

CITY OF OAKLAND



250 FRANK H. OGAWA PLAZA, SUITE 5313 • OAKLAND, CALIFORNIA 94612-2034

Community and Economic Development Agency  
Housing Development

October 23, 2002

(510) 238-3502  
FAX (510) 238-3691  
TDD (510) 238-3254

**Alameda County**

**OCT 28 2002**

**Environmental Health**

<sup>12</sup>  
Barry M. Chan, Hazardous Materials Specialist  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

RE: NOTICE OF PROPOSED ACTION SUBMITTED TO LOCAL AGENCY FOR 2662  
FRUITVALE AVENUE, OAKLAND, CALIFORNIA

Dear Mr. Chan:

In accordance with section 25297,15(a) of Chapter 6.7 of the Health & Safety Code, I, David Hoard, certify that I have notified all responsible landowners of the enclosed proposed action. I have checked the following spaces for applicable proposed actions:

- cleanup proposal (corrective action plan)
- site closure proposal
- local agency intention to make a determination that no further action is required.
- local agency intention to issue a closure letter

Sincerely,

A handwritten signature in cursive that reads "David Hoard".  
David Hoard, Project Manager

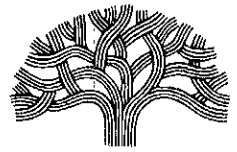
cc: Existing property owner:

City of Oakland  
Community & Economic Development Agency  
250 Frank Ogawa Plaza, Room 5313  
Oakland, CA 94612  
Attention: Roy L. Schweyer, Director of Housing and Community Development

Pending property owner:

East Bay Habitat for Humanity  
2619 Broadway  
Oakland, CA 94612  
Attention: Executive Director

CITY OF OAKLAND



250 FRANK H. OGAWA PLAZA, SUITE 5313 • OAKLAND, CALIFORNIA 94612-2034

Community and Economic Development Agency  
Housing Development

October 23, 2002

(510) 238-3502  
FAX (510) 238-3691  
TDD (510) 238-3254

**Alameda County**

**OCT 25 2002**

**Environmental Health**

Barry M. Chan, Hazardous Materials Specialist  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

RE: NOTICE OF PROPOSED ACTION SUBMITTED TO LOCAL AGENCY FOR 2662  
FRUITVALE AVENUE, OAKLAND, CALIFORNIA

Dear Mr. Chan:

In accordance with section 25297,15(a) of Chapter 6.7 of the Health & Safety Code, I, David Hoard, certify that I have notified all responsible landowners of the enclosed proposed action. I have checked the following spaces for applicable proposed actions:

cleanup proposal (corrective action plan)

site closure proposal

local agency intention to make a determination that no further action is required.

local agency intention to issue a closure letter

Sincerely,

A handwritten signature in cursive script that reads "David Hoard". The signature is written in black ink and is positioned above a horizontal line.

David Hoard, Project Manager

cc: Existing property owner:

City of Oakland  
Community & Economic Development Agency  
250 Frank Ogawa Plaza, Room 5313  
Oakland, CA 94612  
Attention: Roy L. Schweyer, Director of Housing and Community Development

Pending property owner:

East Bay Habitat for Humanity  
2619 Broadway  
Oakland, CA 94612  
Attention: Executive Director

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

October 14, 2002

Mr. Joseph Cotton  
City of Oakland Public Works Agency  
Dalziel Bld., 250 Frank H. Ogawa Plaza, Suite 5301  
Oakland CA 94612-2034

INTENT TO MAKE A DETERMINATION THAT NO FURTHER ACTION IS  
REQUIRED OR ISSUE A CLOSURE LETTER FOR 2662 FRUITVALE AVE.,  
OAKLAND, CA 94601

Dear Mr. Cotton:

This letter is to inform you that Alameda County Environmental Health Department, Local Oversight Program (LOP), intends to make a determination that no further action is required at the above site or to issue a closure letter. Please notify this agency of any input and recommendations you may have on these proposed actions within 20 days of the date of this letter.

In accordance with section 25297.15 of Ch. 6.7 of the Health & Safety Code, you must provide certification to the local agency that all of the current record fee title owners have been informed of the proposed action. Please provide this certification to this office within 20 days of the date of this letter. You may use the enclosed example letter (#3) for your reply.

If you have any questions about these proposed actions, please contact me at (510) 567-6765.

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

enclosure

cc: Mr. L. Griffin, City of Oakland Fire Services OES, 1603 Martin Luther King Dr.,  
Oakland, CA 94612

SAMPLE LETTER 3: NOTICE OF PROPOSED ACTION SUBMITTED TO LOCAL AGENCY

Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

**SUBJECT: NOTICE OF PROPOSED ACTION SUBMITTED TO LOCAL AGENCY (FOR NAME AND ADDRESS OF SUBJECT SITE)**

In accordance with section 25297,15(a) of Chapter 6.7 of the Health & Safety Code, I, (name of primary responsible party), certify that I have notified all responsible landowners of the enclosed proposed action. Check space for applicable proposed action(s):

- cleanup proposal (corrective action plan)
- site closure proposal
- local agency intention to make a determination that no further action is required
- local agency intention to issue a closure letter

Sincerely,

\_\_\_\_\_  
Signature of primary responsible party

\_\_\_\_\_  
Name of primary responsible party

cc: Names and addresses of all record fee title owners

## Chan, Barney, Env. Health

---

**From:** Hoard, David [DHoard@oaklandnet.com]  
**Sent:** Wednesday, August 28, 2002 1:52 PM  
**To:** 'bchan@co.alameda.ca.us'  
**Subject:** 2662 Fruitvale - Oakland

Good afternoon,

I am writing this based after talking with Joseph Cotton, Environmental Program Specialist. I am negotiating a Disposition and Development Agreement and a Loan Agreement with East Bay Habitat for Humanity ("EBHFH"). It is their plan to develop four homes which will be sold to low-income families who have participated in that have participated in EBHFH's self-help, sweat-equity program. EBHFH has been proceeding to be in a position to begin construction on the site on October 1, 2002. The DDA and Loan Agreement negotiations have been complicated by the presence of petroleum on the site and the attendant liability questions.

This office has contributed funds to assist Joseph Cotton in his clean up of the site. We understand that the site is sufficiently clean to permit residential construction for families. There is still the problem of liability for EBHFH concerning possible contamination of ground water downstream from the site. We were hoping to get this matter resolved. Could you be of assistance in giving this project a priority? This is one of our high visibility projects that generates phone calls from the City Manager's Office and neighborhood representatives.

Your help would be greatly appreciated.

David Hoard,  
Housing Development Coordinator, Housing and Community Development,  
Community and Economic Development .

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

January 28, 2002

StID 4457/ [REDACTED]

Mr. Joseph Cotton  
City of Oakland Public Works  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034

**Re: Site Remediation and Closure Report  
2662 Fruitvale Avenue  
Oakland, California 94621**

Dear Mr. Cotton:

This office has reviewed the above referenced site remediation and closure report, dated January 14, 2002, prepared and submitted by Cambria Environmental Technology, Inc. (Cambria) for the subject site. The site remediation and closure report describes completed and proposed future remediation activities and closure of onsite monitoring wells. This office agrees that the site is suitable for residential development. The Risk Management Plan provided will be observed during the development.

The site remediation and closure report also states that offsite groundwater remediation using hydrogen peroxide will be conducted in the spring. This office approved the proposed offsite groundwater remediation in a September 24, 2001 letter responding to the September 17, 2001 remediation workplan submitted by Cambria. Upon satisfactory completion of offsite groundwater remediation, this office will recommend case closure for the site.

If you have any questions regarding this letter or the subject site, please call me at (510) 567-6765.

Sincerely,

Barney Chan  
Hazardous Materials Specialist

cc: B. Chan, files

Chuck Headlee, San Francisco Bay RWQCB

Bob Clark-Riddell, Cambria Environmental Technology, 1144 65<sup>th</sup> St, Ste C, Oakland, CA 94608

2662Fruitvale reg-approval

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 27, 2001  
StID 4457/ RO0000238

Mr. Joseph Cotton  
City of Oakland Public Works  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland CA 94612-2034

**Re: Remediation Workplan for 2662 Fruitvale Ave., Oakland CA 94601**

Dear Mr. Cotton:

This letter recounts our conversation of September 26, 2001 and approves the closure of monitoring MW-F2 in addition to MW-F1 and MW-F3. It was agreed that there would not be any significant loss of information with the closure of this well.

