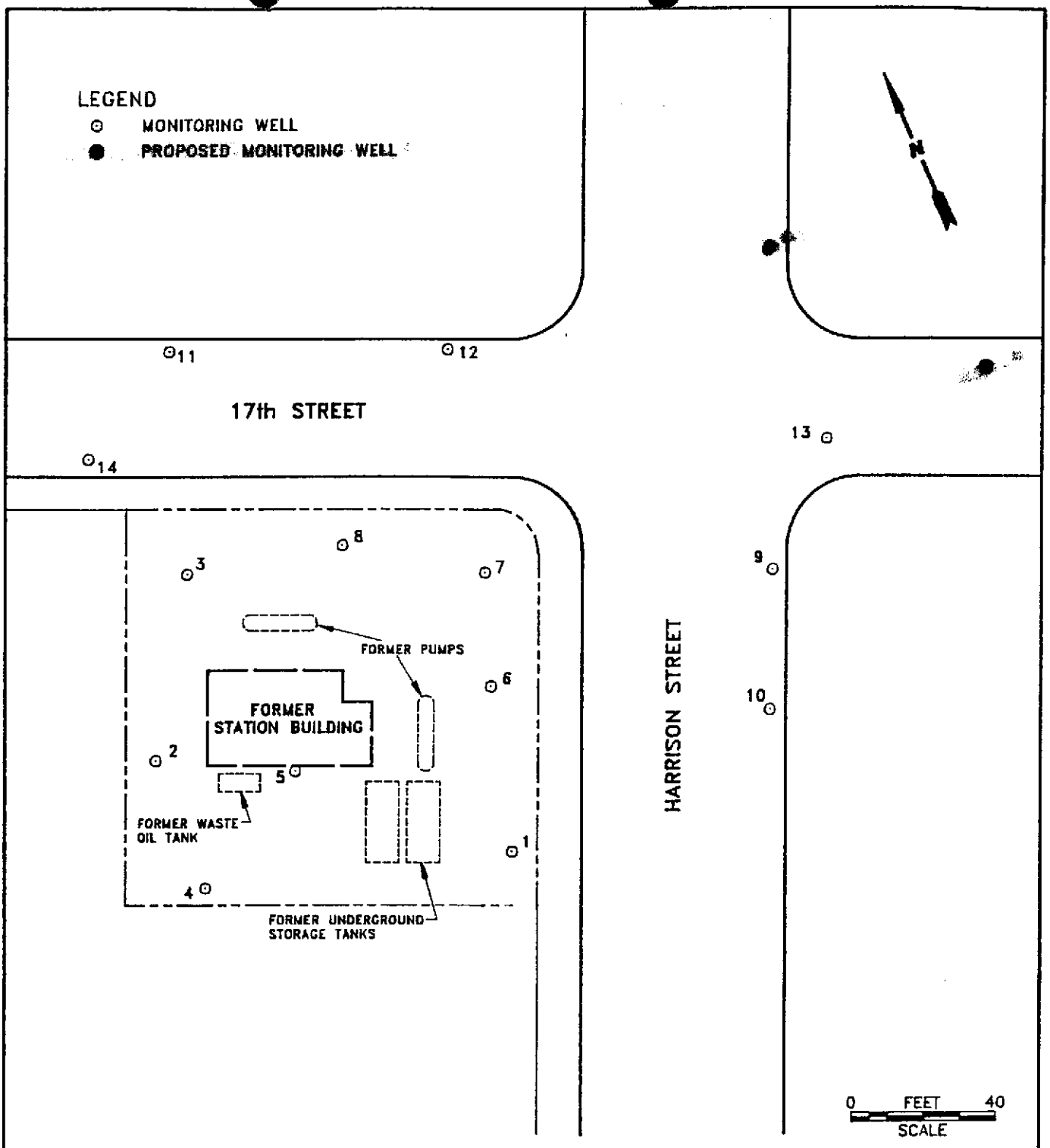
We would appreciate your review and concurrence to this addendum. If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

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

Nancy Vukelich
Site Assessment and Remediation Engineer

Attachment

cc: Mr. Rich Hiett, RWQCB-Bay Area
Ms. B.C. Owen
Mr. L.E. Jones, 225/1510
File (9-0020W2 Addendum)



GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY. CONCORD, CA 94520 (510) 671-2387			PROPOSED MONITORING WELL LOCATION MAP
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-0020		LOCATION: 1633 HARRISON STREET OAKLAND, CALIFORNIA	REV. NO.: 0 / DATE: 5/26/92
PM	PE/RG	DESIGNED: GM / DETAILED: ML	ACAD FILE: PWELLLOC/SP592 / PROJECT NO.: 020302499 / FIGURE: 1

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 JUN -9 AM 8:29

STID 3812

June 1, 1992

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

Re: Former Chevron Service Station #9-0019
210 Grand Avenue, Oakland

Dear Ms. Eberle:

Enclosed is a copy of my letter to Mr. Thomas Peacock dated February 20, 1992, per your telephone request of May 29, 1992. In addition, you requested an update on the submittal of the soil vapor extraction pilot test results for **Former Chevron Service Station #9-0020 located at 17th & Harrison Sts., Oakland.** These results will be submitted to your office along with our recommended corrective action approach. This work plan will be submitted to your office within the next two (2) months.

If you have any questions, please contact me at (510) 842-9581.

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

Nancy Vukelich
Site Assessment and Remediation Engineer

Enclosure

cc: File (9-0019-2)

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

State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
RAFAT A. SHAHID, Assistant Agency Director

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

March 23, 1992

Dear Sir:

The attached "**Notice of Reimbursement**" is **not a bill.** It is required by our contract with the State Water Resouces Control Board that we send this letter to all responsible parties involved in a leaking petroleum underground tank site. You fall into the following category:

> You (or your contractor/consultant) deposited funds for us to use to oversee the tank removal followed by the cleanup. Your case has been transfered to the Alameda County Local Oversight Program. This will involve your being billed **after** after the work has been accomplished. It is directed to all responsible parties as the law requires all operators and owners to be notified.

We will continue to work with you to resolve the site remediation in progress.

If you still have any question please call this office at 271-4530 and ask for the specialist noted in the attached notice.

Sincerely,

Thomas F. Peacock

Thomas F. Peacock, Supervising HMS
Hazardous Material Division

SENDER:

- Complete item 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

3812

Chevron Station
1633 Harrison St.
Oakland CA 94612

4a. Article Number

4b. Service Type

- ☐ Registered
- ☐ Insured
- ☒ Certified
- ☐ COD
- ☐ Express Mail
- ☐ Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form **3811**, November 1990 ★U.S. GPO: 1991—287-066 **DOMESTIC RETURN RECEIPT**

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

State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
RAFAT A. SHAHID, Assistant Agency Director

Certified Mail # P 869 531 736

03/20/92
STID# 3812

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

Notice of Requirement to Reimburse

Nancy Vukelich
Chevron Usa Inc.
Po Box 5004
San Ramon Ca 94583

Responsib' ~ Party #1
Property ner

Chevron Station
1633 Harrison St.
Oakland C A 94612

Responsib Party #2
Contact Person
Contact Company

Chevron U.S.A.
1633 Harrison St.
Oakland, CA 94612

SITE

Date First Reported 12/31/87
Substance: Gasoline
Petroleum: (X)Yes

The federal Petroleum Leaking Underground Storage Tank Trust Fund (Federal Trust Fund) provides funding to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks. The legislature has authorized funds to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks. The direct and indirect costs of overseeing removal or remedial action at the above site are funded, in whole or in part, from the Federal Trust Fund. The above individual(s) or entity(ies) have been indentified as the party or parties responsible for investigation and cleanup of the above site. YOU ARE HEREBY NOTIFIED that pursuant to Title 42 of the United States Code, Section 6991b(h)(6) and Sections 25297.1 and 25360 of the California Health and Safety Code, the above Responsible Party or Parties must reimburse the State Water Resources Control Board not more than 150 percent of the total amount of site specific oversight costs actually incurred while overseeing the cleanup of the above underground storage tank site, and the above Responsible Party or Parties must make full payment of such costs within 30 days of receipt of a detailed invoice from the State Water Resources Control Board.

Please contact Tom PEACOCK, Supervising Hazardous Materials Specialist at this office if you have any questions concerning this matter.