Please notify our office when you proceed with the previously approved tasks of your remediation work plan.

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

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

✓ C: B. Chan, files

Mr. B. Clark-Riddell, Cambria Environmental, 1144 65<sup>th</sup> St., Suite B, Oakland CA 94608

WellMW2



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

September 24, 2001  
StID 4457/ RO00000238

Mr. Joseph Cotton  
City of Oakland Public Works  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland CA 94612-2034

**Re: Remediation Workplan for 2662 Fruitvale Ave., Oakland CA 94601**

Dear Mr. Cotton:

Our office has received and reviewed the September 17, 2001 Remediation Workplan for the referenced property as prepared by Cambria Environmental, your consultant. This work plan follows conversations with you and Mr. Bob Clark-Riddell of Cambria. The proposal includes a number of tasks, which intend to lead to regulatory site closure and residential development of this parcel. Because of the intended future use, additional remediation is proposed to provide additional insurance against potential health concerns.

As you are aware, the following tasks are proposed:

- Perform a utility, conduit and sensitive receptor survey. This includes a well survey within a ¼ mile radius of the site and passing out a questionnaire to homes within a 200 feet radius.
- Perform limited soil excavation near soil sample F4-2', where elevated lead and TPH as motor oil was found. Confirmation soil samples will be collected and analyzed after excavation.
- Install a trench approximately 20'x2'x10' up-gradient of the TPH plume and add approximately 500 pounds of oxygen releasing compound (ORC) within the capillary zone.
- Introduce an approximate 7.5% solution of hydrogen peroxide solution into site wells MW-F4 and MW-13, weekly over a period of four weeks.
- Prepare and submit a Risk Management Plan to be included with the site closure document and implemented during site development.

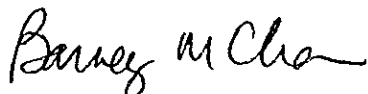
These tasks are approved. Please monitor wells MW-F4 and MW-13 and consider additional hydrogen peroxide addition if necessary. Your work plan was not explicit in stating the amount of this chemical, which will be added to these wells. The work plan also requests concurrence to close wells MW-F1 through MW-F3. Due to the proximity of MW-F2 to the areas of chemical addition, we request that MW-F2 not be closed, however, the other two well may be closed. Once the excavation has occurred, our office is prepared to approve on-site residential development. Site closure is reserved for the completion of the mentioned tasks and successful treatment of wells MW-F4 and MW-13,



Mr. Joseph Cotton  
2662 Fruitvale Ave., Oakland CA 94601  
September 24, 2001  
StID 4457/ RO00000238  
Page 2

Please keep our office informed of the progress in this remediation. You may contact me at (510) 567-6765 if you have any questions.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

✓ C: B. Chan, files  
Mr. B. Clark-Riddell, Cambria Environmental, 1144 65<sup>th</sup> St., Suite B, Oakland CA 94608  
Remwp2662Fruitvale

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

March 9, 2001  
StID # 4457

Mr. Joseph Cotton  
City of Oakland Environmental Services  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland CA 94612

**Re: Semi-Annual Groundwater Monitoring Report for 2662 Fruitvale Ave.,  
Oakland CA 94601**

Dear Mr. Cotton:

Our office has received and reviewed the referenced February 21, 2001 ITSI report and have also been informed of the future intentions for this site. We understand that the site is planned for residential housing and sales and development of the property is contingent on obtaining site closure. The residual soil and groundwater contamination at the site starts from the southern boundary of the site and extends down-gradient beneath and across Davis St. The edge of the gasoline plume lies somewhere between monitoring well MW-13 and the down-gradient wells, MW-F6 and MW-F5.

This report includes monitoring results after the hydrogen peroxide treatment of wells MW-F4 and MW-13. Results of this application were mixed with some improvement and some not. In our recent discussion, you stated the City would be recommending localized excavation, the installation of a trench and addition of oxygen releasing compound and the addition of Fenton's reagent to MW-13. It was assumed that this work would insure site closure. Please submit a work plan to perform this proposed work.

Prior to making any closure decision, however, please perform a utilities and sensitive receptor survey. It should include a search of potentially impacted neighboring properties looking for wells, basements, buildings without foundations etc.

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

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

✓ C: B. Chan, files  
Mr. J. Hess, ITSI, 2855 Mitchell Drive, Suite 111, Walnut Creek, CA 94598  
2662Fruitvale

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 22, 2000  
StID # 4457

Mr. Joseph Cotton  
Public Works Agency  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland CA 94612-2034

**Re: City of Oakland Property, 2662 Fruitvale Ave., Oakland CA 94601**

Dear Mr. Cotton:

Our office has received and reviewed the **Semi-Annual Groundwater Monitoring** report performed on June 27, 2000 by your consultant, ITSI. These results are consistent with past results and indicate an apparent localized area of high gasoline and BTEX in groundwater between the edge of the property across Davis St. Because of the consistent elevated results, your consultant is recommending the addition of 1-3% hydrogen peroxide in monitoring wells MW-F4 and MW-13. This should augment the past ORC injections and may also chemically oxidize the petroleum hydrocarbons. Our office concurs with this approach. Please institute a regular addition of hydrogen peroxide to these two wells. Prior to your next semi-annual monitoring, please cease the peroxide addition soon enough to insure a non-biased sample, which is representative of the aquifer.

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

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

Mr. J. Hess, ITSI, 2855 Mitchell Drive, Suite 111, Walnut Creek, CA 94598

H202-2662Fruitvale

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 29, 2000  
StID # 4457

Mr. Joseph Cotton  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland CA 94612-2034

**Re: Groundwater Monitoring at 2662 Fruitvale Ave., Oakland CA 94601**

Dear Mr. Cotton:

Our office has received and reviewed the January 21, 2000 Semi-Annual groundwater monitoring report for the above site prepared by ITSI, your consultant. It appears that although petroleum hydrocarbon concentrations have stabilized, somewhat elevated TPH as gasoline concentrations still exist near the property boundary and down-gradient across Davis St. It is unclear whether the plume is of uniform concentration beneath Davis St. or whether there may have been more than one release. This gasoline plume has not migrated further down-gradient towards MW-F5 and MW-F6.

In order to facilitate site closure and reduce the petroleum concentration, your consultant recommends the addition of discrete doses of dilute hydrogen peroxide into monitoring wells MW-4 and MW-13. Weekly additions over a period of 6-8 weeks are proposed. This would be discontinued 1-2 weeks prior to the next semi-annual monitoring event. Our office approves of this action. Hopefully, this has already been done and your next monitoring event will show the effects of this treatment. If not, you are encouraged to start this treatment after the next semi-annual monitoring event. You may want to continue the addition of peroxide beyond 8 weekly additions if there is still indication of petroleum contamination.

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

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

Mr. J. Hess, ITSI, 2855 Mitchell Dr., Suite 111, Walnut Creek, CA 94598

H202-2662Fruitvale

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

November 18, 1999  
StID # 4457

Mr. Joseph Cotton  
City of Oakland Environmental Services  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland CA 94612

**Re: 2662 Fruitvale Ave., Oakland CA 94601**

Dear Mr. Cotton:

Thank you for the submission of the Semi-Annual Groundwater Monitoring Report for the above referenced site. It appears that the petroleum hydrocarbon plume has migrated off-site and its limits are defined by monitoring well MW-F2 and wells, MW-F5 and MW-F6. Wells MW-F4 and MW-13, within the heart of the plume, exhibit the highest dissolved petroleum hydrocarbon concentrations.

It appears the effect of the October 1998 ORC injections may be waning. Our office agrees with the recommendation to continue the scheduled semi-annual monitoring, however, we suggest you consider an additional application of ORC. This may be done by introducing ORC socks into the two highest impacted wells or another slurry injection. You may also consider discontinuing the analysis for petroleum hydrocarbons on those wells, which historically have not shown contamination, ie wells MW-F1, MW-F2 and MW-F3. This assumes that free product is no longer present in MW-13.

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

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

Mr. J. Hess, ITSI, 1330 Broadway, Suite 1625, Oakland, CA 94612  
**Mon2662Fruitvale**

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

March 3, 1999  
StID # 4457

Mr. Joseph Cotton  
City of Oakland  
Dalziel Bld., 250 Frank H. Ogawa Plaza, Suite 5301  
Oakland CA 94612

**Re: City of Oakland Site, 2662 Fruitvale Ave., Oakland CA 94601**

Dear Mr. Cotton:

Our office has received and reviewed the February 19, 1999 Semi-Annual Groundwater Monitoring report for the above site as prepared by Innovative Technical Solutions, Inc. (ITSI). At this point, it appears that you have not seen the anticipated affect of the addition of ORC borings performed in October 1998. More surprising, is the lack of apparent affect in the dissolved oxygen in well MW-F2, which is located within the proximity of the ORC injections. Our office has the following comments and recommendations for this site:

- Please include the measurement for oxidation-reduction potential (ORP) in future monitoring events
- Please verify the calibration and proper operation of your oxygen reading meter in future monitoring events
- You may eliminate the testing for MTBE in future monitoring

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

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

✓ C. B. Chan, files  
Mr. J. Hess, ITSI, 1330 Broadway, Suite 1625, Oakland CA 94612  
Mon-2662

HAZARDOUS WASTE GENERATOR INSPECTION REPORT

STID #: 4457 FACILITY NAME: City of Oakland Dept PG. 1 OF 1  
2662 Fruitville Ave

SUPPLEMENTAL FORM Structure N ↑

Present to observe the pressure  
approx location of boring of borehole w/ ORE  
of boring ORE installed w/ bit zone  
Passes ~15-25' & cement grouted to  
SF surface

Fast Tek - contractors, use a  
geoprobe type drill + pump through  
hollow stem bit  
ITST - J Hess + W. Schulz present  
Have completed 3 of the 10 proposed.

PRINT NAME: \_\_\_\_\_ INSPECTED BY: BCHAM  
SIGNATURE: \_\_\_\_\_ DATE: 6/30/98

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 30, 1998  
StID # 4457

Mr. Joseph Cotton  
City of Oakland  
Dalziel Building  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland CA 94612

**Re: Groundwater Remediation Workplan for 2662 Fruitvale Ave., Oakland CA 94601**

Dear Mr. Cotton:

Our office has received and reviewed the September 18, 1998 work plan for the remediation of groundwater at the above site. The work plan proposes the advancement of ten (10) soil borings on the up-gradient side of the contaminant plume for the injection of oxygen releasing compound (ORC). In addition, an absorbent sock will be installed within MW-13, the off-site well where free product has been observed in the past.

Our office approves of this work plan and the work may be scheduled as soon as possible. Please contact our office at least 72 working hours prior to this field work so I may arrange to be on-site, if possible.

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

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files  
Mr. J. Hess, ITSI, 1330 Broadway, Suite 1625, Oakland CA 94612

ORCwp2662



ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



May 27, 1998  
StID # 4457

Mr. Joseph Cotton  
City of Oakland Environmental Services  
1333 Broadway, Suite 330  
Oakland, CA 94612

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

**RE: City of Oakland Site, 2662 Fruitvale Ave., Oakland, CA 94601**

Dear Mr. Cotton:

Our office has received and reviewed the May 18, 1998 **Semi-Annual Groundwater Monitoring** report for the above site as prepared by Innovative Technical Solutions, Inc., (ITSI). Upon my review of this report, I have the following questions and comments which should be addressed in order to expedite site closure:

- Please verify that the City has decided not to perform the previously proposed limited site excavation. It appears that the residual soil contamination is mainly TPH which would not pose an imminent human health risk. This type of contamination is often addressed in either a risk management plan or within the "transmittal letter" sent to the responsible party and the City Offices of Public Works.
- Please install, as I previously recommended, oxygen-releasing compounds into monitoring wells MW-F4 and MW-13. Please consider purging these wells if free product is present prior to ORC introduction. Oxygen levels are low within the heart of the plume.
- Please include the analysis of MTBE in the wells at this site. You may use EPA Method 8020 for all wells except MW-F4 and MW-13. Given the elevated TPHg in these wells, please run MTBE by EPA Method 8260.

Please address the above items as soon as possible. I would like to see the affect of these actions on the next monitoring event. You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

C: B. Chan, files

Mr. J. Hess, ITSI, 1330 Broadway, Suite 1625, Oakland CA 94612

B102662

ENVIRONMENTAL  
PROTECTION

Project No.: 97-037

INNOVATIVE TECHNICAL SOLUTIONS, INC. MAY 21 AM 8:58



## TRANSMITTAL COVER SHEET

To: Joseph Cotton

Company: City of Oakland

From: Jim Schollard ITSI

Subject: Fruitvale

Date: May 15, 1998

Telephone 925-256-8898 ext.107

Notes: The results for the Semi-Annual Groundwater Monitoring on March 11, 1998 at

2662 Fruitvale Ave. are enclosed.

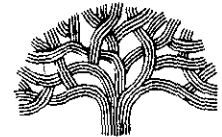
cc: Barney Chan - Alameda County

Ade Fagorala - RWQCB

Kevin O'Dea - Baseline Environmental Consultants



CITY OF OAKLAND



ENVIRONMENTAL SERVICES • 1333 BROADWAY, SUITE 330 • OAKLAND, CALIFORNIA 94612

Public Works Agency

(510) 238-6688  
FAX (510) 238-7286  
TDD (510) 238-7644

September 26, 1997

Alameda County Public Works Agency  
Attn: Andreas Godfreid  
951 Turner Court, Suite 300  
Hayward, CA 94545

Re: Former Chevron Service Station #9-4340  
2681 Fruitvale Avenue, Oakland, CA  
Transfer of Title for Monitoring Well MW-13

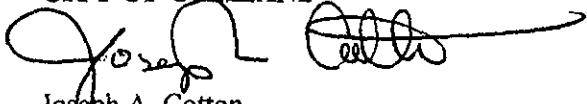
Dear Mr. Godfreid:

I would like to request that Alameda County Public Works Agency modify existing records to reflect a title transfer of monitoring well MW-13 at the above referenced site from Chevron Products Company (Chevron) ownership to the City of Oakland Public Works Agency Environmental Services Division (City). The City will assume the responsibility for maintenance and abandonment of this well. Attached is a letter from Chevron extending an offer to the City of Oakland to secure title of monitoring well MW-13. Chevron has received corrective action closure at the 2681 Fruitvale Avenue site and will begin abandoning wells associated with this site in the near future. Monitoring well MW-13 would provide useful groundwater quality data for the City's on-going groundwater monitoring program which is being conducted at an adjacent site located at 2662 Fruitvale Avenue. -01

STW  
#4457

Please notify use when your records have been modified to reflect this change in monitoring well ownership. Should you have any questions or require additional information, please do not hesitate to contact me at (510) 635-6633.

Sincerely,  
CITY OF OAKLAND

  
Joseph A. Cotton  
Environmental Program Specialist

cc: Philip Briggs-Chevron Products Company  
Barney Chan-Alameda County Department of Environmental Health



August 22, 1997

Mr. Andrew C. Clough  
Office of Public Works  
City of Oakland  
1333 Broadway, Suite 800  
Oakland, CA 94612

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

**Marketing - Sales West**  
Phone 510 842-9500

**Re: Former Chevron Service Station #9-4340**  
2681 Fruitvale Avenue  
Oakland, California

Dear Mr. Clough:

I met with Mr. Barney Chan of the Alameda County Health Care Services yesterday and discussed the monitoring activities that Chevron is presently conducting at the above noted site and proposed the future actions.

One of the future actions that is proposed, is the closure of the wells that our presently located on and off the site. One of these wells, MW-13 is located on Davis Street and is down gradient of your property, located at 2662 Fruitvale Ave.

*Would the City be interested in securing title to this well prior to Chevron's abandonment of the monitoring wells? You can call me at (510) 842-9136 if you have any questions.*

Sincerely,  
**CHEVRON PRODUCTS COMPANY**

A handwritten signature in cursive script, appearing to read "Philip R. Briggs".

Philip R. Briggs  
Site Assessment and Remediation Project Manager

cc. Mr. Barney Chan  
Alameda County Health Care Services  
Department of Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



November 12, 1996  
StID # 4457

Mr. Andrew Clark-Clough  
City of Oakland, Environmental Services  
1333 Broadway, Suite 330  
Oakland CA 94612

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

**Re: 2662 Fruitvale Ave., Oakland CA 94601**

Dear Mr. Clark-Clough:

This letter serves to recount our recent conversation of the above City of Oakland site. In our conversation, we discussed the "ownership" of MW-13, the well installed for the former Chevron site located at 2681 Fruitvale Ave. This well is downgradient to the City's site (2662 Fruitvale) and is most likely monitoring petroleum contamination either downgradient of the City's site or of a yet unidentified site. However, since Chevron has installed a well (MW-16) between their site and MW-13 and it has not detected petroleum hydrocarbon during three years of monitoring, you acknowledged that the contamination in MW-13 was likely from the City's site.