Edgar B. Howell

Edgar B. Howell, III, Chief
Contract Project Director

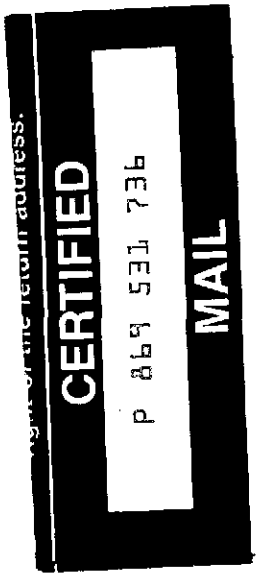
cc: Sandra Malos, SWRCB

SWRCB Use: Add: X Reason: New Case

9/2

ALAMEDA COUNTY
HEALTH CARE SERVICES AGENCY

Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621



Chevron Station
1633 Harrison St.
Oakland CA 94612

DATE: 3-5-92

TO : Local Oversight Program

FROM: BRIT JOHNSON

SUBJ: Transfer of Elligible Oversight Case

Site name: CHEVRON USA

Address: 1633 HARRISON City OAK Zip 94612

Closure plan attached? Y (N) DepRef remaining $ 90.75

DepRef Project # 2063 STID #(if any) 3812

Number of Tanks: removed? (Y) N Date of removal PRIOR TO 1972

Leak Report filed? Y (N) Date of Discovery DEC 1987

Samples received? (Y) N Contamination: SOIL + GW

Petroleum (Y) N Types: Avgas Jet ~~leaded~~ (unleaded) Diesel
fuel oil (waste oil) kerosene solvents

Monitoring wells on site 14 Monitoring schedule? (Y) N

Briefly describe the following:

Preliminary Assessment HAS HALOGENATED VOC POSS. OFF-SITE SOURCE

Remedial Action PHASE I STARTED 1/6/92

Post Remedial Action Monitoring

Enforcement Action

Comments:

PRIOR TO 1972 CHEVRON GASOLINE STATION
UNKNOWN NUMBER OF UST POSS 2 GASOLINE 1 WASTE OIL
PARKING LOT SINCE 1975
DECEMBER 1987 SOIL VAPOR SURVEY FINDS
140 PPM OF TOTAL VOLATILE HYDROCARBONS
IN AREA OF FORMER WASTE OIL TANK
TOLUENE FOUND IN AREA OF FORMER GASOLINE TANKS

PACIFIC
ENVIRONMENTAL
GROUP INC.

January 6, 1992
Project 320-90.01

Ms. Nancy Vukelich
Chevron USA, Inc.
P.O. Box 5004
San Ramon, CA 94583-0804

Re: Addendum to Phase I Corrective Action Work Plan
Former Chevron USA Service Station 9-0020
1633 Harrison and 17th Street
Oakland, California

Dear Ms. Vukelich:

As directed by Mr. Paul Smith of Alameda County Hazardous Materials Division, this letter presents an addendum to the Pacific Environmental Group, Inc. (PACIFIC) Work Plan dated December 1, 1991, for the referenced location.

As we discussed, the excavation should generate approximately 100 to 150 cubic yards of soil which will be segregated into suspected "clean" and "dirty" piles. To prevent run off from the stockpiled soils in case of rain, plastic sheets will be placed over and under the soil piles. The plastic will be tucked around the sides to prevent water from entering or escaping the piles. Also as requested by Mr Paul Smith, a stockpile sample will be analyzed for halogenated volatile organics by EPA Method 8010.

If you have any questions regarding the contents of this letter, please call.

Sincerely,

Pacific Environmental Group, Inc.

Jerry W. Mitchell
Project Geologist

3209001/addendum

1601 Civic Center Drive, Suite 202, Santa Clara, California 95050 (408) 984-6536 FAX: (408) 243-3911
620 Contra Costa Boulevard, Suite 209, Pleasant Hill, California 94523 (415) 825-0855 FAX: (415) 825-0882

WATER RESOURCES CONTROL BOARD
DIVISION OF WATER QUALITY - UST CLEANUP PROGRAM
SITE SPECIFIC QUARTERLY REPORT
01/01/92 THROUGH 03/31/92

AGENCY # : 10000 SOURCE OF FUNDS: F SUBSTANCE: 8006619
StID : 3812
SITE NAME: Chevron U.S.A. DATE REPORTED : 12/31/87
ADDRESS : 1633 Harrison St. DATE CONFIRMED: 12/31/87
CITY/ZIP : Oakland 94612 MULTIPLE RPs : N

SITE STATUS

CASE TYPE: G	CONTRACT STATUS: 3	EMERGENCY RESP:
RP SEARCH: I		DATE COMPLETED: 03/20/92
PRELIMINARY ASMNT: U	DATE UNDERWAY: 06/30/99	DATE COMPLETED: 12/01/91
REM INVESTIGATION: U	DATE UNDERWAY: 12/01/91	DATE COMPLETED:
REMEDIAL ACTION:	DATE UNDERWAY:	DATE COMPLETED:
POST REMED ACT MON:	DATE UNDERWAY:	DATE COMPLETED:

ENFORCEMENT ACTION TYPE: 1 DATE ENFORCEMENT ACTION TAKEN: 03/20/92
LUFT FIELD MANUAL CONSID: 3,HSCAWG
CASE CLOSED: DATE CASE CLOSED:
DATE EXCAVATION STARTED : 01/01/72 REMEDIAL ACTIONS TAKEN: ED

RESPONSIBLE PARTY INFORMATION

RP#1-CONTACT NAME: Nancy Vukelich
COMPANY NAME: Chevron Usa Inc.
ADDRESS: Po Box 5004
CITY/STATE: San Ramon Ca 94583

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 20 PM 3:16

December 18, 1991

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

Re: Former Chevron Service Station #9-0020
1633 Harrison, Oakland

Dear Mr. Smith:

Enclosed we are forwarding the Phase I Corrective Action Work Plan dated December 1, 1991, prepared by our consultant Pacific Environmental Group, Inc. for the above referenced site. This workplan outlines additional work steps we propose to take at the referenced site to mitigate a small localized area of hydrocarbon-affected soil in the vicinity of monitor well MW-4.

In addition, a soil vapor extraction pilot test has been performed to assess the feasibility of this technology for mitigating the impacted soils in the vicinity of monitor well MW-7. These soils are at a depth of approximately 18-feet below grade and attempting to excavate these would be impractical. The results of the pilot test will be forwarded to you in January, 1992, along with our corrective action work plan to mitigate these soils.

We would appreciate your review and concurrence prior to initiating this work. We have tentatively scheduled January 6, 1991, to commence with this work providing all necessary permits are secured. Have a wonderful holiday season.

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-Bay Area
Mr. B.C. Owen
File (9-0020W1)

PACIFIC
ENVIRONMENTAL
GROUP, INC.

December 1, 1991
Project 320-90.02

Ms. Nancy Vukelich
Chevron USA, Inc.
P.O. Box 5004
San Ramon, California 94583-0804

Re: Former Chevron USA Station 9-0020
1633 Harrison and 17th Street
Oakland, California

Dear Ms. Vukelich:

This letter presents a Phase I Corrective Action Work Plan prepared by Pacific Environmental Group, Inc. (PACIFIC) for Chevron USA, Inc., (Chevron USA) to remove hydrocarbon-affected soil in the vicinity of Well MW-4 at the referenced location (Figures 1 and 2). Included in this Work Plan are discussions of the site background and previous site investigations as they pertain to the excavation, the proposed scope of work, and field and laboratory procedures.

BACKGROUND

Site Description

The site is a former Chevron USA service station located at 1633 Harrison Street and 17th Street in Oakland, California (Figure 1). The site is located in a mixed retail, office, residential, and light industrial region of downtown Oakland. The former service station layout, including station building, product island, and underground storage tank locations are presented on Figure 2.

According to Chevron USA records, the service station facilities, including underground storage tanks and lines, were removed prior to 1972. Information regarding the number or volume of underground storage tanks was not available at the time of this report. The site has been occupied and operated as a parking lot since December 1, 1975.