This point is significant, since Chevron has requested that our office consider their site for closure. Excluding the contamination detected in MW-13, this is a reasonable request. Our office will thus proceed with reviewing the Chevron site for closure.

We also discussed whether onsite localized excavation was to occur as previously proposed and whether groundwater removal from MW-13 would be a viable remediation method. Your June Semi-annual monitoring report also mentioned considering the addition of ORC (oxygen releasing compounds) into wells MW-13 and MW-F4.

Please clarify which, if any of the above, remedial activities will be performed at this site. Please include a time schedule for this work (if applicable) along with your next semi-annual monitoring report. You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

c: B. Chan, files

Mr. K. O'Dea, Baseline Env. Consulting, 5900 Hollis St., Suite  
D, Emeryville, CA 94608 2-2662Fr

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY



DAVID J. KEARS, Agency Director

July 5, 1996  
StID # 4457

Mr. Andrew Clark-Clough  
City of Oakland Environmental Services  
1333 Broadway Suite 330  
Oakland CA 94612

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

**Re: Subsurface Investigation at 2662 Fruitvale Ave., Oakland  
94601**

Dear Mr. Clark-Clough:

This letter requests clarification as to future activities at the above site. Previously, limited soil excavation was proposed as a method of source removal. Additionally, groundwater extraction was to be considered after the installation of offsite wells. In June of 1995, the additional offsite wells, MW-F5 and MW-F6, were installed. Initial results have not detected petroleum contamination in these downgradient wells.

It seems to be uncertain whether the proposed soil excavation will occur. Are you considering performing a baseline risk assessment as an alternative? Please clarify the City's intentions.

In regards to the City's request to cease sampling and monitoring MW-F1, this is approved. In the interim, our office requests that you consider placing ORC socks or other chemicals into wells MWF-4 and MW-13 to enhance biodegradation.

Please respond to the above items verbally or in writing as soon possible. You may contact me at (510) 567-6765.

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

c: Mr. K. O'Dea, Baseline Env. Consulting, 5900 Hollis St., Suite  
D, Emeryville, CA 94608

G. Coleman, files

rem2662Fr

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

September 22, 1995  
StID #4457

Mr. Andrew Clark-Clough  
City of Oakland  
1333 Broadway, Suite 330  
Oakland CA 94612

**Re: Comment on Baseline's September 1995 Supplemental Groundwater  
Investigation for 2662 Fruitvale Ave., Oakland CA 94601**

Dear Mr. Clark-Clough:

Thank you for the submission of the above referenced report. Our office has completed its review and this letter serves to comment on the recommendations and conclusions of your consultant, Baseline. Recall, this report detailed the installation of two additional downgradient wells, MW-F5 and MW-F6, and the sampling of MW-13 the well installed by Chevron. The concentration of gasoline and BTEX found in MW-13 was significantly higher than the prior sampling event in 12/21/94. This is opposed to the lower concentration of gasoline and BTEX detected in MW-F4 versus its concentration in 12/21/94. Our office recommends the comparison of the gas chromatograms for the groundwater samples from these two wells, MW-F4 and MW-13. Perhaps one can determine whether the gasoline detected in these wells are consistent or whether more than one source is indicated.

In regards to the recommended changes in monitoring for this site, our office agrees that semi-annual monitoring is appropriate for wells MW-F1 through MW-F3, however, we request that you continue to monitor the new wells, MW-F4 through MW-F6 on a quarterly basis. This information is needed to verify the limits of the contaminant plume as well as observe any trends in contaminant concentrations. In regards to the proposed limited excavation, please notify our office **48 working hours prior to your field activities.**

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

Sincerely,

Barney M. Chan  
Hazardous Materials Specialist

cc: K. O'Dea, Baseline Environmental Consulting, 5900 Hollis St.,  
Suite D, Emeryville CA 94608

G. Young, files  
mon2662



**BASELINE**  
ENVIRONMENTAL CONSULTING

ESJIN-9 F13:31  
HAZMAT

6 January 1995  
92404-D0

Mr. Barney Chan  
Alameda County Environmental Health  
1131 Harbor Bay Parkway #250  
Alameda, CA 94502-6577

**Subject: Response to Comments on November 1994 Report on Supplemental Groundwater Investigation, 2662 Fruitvale Avenue, Oakland, CA**

Dear Barney:

Andrew Clark-Clough of the City of Oakland Environmental Services Division has requested that we respond to your comments on the continuing groundwater investigation at 2662 Fruitvale Avenue. The comments were presented in a letter from your office dated 18 November 1994 to Mr. Clark-Clough. This letter presents our response to the comments.

In the letter you required that quarterly monitoring be performed at the project site. The monitoring wells installed for investigation of the project site (MW-F1 through MW-F4) and well MW-13 installed by Chevron were sampled on 21 December 1994. The sampling event was performed on this date (within the winter quarter of 1994) in conjunction with sampling performed by Blaine Technology for the investigation of the former Chevron service station at 2681 Fruitvale Avenue. The coordination of groundwater sampling, initiated by the City, will provide a more comprehensive data set for evaluation of the groundwater quality in the area of the two sites. The sampling during the winter quarter was performed to coincide with sampling of the 2662 Fruitvale site with the semi-annual sampling schedule for Chevron's 2681 Fruitvale site.

The City is very interested in maintaining this coordinated schedule to maximize the usefulness of the collected groundwater data. Although fewer sampling events have been performed for the 2662 Fruitvale site relative to the Chevron site, the distribution and concentration of petroleum hydrocarbon compounds have been similar in the wells at the project site (MW-F1, MW-F2, and MW-F3) for all three previous sampling events. The results indicate that the groundwater at the locations of these wells is not adversely affected by the release of petroleum hydrocarbons to the subsurface. Quarterly monitoring does not seem necessary to support this conclusion. The City therefore, requests a semi-annual monitoring schedule for these wells.

Your letter also addresses the detection of separate phase petroleum hydrocarbon (free product) in monitoring well MW-13 during sampling on 9 September 1994. As you are probably aware,

Mr. Barney Chan  
6 January 1995  
Page 2

free product was not observed during previous sampling (performed by consultants to Chevron) at MW-13. The thickness of product measured in the well before purging in September and December 1994 is less than 0.05 feet. Recovery of thin free product pools is technically challenging and design of an appropriate recovery system requires knowledge of the extent of the free product. Furthermore, floating product thickness can fluctuate dramatically with groundwater level variation. Presence of a persistent measurable thickness has not been confirmed. The City would prefer to evaluate data that will be collected during installation and sampling of the proposed wells located southwest of MW-13 before developing remediation options for the detected free product. The two new wells will be installed in February 1995 if encroachment and excavation permits are approved. All wells installed by the City and MW-13 will be sampled upon completion of the new wells.

Finally, your letter requested an update on the schedule for overexcavation of affected soils at the project site. The bid documents for contractors will be prepared during January 1995. The actual excavation activities are expected to occur in April 1995.

Implementation of the recommendation proposed in our November 1994 report will provide valuable data for characterization of groundwater quality conditions downgradient of the areas identified as being affected by the release of petroleum hydrocarbons. The results of the December 1994 sampling event will be documented in a report that will be submitted to you in February 1995. If you have any further questions or comments, please call us at your convenience.

Sincerely,



Kevin O'Dea  
Cert. Eng. Geologist #1702

cc: Andrew Clark-Clough, City of Oakland

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY



DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

November 18, 1994  
StID # 4457

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

Mr. Andrew Clark-Clough  
City of Oakland  
Environmental Affairs Division  
1333 Broadway, Suite 330  
Oakland CA 94612

**Re: Comment on November 16, 1994 Report on Supplemental  
Groundwater Investigation at 2662 Fruitvale Ave.,  
Oakland 94601**

Dear Mr. Clark-Clough:

Thank you for the submittal of the above report detailing the findings of the latest investigation at this City site. Recall, the investigation involved the former sump area and downgradient to former boring F14. It appears that the oil and grease contamination beneath the sump was limited in extent and limited excavation would remedy this area. In the other area, both soil and groundwater contamination was detected downgradient to the former tank locations on this site. In addition, free product was detected in MW-13, the well installed by Chevron further downgradient from this site.