1601 Civic Center Drive, Suite 202, Santa Clara, California 95050 (408) 984-6536 FAX: (408) 243-3911
620 Contra Costa Boulevard, Suite 209, Pleasant Hill, California 94523 (415) 825-0855 FAX: (415) 825-0882

Regional Hydrogeologic Setting

The area is underlain by Quaternary marine and non-marine alluvial deposits consisting of layers of sand and gravel interspersed with thick sections of sand and clay. The uppermost of the strata in this area is the Merritt Sand, which underlies the site. The aquifers in the area are predominantly unconfined.

Summary of Previous Site Investigations

Western Geologic Resources (WGR) of San Rafael, California drilled Exploratory Soil Borings B-1 through B-16 and installed Groundwater Monitoring Wells MW-1 through MW-12 during investigations that took place in October 1988, April 1989, and June 1990. Monitoring well locations are indicated on Figure 2. Groundwater was encountered at approximately 21 feet below grade. To summarize the analytical results of soils tested during these investigations, total fuel hydrocarbons were only detected at 12 parts per million (ppm) in the soil sample collected from Well MW-2 at 19 feet below grade. Total purgeable petroleum hydrocarbons (TPPH) were detected only in soil samples from Well MW-4 collected at 4.5 feet and 9.6 feet at 600 ppm, and from Well MW-7 at 680 ppm (19.25 foot sample) and 50,000 ppm (23.5 foot sample). Toluene, ethylbenzene and xylenes were detected at concentrations up to 4.1 ppm, 5 ppm, and 20 ppm, respectively, in the 23.5 foot sample from Well MW-7. Benzene was not detected in any of the soil samples.

diesel #2

Soil samples were also analyzed for volatile organic compounds. 1,1,1-Trichloroethane (TCA) was detected at 0.1 ppm in the sample from Well MW-4 (9.6 foot depth), and 0.2 ppm in the sample from Well MW-7 (23.5 foot depth). Chlorobenzene was the only other volatile organic detected in soil samples, at 0.07 ppm in the sample from Well MW-7 collected at 19.25 feet below grade. WGR reports dated June 1989, and July 1990, document the investigations summarized above.

SCOPE OF WORK

Based on available data, the horizontal extent of the hydrocarbons detected in the shallow soil in the vicinity of Well MW-4 has not been determined. However, the vertical extent has been delineated as indicated by non-detectable hydrocarbon levels below the 9.6 foot sample to the total depth explored of 34.5 feet. The purpose of this phase of the on-going site investigation is to excavate and aerate the hydrocarbon-affected soil in the vicinity of Well MW-4. Remedial alternatives are currently being considered for the groundwater and the deeper zone of hydrocarbon-affected soil in the vicinity of Well MW-7. A report discussing future remedial plans is forthcoming.

EXCAVATION

The soils containing hydrocarbons in the vicinity of Well MW-4 will be excavated. The intent of the excavation is to remove all hydrocarbon-affected soil; however, property boundaries and structural concerns for adjacent buildings will determine the actual extent of the excavation. At limiting boundaries, hydrocarbon levels will be quantified. It is anticipated that the maximum excavation depth will be approximately 15 feet below ground surface. Groundwater occurs at 21 feet below grade and will not be encountered during this project. The soil will be excavated with the use of a backhoe. PACIFIC will provide oversite during the excavation and will obtain appropriate soil samples from the excavation and generated soils. Excavated soil will be stockpiled on site and segregated into suspected "clean" and "dirty" piles. The excavation will be backfilled and compacted after confirmation samples indicate that maximum practical removal of the hydrocarbon-affected soil has been accomplished. Appropriate permits will be obtained from the City of Oakland, and the Bay Area Air Quality Management District (BAAQMD) will be notified prior to the commencement of field work.

The site perimeter will be fenced to provide security during the excavation project. The excavation pit will also be barricaded for safety. PACIFIC has prepared a Site Health and Safety Plan dated September 25, 1991, for this site.

Sampling Program

The soil sampling program will be designed to confirm that the hydrocarbon-affected soil has been removed or quantified in the area of Well MW-4. During the excavation, evidence of contamination will be monitored visually and with the use of a photoionization detector (PID). Field evidence of contamination will assist in determining the extent of the excavation but confirmation sampling and laboratory analysis will determine the final extent. Bottom and sidewall samples will be collected in a grid matrix pattern of between five and fifteen foot intervals depending on the size of the excavation pit.

Sampling Procedures

Sampling procedures will be adapted from *"Tri-Regional Board Staff Recommendations for the Preliminary Evaluation and Investigation of Underground Tank Sites"*, dated August 10, 1990. To collect the excavation samples, a backhoe bucket of sample-targeted soil will be brought to the surface immediately. Approximately 3 inches of soil will scraped from the surface, and then a clean brass ring will be driven into the soil. The ends of each brass ring will be covered with aluminum foil, capped with plastic end caps, and placed in a sealed glass jar. The samples will be immediately placed on ice for transport to a California State-certified laboratory for analysis.

To characterize the stockpiled soils, one composite sample will be collected for every 50 cubic yards of excavated soil. Each composite sample will consist of 4 separate soil samples to be composited at the laboratory. Samples will be collected with brass rings at least 3 inches below the surface of the pile. Sample preservation and handling will proceed as described above.

Analytical Program

All soil samples will be analyzed for total petroleum hydrocarbons as gasoline and diesel by Modified EPA Method 8015 and for benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8020. A minimum of 3 excavation samples will be analyzed for halogenated volatile organics by EPA Method 8010. In addition, one composited stockpile sample will be analyzed for organic lead.

Soil Aeration and Disposal

Excavated soil will be stockpiled and aerated on site. Aeration of the hydrocarbon-affected soil will proceed in accordance with BAAQMD Regulation 8, Rule 40. The aerated soil will be profiled and hauled to an appropriate receiving facility.

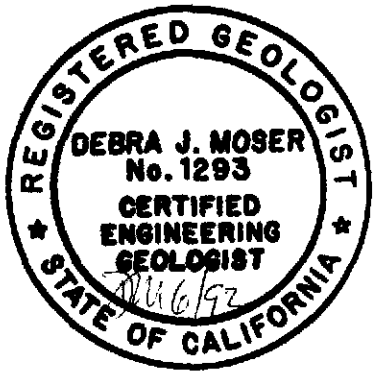
If you have any questions or comments regarding the contents of this letter, please do not hesitate to call.

Sincerely,

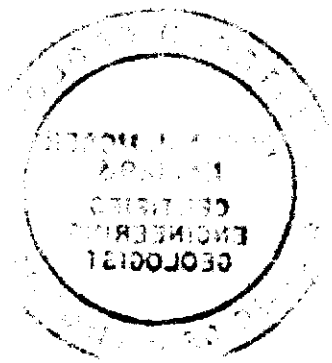
Pacific Environmental Group, Inc.

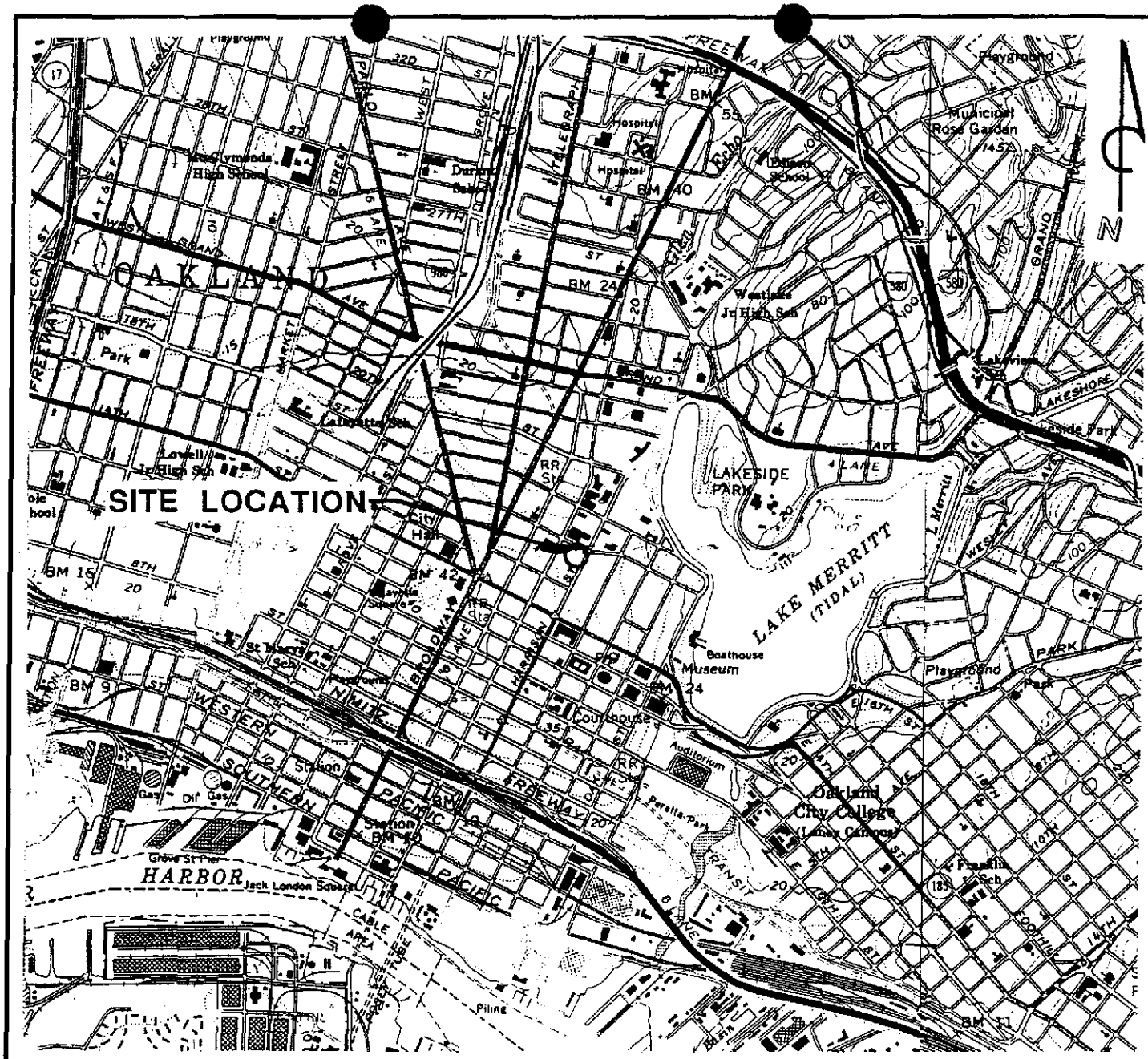
Jerry W. Mitchell
Project Geologist

Debra J. Moser
Senior Geologist
CEG 1293



Attachments: Figure 1 - Site Location Map
Figure 2 - Site Map





QUADRANGLE LOCATION

REFERENCES:

USGS 7.5 MIN. TOPOGRAPHIC MAP
TITLED: OAKLAND WEST, CALIFORNIA
DATED: 1959 REVISED: 1980
TITLED: OAKLAND EAST, CALIFORNIA
DATED: 1959 REVISED: 1980

SCALE

2000 0 2000 FEET

PACIFIC ENVIRONMENTAL GROUP, INC.

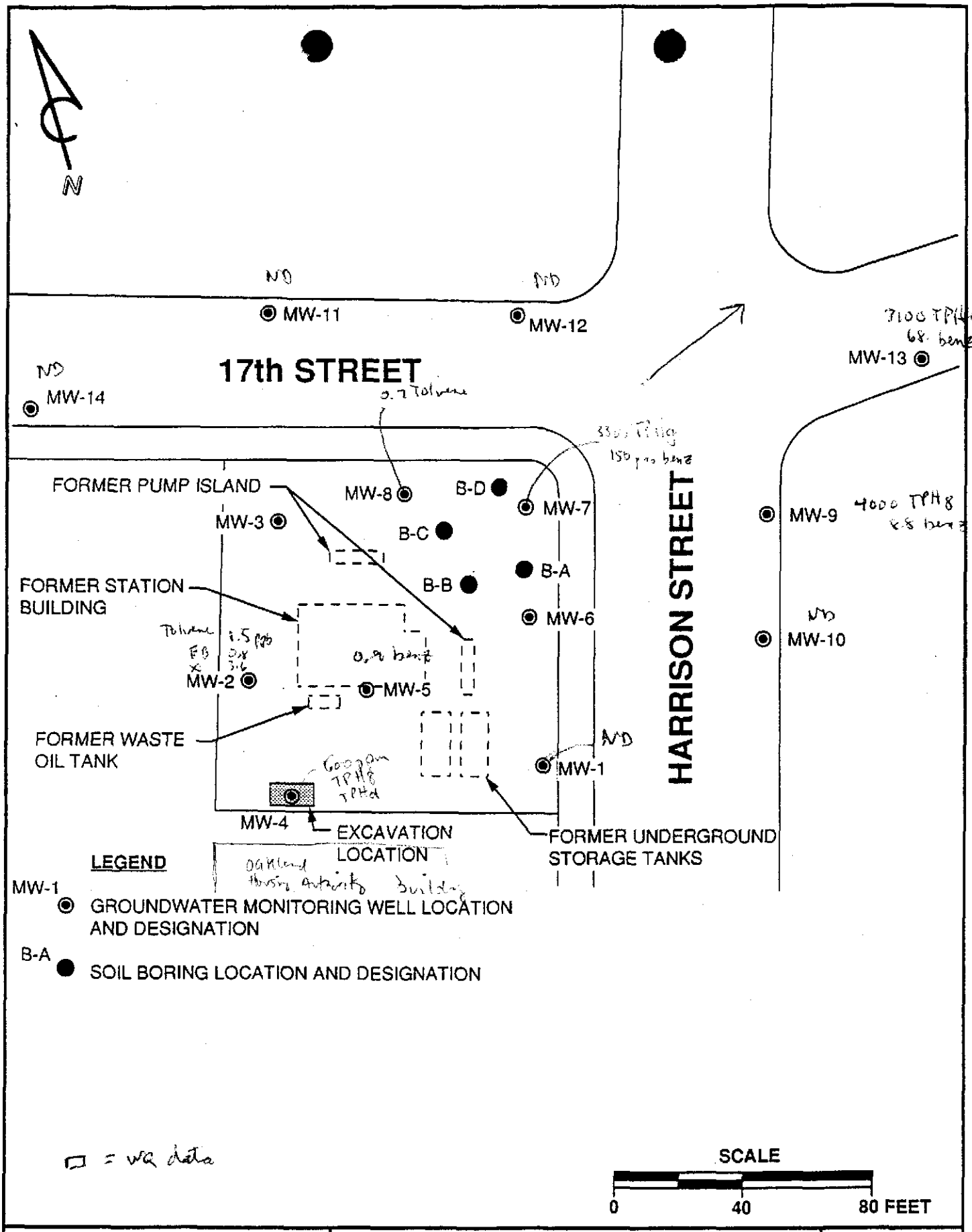
FORMER CHEVRON USA STATION 9-0020
1633 Harrison Street at 17th Street
Oakland, California

SITE LOCATION MAP

FIGURE: 1

PROJECT: 320-90.02

SAN JOSE BLUEPRINT CO
PRINTED ON



PACIFIC ENVIRONMENTAL GROUP, INC.

FORMER CHEVRON USA STATION 9-0020
1633 Harrison Street at 17th Street
Oakland, California

SITE MAP

FIGURE: **2**

PROJECT: 320-90.02

22/ 17753

SIERRA
Environmental Services

8/27/91
I did not get the
Quarterly report.

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

90 DEC -6 PM 10: 55

Marketing Operations

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

December 5, 1990

Mr. Paul M. Smith
Alameda County Department of
Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Re: Former Chevron Service Station #9-0020
1633 Harrison Streete
Oakland, CA

Dear Mr. Smith:

This letter is in response to your letter dated November 5, 1990, regarding the investigation in progress at the above referenced site. Chevron has recently contracted Pacific Environmental Group, Inc. (Pacific) to implement further assessment required at the site. Pacific will proceed with the permitting process and installation of the downgradient groundwater monitoring well proposed in the Chevron letter dated September 11, 1990, submitted to your office.

A technical report will be prepared and submitted to your office which will include the following:

* The findings of the chlorinated solvents source investigation, which will include **Hallmark Cleaners** located upgradient of the site.

* The results of the installation of the proposed downgradient groundwater monitoring well.

* A discussion of the plume definition.