At this time, I would like to comment on the recommendations made in this report and request further action in regards to the free product evidently migrating off-site. Although neither Chevron or the City of Oakland has assumed the responsibility for the free product being found in MW-13, it is clear that no other viable sources have been identified. It is also clear that free product must be addressed in accordance to Title 23, Chapter 16, Section 2655 of the California Code of Regulations. Certainly, the presence of this contamination over a long period of time presents both an environmental and human health threat and an active remedial approach is necessary. Our office hopes that Chevron and the City of Oakland will quickly resolve the liability issue and prevent the need to seek any enforcement action.

In regards to the recommendations given in this report, quarterly groundwater monitoring should continue on all wells associated with this site **including MW-13 or a well equivalent to this well installed by the City.** The proposal to install two additional wells further downgradient is acceptable. Please update our office as to the anticipated timetable for the installation of these wells as well as the overexcavation workplan previously approved by this office.

Mr. Andrew Clark-Clough  
StID #4457  
November 18, 1994  
Page 2.

Should you have questions or comment regarding this letter, you may contact me at (510) 567-6765.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

cc: Kevin O'Dea, Baseline, 5900 Hollis St., Suite D, Emeryville,  
CA 94608

M. Miller, Chevron USA, P. O. Box 5004, San Ramon 94583-0804  
E. Howell, files

5-2662

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

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

Hazardous Materials Division Inspection Form

Site ID# \_\_\_\_\_ Site Name City of Oakland Today's Date 7/8/94  
 Site Address 2662 Fruitvale Ave EPA ID# \_\_\_\_\_  
 City \_\_\_\_\_ Zip 94601 Phone \_\_\_\_\_

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

Inspection Categories:

- I. Haz. Mat/Waste GENERATOR/TRANSPORTER
- II. Business Plans, Acute Hazardous Materials
- III. Underground Tanks

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

I.A GENERATOR (Title 22)

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

Comments:

Spoke w/ k O Dea this morning, the MW on the street (Davis) sidewalk down gradient of the City site was installed on 9/7/94. Contaminated soil was encountered. Two hydroponch borings were advanced on the N+S of the MW, however, a satellite prevented the advancing of the hydroponch directly between the new well & the Chevron well (MW13). See photo.

Bill Scott of Fuelcare present. GW was very slow to fill w hydroponch borings when were advanced to ~15' BGS.

The borings w/ the former sump were also being advanced today.

I.B TRANSPORTER (Title 22)

- |          |  |       |
|----------|--|-------|
| Manifest | <input type="checkbox"/> 32. Applic./Insurance     | 66428 |
|          | <input type="checkbox"/> 33. Comp. Cert./CHP Insp. | 66448 |
|          | <input type="checkbox"/> 34. Containers            | 66465 |
|          | <input type="checkbox"/> 35. Vehicles              | 66465 |
|          | <input type="checkbox"/> 36. EPA ID #s             | 66531 |
|          | <input type="checkbox"/> 37. Correct               | 66541 |
|          | <input type="checkbox"/> 38. HW Delivery           | 66543 |
|          | <input type="checkbox"/> 39. Records               | 66544 |
| Con't's  | <input type="checkbox"/> 40. Name/ Covers          | 66545 |
|          | <input type="checkbox"/> 41. Recyclables           | 66800 |

Contact: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Signature: \_\_\_\_\_

Inspector: B Chan  
 Signature: \_\_\_\_\_

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY



DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

July 8, 1994  
StID # 4457

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

Mr. Andrew C. Clough  
Office of Public Works  
City of Oakland  
1333 Broadway, Suite 800  
Oakland CA 94612

**Re: Comment on June 27, 1994 Proposed Additional Groundwater  
Investigation for 2662 Fruitvale Ave., Oakland 94601**

Dear Mr. Clough:

Our office has just received the above work plan proposal which responds to my June 17, 1994 conversation with Mr. Kevin O'Dea of Baseline. This work plan calls for the advancement of three well points in addition to monitoring well MW-F4 as an attempt to determine if groundwater contamination being found in Chevron's MW-13 may be coming from the 2662 Fruitvale site. This work plan supplements the proposed investigation of the on-site sump and on-site excavation of contaminated soils. This work plan is acceptable and you may initiate this work as soon as possible.

I understand that the implementation of the work plan is dependent on receiving encroachment permits for the well points and that the installation of the off-site well and the well points will be performed prior to any excavation. I also understand that the City is attempting to co-ordinate monitoring with the neighboring Chevron site. Please keep our office updated on your progress of work in your quarterly monitoring reports.

Please be aware our office has moved to: **1131 Harbor Bay Parkway, Rm 250, Alameda CA 94502**. Until our phone system is in order, you may leave a voice message for me at (510) 271-4310.

Sincerely,

A handwritten signature in cursive script that reads "Barney M. Chan".

Barney M. Chan  
Hazardous Materials Specialist

cc: K. O'Dea, Baseline Env. Consulting, 5900 Hollis St., Suite D,  
Emeryville, CA 95608

M. Miller, Chevron USA Products Co., P.O. Box 5004, San  
Ramon, CA 94583-0804

4-2662

File

**BASELINE****ENVIRONMENTAL CONSULTING**

27 June 1994  
92404-D0

Date: 7/8/94 9:55  
Post-It™ brand fax transmittal memo 7671 # of pages > 3

To	Barney Chan	From	KEVIN O'DEA
Co.	Alameda Co	Co.	BASELINE
Dept.	ENVIRON. HEALTH	Phone #	707-762-5233
Fax #	510-337-9335	Fax #	707-762-5271

Mr. Barney Chan  
Alameda County  
Department of Environmental Health  
80 Swan Way Room 200  
Oakland, California 94621

**Subject: Proposed Additional Groundwater Quality Investigation, 2662 Fruitvale Avenue, Oakland, CA**

Dear Barney:

The purpose of this letter is to further clarify our proposed work at the subject property. In our telephone conversation on 17 June 1994, you raised issues and provided recommendations concerning the off-site investigation of groundwater quality downgradient of the site. In that conversation, you responded to our proposal to include two temporary well points in the investigation of groundwater quality downgradient of the site. You indicated that the proposed additional temporary well points and the additional monitoring well (MW-F4) may not provide sufficient data to account for the anomalous detection of petroleum hydrocarbon compounds in Chevron's monitoring well MW-13 located near the southeast corner of Davis Street and Fruitvale Avenue. We have discussed your comments with Mr. Andrew Clark-Clough, supervisor of the City of Oakland Office of Public Works, Environmental Affairs.

Following these discussions, we propose to install three temporary well points and one monitoring well at the locations shown in Figure 1. The purpose of the monitoring points would be to better describe the groundwater quality conditions between the project site and Chevron's well MW-13. The data gathered from these monitoring points will advance the understanding of the distribution of contaminants upgradient and cross-gradient of MW-13 in areas not sampled during previous investigations. The results of the investigation should provide sufficient data to determine if a plume of affected groundwater has migrated away from the 2662 Fruitvale site. We are coordinating a groundwater sampling schedule with Chevron to optimize the data collected from the new monitoring locations. In addition, we will perform quarterly groundwater sampling of the on-site wells (MW-F1, MW-F2 and MW-F3) on 29 June 1994.

92404ltr.627

**BASELINE**

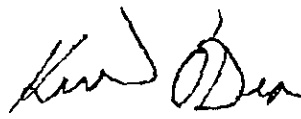
Mr. Barney Chan  
27 June 1994  
Page 2

If the sampling results indicate that the project site is not the likely source of petroleum hydrocarbons detected in MW-13, additional investigation of other migration pathways would be necessary. If the data were to indicate that the project site were the source of petroleum hydrocarbons, the City would conduct further investigations. However, we consider the investigation proposed in this letter to be a useful and efficient step in characterization of groundwater quality in the area of the site.

Should you have any questions or need further information prior to considering this proposal, please do not hesitate to contact us at your convenience.