* A proposal for appropriate site remediation

The following outlines the estimated completion dates for the proposed tasks:

TASK	ESTIMATED COMPLETION DATE
Off-site source investigation	January 21, 1991
Off-site well installation	February 6, 1991
Technical report documenting well installation and off-site source investigation	March 18, 1991
Proposal for appropriate remedial action	May 1, 1991

Chevron U.S.A. Inc. will continue to monitor this site and report findings on a quarterly basis.

If you have any questions or comments, please do not hesitate to contact Nancy Vukelich at (415) 842-9581.

Very truly yours,
C.G. Trimbach

By _____
Nancy L. Vukelich

NLV/jmr

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

Mr. W.T. Scudder
Chevron Property Management Specialist

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

Y→/

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

November 5, 1990

Ms. Nancy Vukelich
Chevron USA
2410 Camino Ramon
San Ramon, CA 94583-0804

RE: Former Chevron #9-0020, 1633 Harrison Street, Oakland 94612

Dear Ms. Vukelich:

In reviewing the latest Quarterly Groundwater Sampling report dated September 28, 1990 it became apparent that an attempt is being conducted at delineating the extent of contamination of both petroleum and chlorinated products in the groundwater at the above site.

Contamination levels (11,000 ppb of Total Petroleum Hydrocarbons (TPH) and 81 ppb Tetrachloroethane (PCE)) have been detected in groundwater. Given these levels the need for the implementation of a remediation system has been clearly established. Taking into consideration your desire to define the lateral and vertical extent of contamination at this site and also to understand the hydraulic regime, we request that you specify a time line for the completion of groundwater monitoring well installation, contamination plume definition, and for the installation of a remedial recovery system.

Information defining specific surface or subsurface contamination sources particularly for chlorinated solvents is requested.

You are also requested to submit a proposal specifying the type of remediation system to be chosen in dealing with the contamination at this site. Please respond to the above requests within 30 days of the receipt of this letter.

If you have any questions I can be reached at (415) 271-4320.

Sincerely,

Paul M. Smith

Paul M. Smith
Hazardous Materials Specialist

cc:
Gil Jensen, Alameda County District Attorneys Office
Lester Feldman, SFRWQCB
Howard Hatayama, DHS
Leonard P. Niles, Western Geologic Resources
Files

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 24, 1990

90 SEP 31 AM 11:21

Mr. Paul M. Smith
Alameda County Department of
Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Re: Chevron Service Station #9-0020
17TH and Harrison
Oakland, CA

Dear Mr. Smith:

Enclosed is a check in the amount of $600 to cover the cost of overseeing the work performed at this site as per your letter dated September 4, 1990.

As stated in my letter dated September 10, 1990, documenting the Off-Site Subsurface Investigation at the above referenced site, we have instructed Western Geologic Resources, Inc. to permit and install an additional groundwater monitoring well east of and downgradient from the site along 17th Street to delineate the maximum extent of the plume in the groundwater. I expect the permitting process to be lengthy due to City of Oakland's permit requirements. Upon receipt we will proceed with the installation of the well. A formal report documenting this work will be forwarded to your office.

Upon completing full definition of the extent of the contamination, we will evaluate appropriate remedial actions.

If you have any questions or comments please do not hesitate to call me at (415) 842 - 9581.

Very truly yours,
C. G. Trimbach

By Nancy Vukelich
Nancy Vukelich

NLV/jmr
Enclosure

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

Chevron

The Chevron Companies

CHEVRON U.S.A. INC.
P.O. Box 5, Concord, CA 94524

CHECK DATE 09/21/90
0061
PAGE 01 OF 01

INV DATE	INVOICE NO.	ORDER IDENTIFICATION	REF. NO.	GROSS AMOUNT	DEDUCTIONS	NET AMOUNT
09/10/90	091090ALA					
	OVERSIGHT FEE 600.00 90020		09A6JM002WC	600.00		600.00

DIRECT QUESTIONS TO: (415) 842-9576

PAYEE 000191841 ALAMEDA COUNTY HEALTH CARE ENVIRONMENTAL HEALTH DEPT
001

TOTAL 600.00
WC
BANK MGR 00262

Check No. 6804926O

X-UCA091 (08-90)

authorized by Section [illegible]
County of Alameda and is used to cover expenses [illegible]
Alameda County personnel in the carrying out their oversight duties associated with this project. Records are maintained of the time County employees commit to a project and the project is charged at an hourly rate. Upon completion of this project the balance of this project will be returned to you.

Chevron

P. R. (Phil) Briggs
Site Assessment
and Remediation
Project Manager
Phone 510 842 ~~8624~~ 9136
Fax 510 842 ~~8252~~ ~~8752~~
9370

**Chevron U~~S~~A.
Products Company**
~~2410 Camino Ramon~~
P.O. Box 5004
San Ramon, CA 94583-0804

BLAINE
TECH SERVICES INC.

INDEPENDENT THIRD PARTY SAMPLING AND DOCUMENTATION

Fred Vandenbroeck

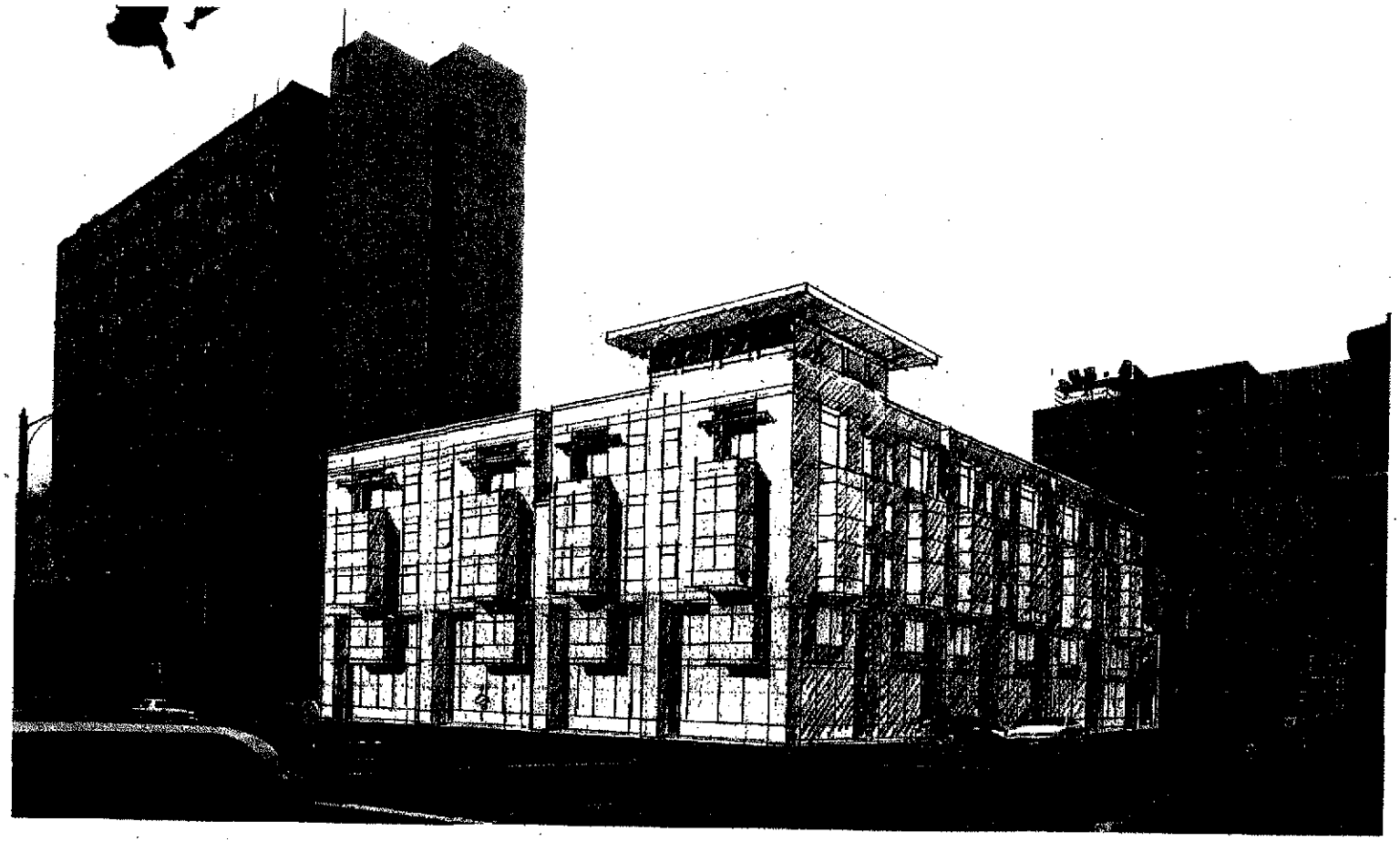
(408) 995-5535

985 Timothy Drive
San Jose, CA 95133
FAX (408) 293-8773

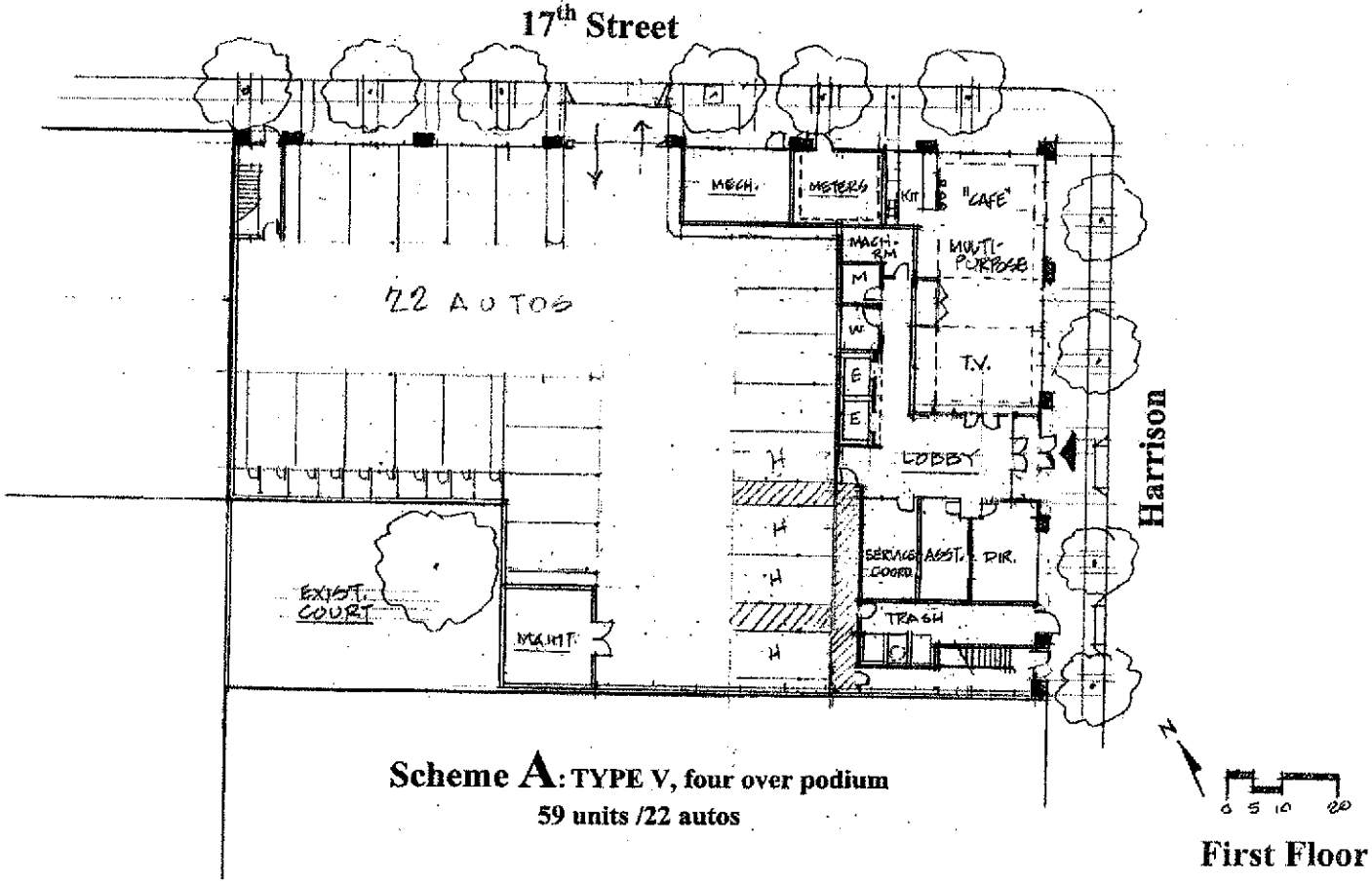
GERAGHTY & MILLER, INC.
Environmental Services
a heidemij company

Rick Spencer
Master Technician

1050 Marina Way South
Richmond, California 94804
(510) 233-3200 • FAX (510) 233-3204
Mobile: (510) 918-7591



Harrison **Scheme A: TYPE V, four over podium**
59 units /22 autos



Scheme A: TYPE V, four over podium
59 units /22 autos

First Floor

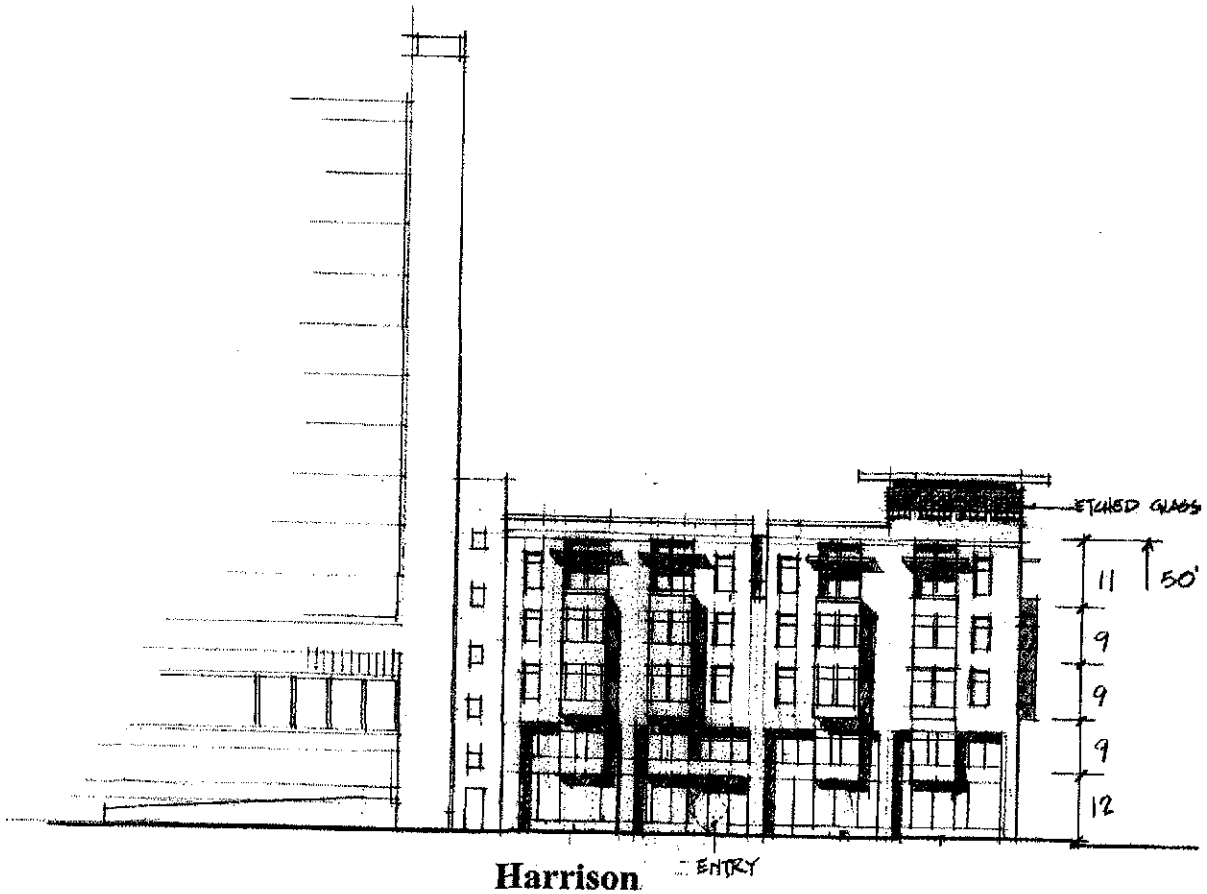
Senior Housing Proposal for Harrison and 17th Street