Sincerely,

  
Yane Nordhav  
Principal

  
Kevin O'Dea  
Senior Geologist

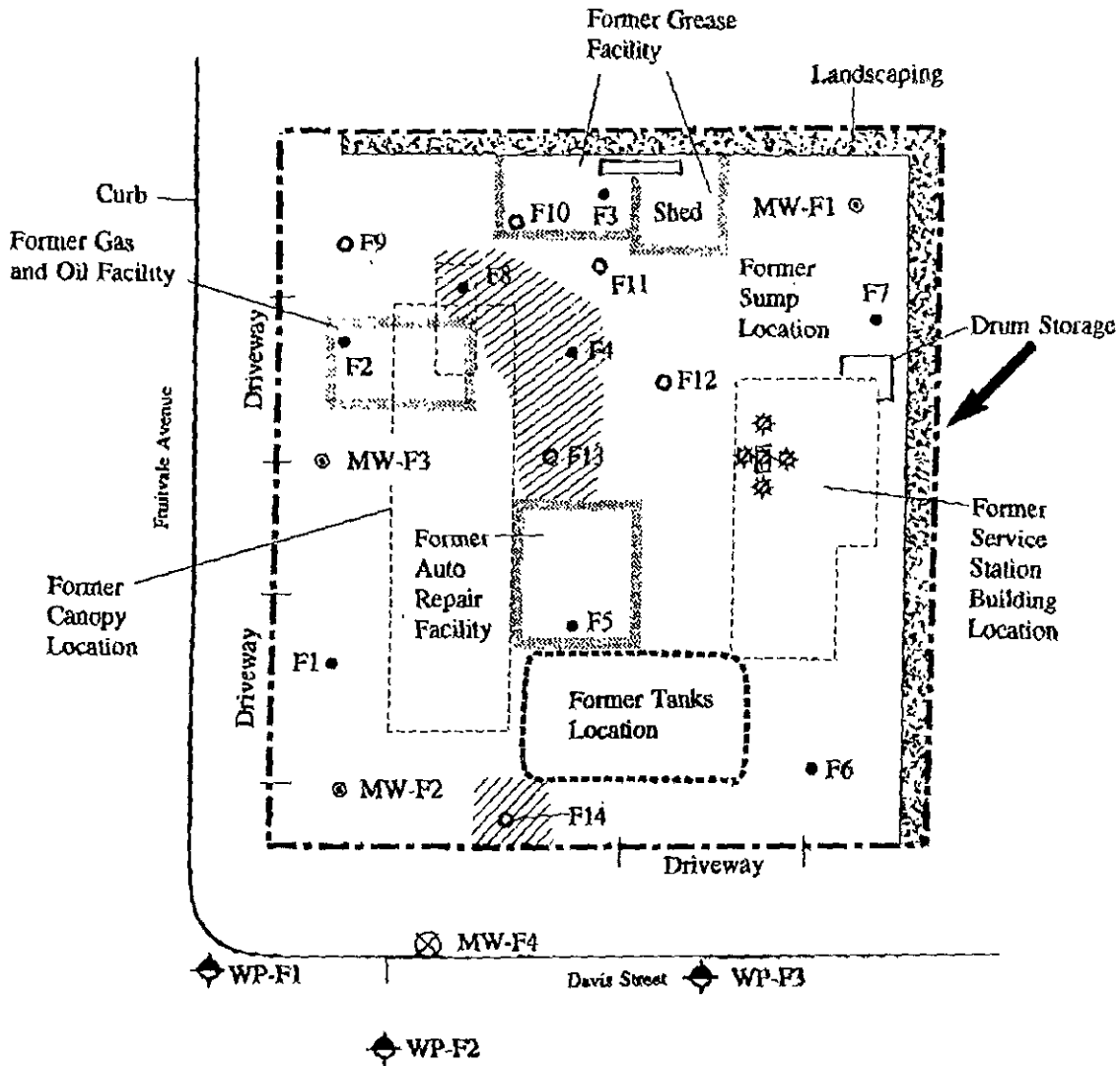
KOD/ss

cc: Andrew Clark-Clough, City of Oakland



# SITE PLAN

# Figure 1



### Legend



Areas with Elevated  
TPH Concentrations

F1-F8 • Soil Boring Location - Phase II

F9-F14 ◊ Soil Boring Location - Phase III

MW-F2 ⊙ Monitoring Well Location

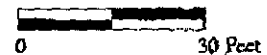
MW-F4 ⊗ Proposed Monitoring Well Location

WP-F1 ⬠ Proposed Well Point

✦ Proposed Soil Boring Locations

--- Project Site Boundary

2662 Fruitvale Avenue  
Oakland, California



BASELINE

# **BASELINE**

ENVIRONMENTAL CONSULTING

ALCO  
HAZMAT

JUN 21 2:19 PM '94

R0238

27 June 1994  
92404-D0

Mr. Barney Chan  
Alameda County  
Department of Environmental Health  
80 Swan Way Room 200  
Oakland, California 94621

**Subject: Proposed Additional Groundwater Quality Investigation, 2662 Fruitvale Avenue, Oakland, CA**

Dear Barney:

The purpose of this letter is to further clarify our proposed work at the subject property. In our telephone conversation on 17 June 1994, you raised issues and provided recommendations concerning the off-site investigation of groundwater quality downgradient of the site. In that conversation, you responded to our proposal to include two temporary well points in the investigation of groundwater quality downgradient of the site. You indicated that the proposed additional temporary well points and the additional monitoring well (MW-F4) may not provide sufficient data to account for the anomalous detection of petroleum hydrocarbon compounds in Chevron's monitoring well MW-13 located near the southeast corner of Davis Street and Fruitvale Avenue. We have discussed your comments with Mr. Andrew Clark-Clough, supervisor of the City of Oakland Office of Public Works, Environmental Affairs.

Following these discussions, we propose to install three temporary well points and one monitoring well at the locations shown in Figure 1. The purpose of the monitoring points would be to better describe the groundwater quality conditions between the project site and Chevron's well MW-13. The data gathered from these monitoring points will advance the understanding of the distribution of contaminants upgradient and cross-gradient of MW-13 in areas not sampled during previous investigations. The results of the investigation should provide sufficient data to determine if a plume of affected groundwater has migrated away from the 2662 Fruitvale site. We are coordinating a groundwater sampling schedule with Chevron to optimize the data collected from the new monitoring locations. In addition, we will perform quarterly groundwater sampling of the on-site wells (MW-F1, MW-F2 and MW-F3) on 29 June 1994.

92404ltr.627


**BASELINE**


Mr. Barney Chan  
27 June 1994  
Page 2

If the sampling results indicate that the project site is not the likely source of petroleum hydrocarbons detected in MW-13, additional investigation of other migration pathways would be necessary. If the data were to indicate that the project site were the source of petroleum hydrocarbons, the City would conduct further investigations. However, we consider the investigation proposed in this letter to be a useful and efficient step in characterization of groundwater quality in the area of the site.

Should you have any questions or need further information prior to considering this proposal, please do not hesitate to contact us at your convenience.