for

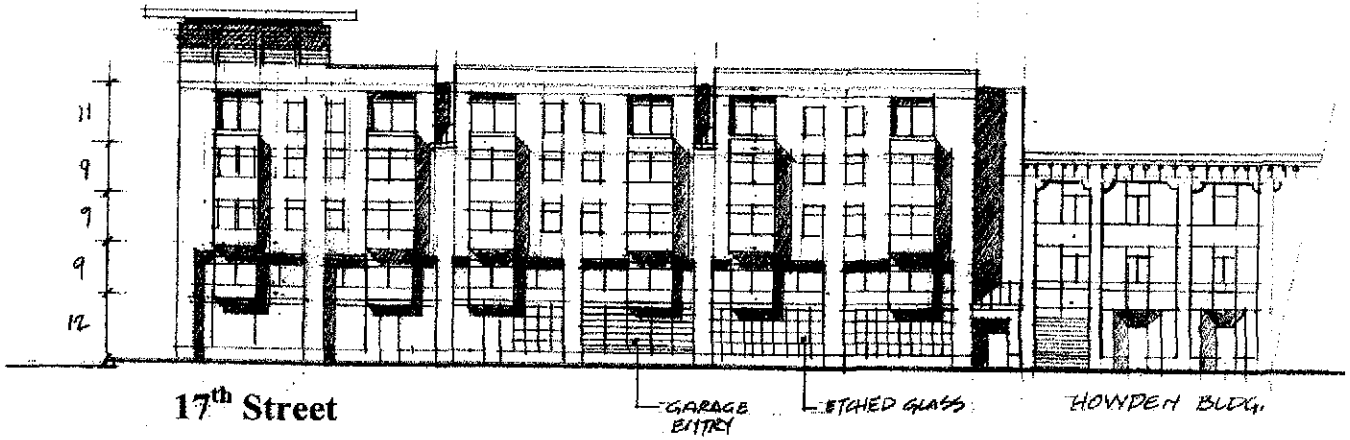
Oakland Housing Authority

by

Pyatok Architects, Inc 1611 telegraph Ave, Oakland, CA 94612

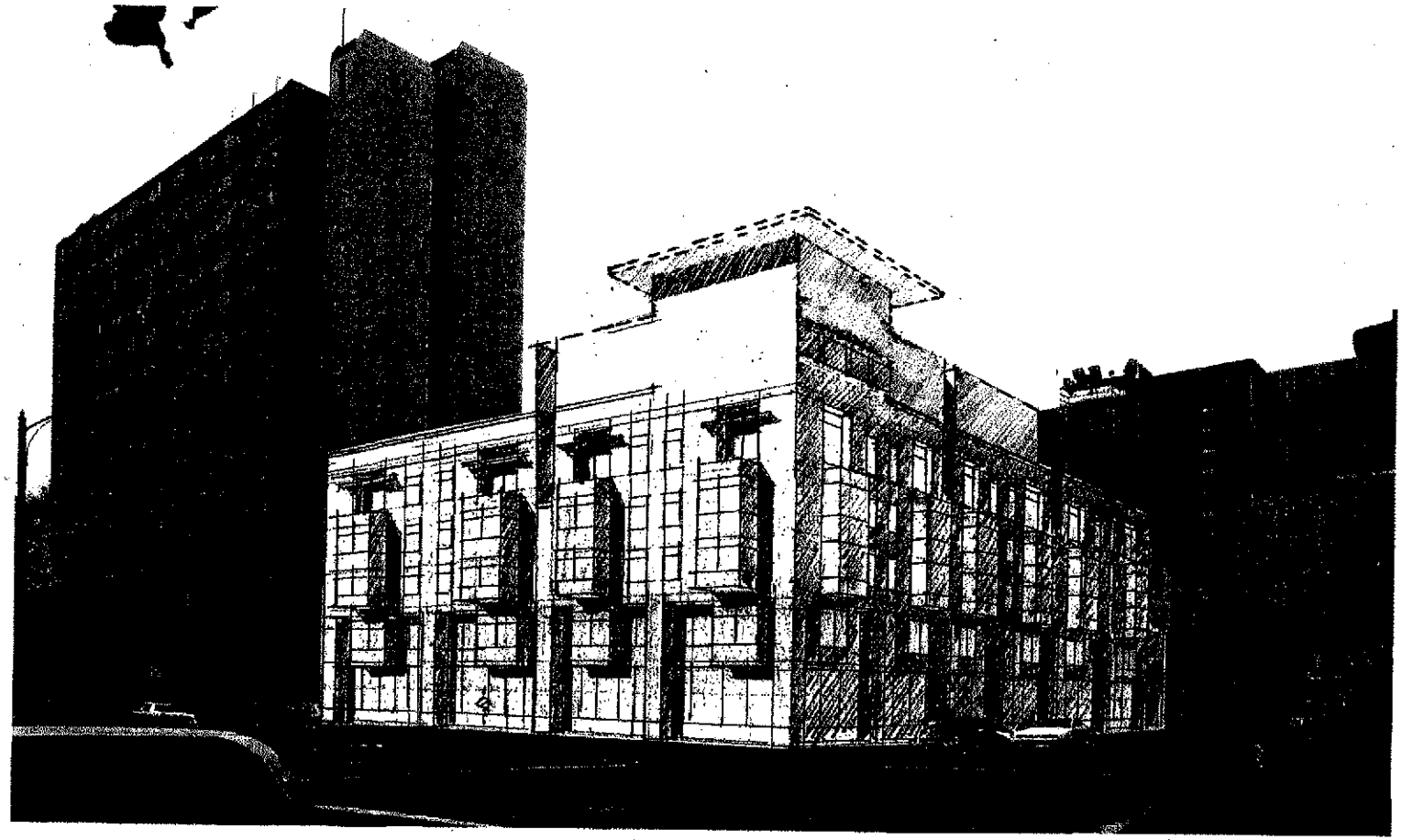


Scheme A: TYPE V, four over podium
59 units /22 autos



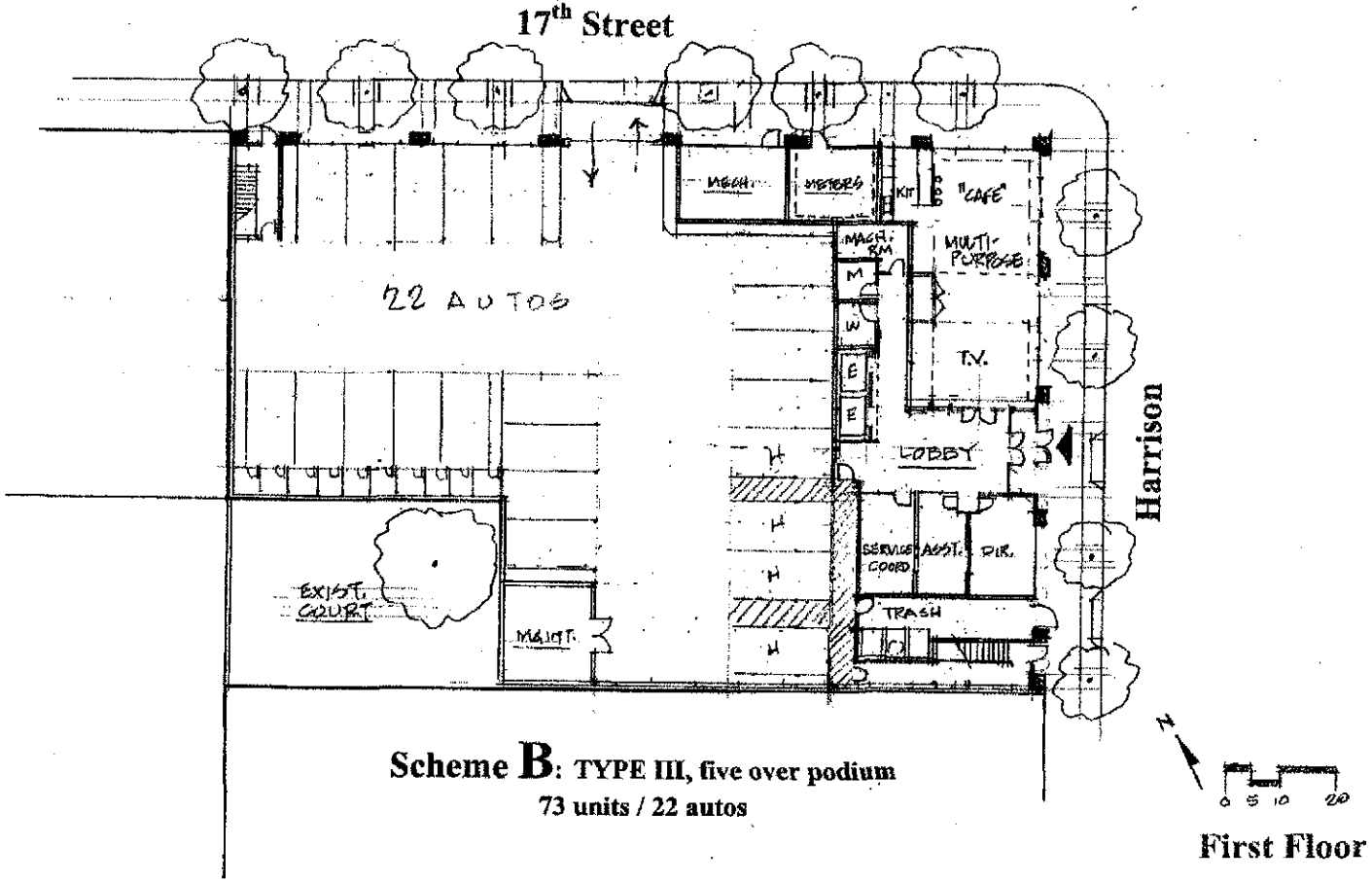
Scheme A: TYPE V, four over podium

59 units /22 autos



Harrison

Scheme B: TYPE III, five over podium
73 units /22 autos