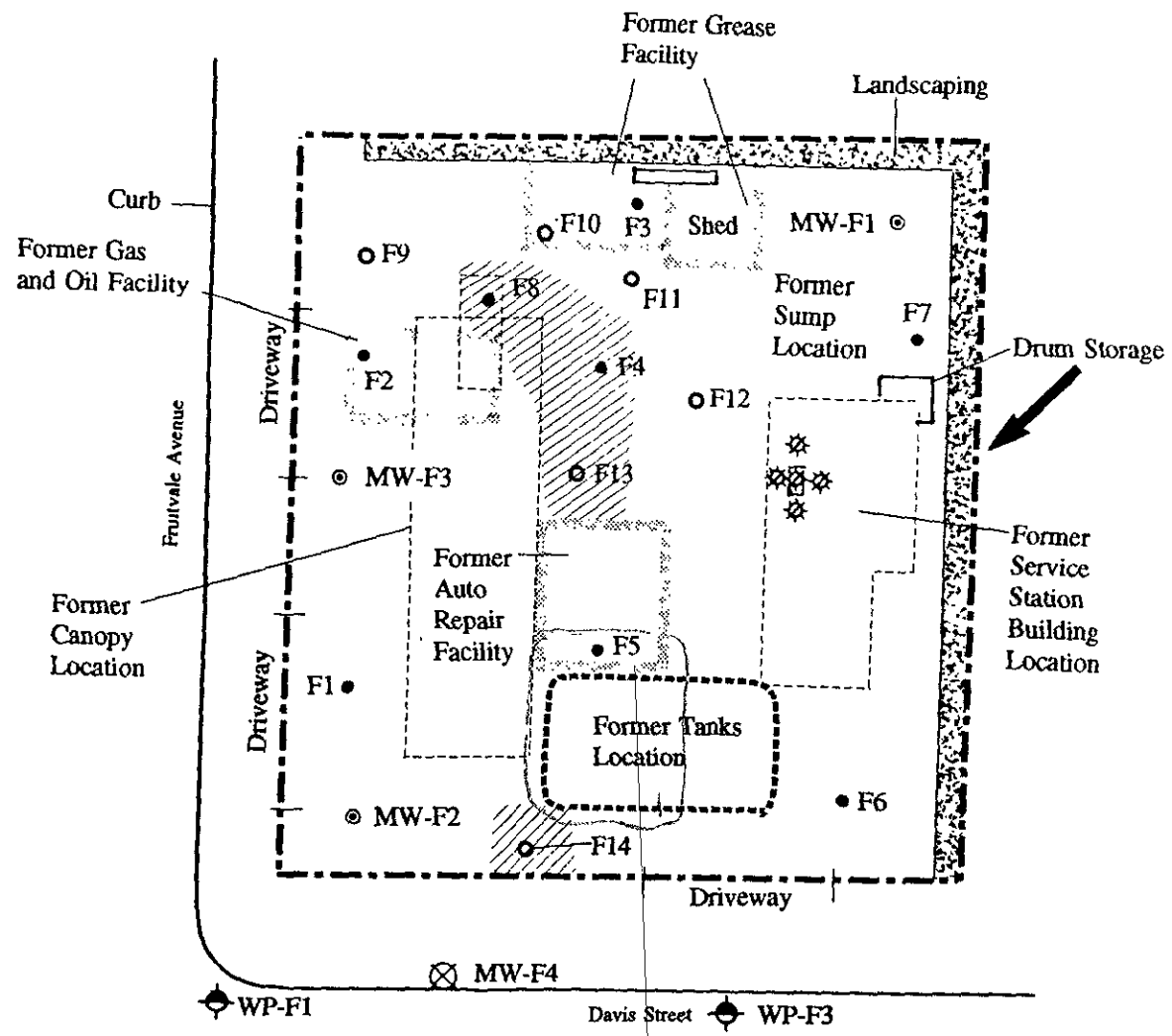
Sincerely,

  
Yane Nordhav  
Principal


  
Kevin O'Dea  
Senior Geologist

KOD/ss

cc: Andrew Clark-Clough, City of Oakland

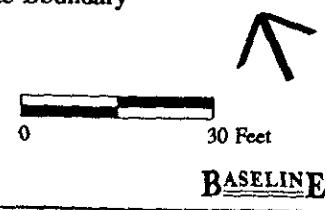


**Legend**

-  Areas with Elevated TPH Concentrations
- F1-F8 • Soil Boring Location - Phase II
- F9-F14 ○ Soil Boring Location - Phase III
- MW-F2 ⊙ Monitoring Well Location

- MW-F4 ⊗ Proposed Monitoring Well Location
- WP-F1 ⬤ Proposed Well Point
- ⊗ Proposed Soil Boring Locations
- - - - - Project Site Boundary

**2662 Fruitvale Avenue  
Oakland, California**



check # 838  
2681 Fruitvale

# **BASELINE**

## ENVIRONMENTAL CONSULTING

# 4457

ALCO  
HAZMAT  
94 JUN -8 PM 4:00

6 June 1994  
92404-D0

Mr. Barney Chan  
Alameda County  
Department of Environmental Health  
80 Swan Way Room 200  
Oakland, California 94621

**Subject: Response to Comments in 20 May 1994 Letter, 2662 Fruitvale Avenue, Oakland, CA**

Dear Barney:

We have reviewed your letter, dated 20 May 1994, to Andrew Clark-Clough of the City of Oakland regarding the continuing environmental investigation at 2662 Fruitvale Avenue in Oakland. The letter presented your summary of the meeting attended by you, Andrew, and Kevin O'Dea of BASELINE on 12 May 1994. The purpose of that meeting was to discuss the recommended additional investigation and corrective action activities proposed in BASELINE's Work Plan for Additional Environmental Investigation and Remedial Activities dated 10 May 1994. Your letter identified four aspects of the proposed scope of work for which you had comments or concerns. The comments, in the order presented in your letter, are repeated (in italics) below and followed by our responses to those comments:

1. *If the location of the former sump is identified, our office was willing to accept a single boring within the center of this area as a confirmation sample to determine whether a contaminant release had occurred. If its location is unclear, the borings recommended are acceptable.*

The work plan proposed **up to five soil borings** at the former sump location. The center of the former sump location can be accurately identified from site plans. The number of borings will be determined in the field on the basis of observations made by a geologist during completion of the boring at the approximate center of the sump location. If the observations and/or PID screening indicate that soils have been affected by contaminant releases, additional borings (up to five) will be drilled and sampled to constrain the extent of contamination.

92404ltr.606

## **BASELINE**

Mr. Barney Chan  
6 June 1994  
Page 2

- 2. Soil samples after overexcavation would be taken at the prescribed frequency. Although no specific cleanup levels were discussed, a PID would be used to screen for potential clean levels. Ultimately, a human health risk assessment would be performed using the exposure scenario accounting of the future use of the site. Though non-detectable is the goal for the soil cleanup, physical constraints may ultimately determine the extent of excavation.*

The work plan proposes the excavation of soils (approximately 200 cubic yards) containing total petroleum hydrocarbons at concentrations greater 1,000 mg/kg. As we discussed at the meeting on 10 May 1994, this level is the proposed cleanup goal for the remedial excavation activities. Benzene was only detected in one of thirty-three samples. These data indicate that benzene does not present a significant health risk at the site except, possibly, in the area of boring F4. Other volatile organic compounds were typically detected in soils with elevated TPH levels which would be removed under the proposed excavation activities. Following the remedial excavation activities, a human health risk assessment would be performed. We believe that the cleanup goal of 1,000 mg/kg TPH would be effective in reducing human health and environmental risks to a less-than-significant level.

The work plan states that a photo-ionization detector (PID) would be used as the method for field screening of volatile organic contaminant levels in soils during excavation activities.

- 3. The City chose not to use the existing monitoring well installed by Chevron. Therefore, a map indicating the location of your downgradient off-site well should be submitted to our office as soon as its location has been determined. We discussed the results of Chevron's investigation which supports the belief that the contamination being found in the well across your site on Davis Street is likely from the City's site. Should your off-site well confirm this, groundwater remediation will be required.*

Please refer to the attached Figure 1 which shows the location of the proposed monitoring well. The well location is proposed in the sidewalk adjacent to the southern boundary of site along Davis Street; approximately 20 feet downgradient of the most southerly area of soil contamination detected at the site (boring BF14). This well will provide soil and groundwater quality data between the project site and the groundwater monitoring well (MW-13) installed and monitored by Chevron near the southeast corner of Fruitvale Avenue and Davis Street.

# BASELINE

Mr. Barney Chan  
6 June 1994  
Page 3

Although we discussed the results of the most recent groundwater quality monitoring for the Chevron site during the 10 May 1994 meeting with you, we did not, as implied in your letter, support the belief that the contamination in monitoring well (MW-13) is "likely from the City's site". The results of initial groundwater sampling from monitoring wells MW-F2 and MW-F3 and the results of sampling of Chevron's wells MW-16 and MW-4 indicate that groundwater downgradient of the 2662 Fruitvale Avenue site has not been significantly affected by the release of TPH. Although TPH releases at the 2662 Fruitvale Avenue site could be the source of compounds detected in MW-13, the compounds could have migrated to the well location from other undetected sources or the Chevron site. Cross-gradient migration could occur along a permeable channel deposits or within utility trenches under Fruitvale or Davis Street. The intended purpose of the proposed additional well is to establish the groundwater quality at an off-site location between the City's property at 2662 Fruitvale Avenue and Chevron's MW-13 well. In combination with the existing wells, the new well will provide a more complete monitoring network for evaluation of the distribution of petroleum hydrocarbon compounds that have been identified by the Chevron monitoring program.