Scheme B: TYPE III, five over podium
73 units / 22 autos

First Floor

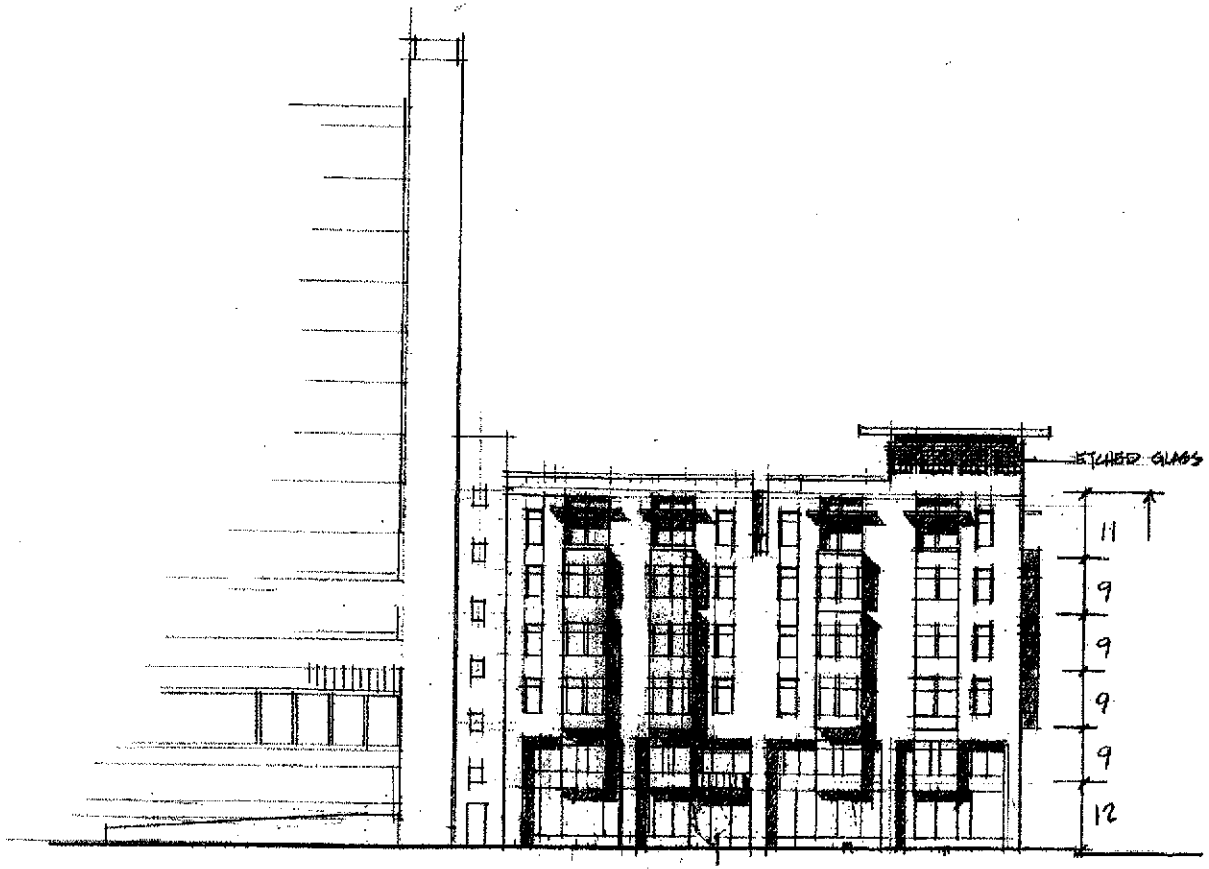
Senior Housing Proposal for Harrison and 17th Street

for

Oakland Housing Authority

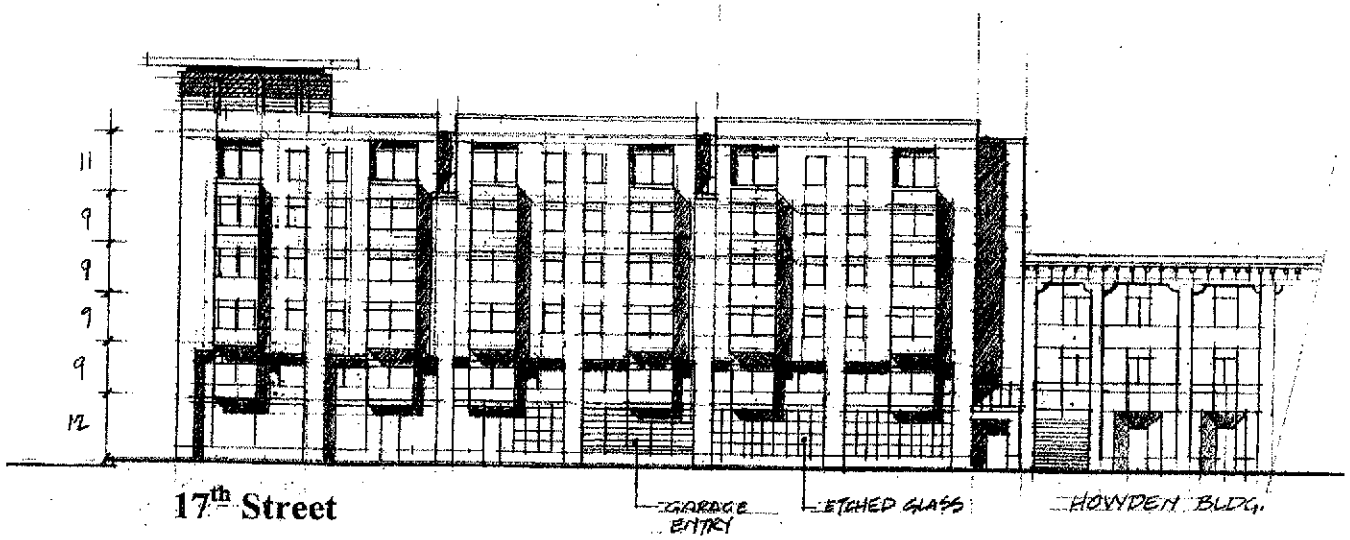
by

Pyatok Architects, Inc 1611 telegraph Ave, Oakland, CA 94612



Harrison

Scheme B: TYPE III, five over podium
73 units / 22 autos



Scheme B: TYPE III, five over podium

73 units / 22 autos