The final sentence of your comment does not specify the analytical results that would confirm the assumption that the 2662 Fruitvale Avenue site is the source of contamination detected in MW-13 or who would be responsible for the required groundwater remediation. The levels of TPH and volatile organic compounds detected in well MW-13 during previous sampling events were similar to levels detected in wells at the Chevron site. Groundwater remediation has not been required for that site. You indicated that Chevron intends to prepare a request that Alternative Points of Compliance be applied to their site by the Regional Water Quality Control Board (RWQCB) in the enforcement of groundwater cleanup standards. If the request is found to be acceptable by the RWQCB, it is unlikely that any remediation will be required for the Chevron site. If remediation were not required for the groundwater at the Chevron site, we would not expect that remediation would be required at 2662 Fruitvale Avenue.

4. *Due to the uncertainty of the timeframe of the proposed investigation, groundwater monitoring was to be reinstated as soon as possible to help further characterize this site.*

We are currently coordinating with the City of Oakland to obtain permission to install the proposed monitoring well in the sidewalk along the southern margin of the site. We expect to have the well installed by the end of June 1994. The new well and the existing wells at the site (MW-F1, MW-F2, and MW-F3) will be sampled at that time. If the permit approval process delays this schedule, the existing wells will be sampled before the end of June.


with the  
MW-13 problem  
must do the  
remediation.

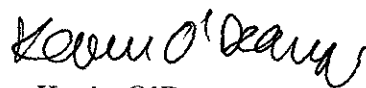
**BASELINE**

Mr. Barney Chan  
6 June 1994  
Page 4

We hope that this letter provides you with the information that you need for the project. We would appreciate your response to our intention to set the cleanup goal for TPH compounds during the remedial excavation activities at 1,000 mg/kg. It may be helpful to invite Ravi Arualanathan's opinion on the proposed cleanup level and health risk-based management of the City's property. Please call us if you have any questions or comments on the issues addressed in this letter or our 10 May 1994 work plan, and thank you for your timely review of the work plan.

Sincerely,

  
Yane Nordhav  
Principal

  
Kevin O'Dea  
Senior Geologist

KOD/ss

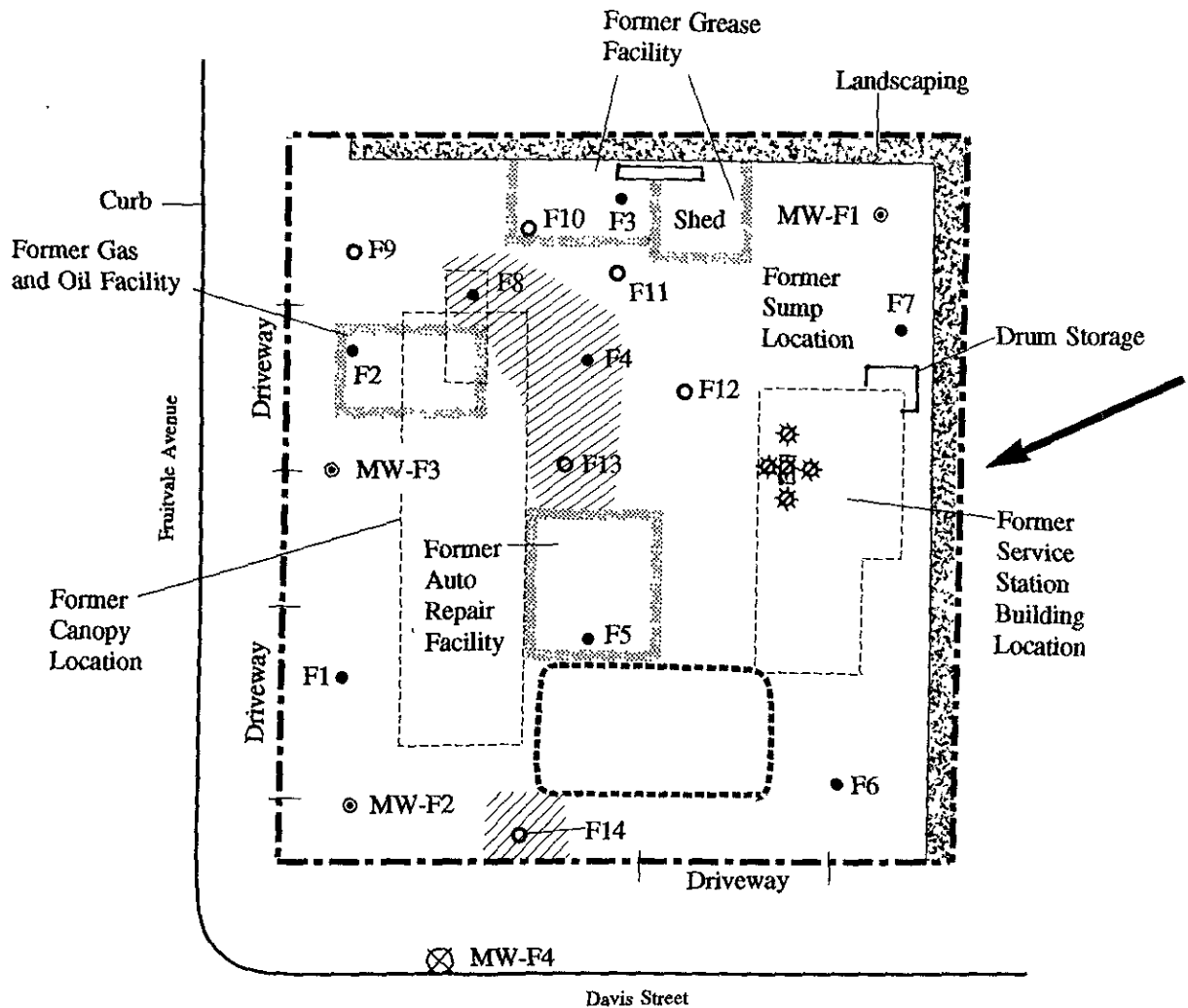
w/ Attachment

cc: Andrew Clark-Clough, City of Oakland



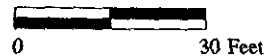
# SITE PLAN

# Figure 1



## Legend

- |  |  |        |   |                                   |
|--|--|--------|---|-----------------------------------|
|  | Outline of Former Service Station Facilities (1946 Sanborn Map)                    | F1-F8  | ● | Soil Boring Location - Phase II   |
|  | Approximate Location of Tanks Removed in 1978 (Trans Pacific, 1986)                | F9-F14 | ○ | Soil Boring Location - Phase III  |
|  | Areas with Elevated TPH Concentrations   | MW-F2  | ⊙ | Monitoring Well Location          |
|  | Proposed Soil Boring Locations   | MW-F4  | ⊗ | Proposed Monitoring Well Location |
|  | Approximate Geophysical Anomaly (Possible Underground Tank) (BCA Geophysics, 1993) |        |   |                                   |
|  | Groundwater Flow Direction   |        |   |                                   |
|  | Project Site Boundary  |        |   |                                   |



**2662 Fruitvale Avenue  
Oakland, California**

**BASELINE**

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

May 20, 1994  
StID # 4457

Mr. Andrew C. Clough  
Office of Public Works  
City of Oakland  
1333 Broadway, Suite 800  
Oakland CA 94612

**Re: Summary of May 12, 1994 Meeting on Subsurface Investigation  
at 2662 Fruitvale Ave., Oakland 94601**

Dear Mr. Clough:

This letter serves to summarize the May 12, 1994 meeting between you, myself and Mr. Kevin O'Dea of Baseline regarding the May 10, 1994 work plan for additional investigation at the above site. Recall, this work plan called for borings within and around the former sump area, the excavation of soil in areas previously identified as having residual petroleum contamination, the repair of one well and the installation of a new well. Our office had the following comments and concerns:

1. If the location of the former sump is identified, our office was willing to accept a single boring within the center of this area as a confirmation sample to determine whether a contaminant release had occurred. If its location is unclear, the borings recommended are acceptable.
2. Soil samples after overexcavation would be taken at the prescribed frequency. Although no specific cleanup levels were discussed, a PID would be used to screen for potential clean levels. Ultimately, a human health risk assessment would be performed using the exposure scenario accounting of the future use of the site. Though non-detectable is the goal for the soil cleanup, physical constraints may ultimately determine the extent of excavation.
3. The City chose not to use the existing monitoring well installed by Chevron. Therefore, a map indicating the location of your downgradient offsite well should be submitted to our office as soon as its location has been determined. We discussed the results of Chevron's investigation which supports the belief that the contamination being found in the well across your site on Davis St. is likely from the City's site. Should your offsite well confirm this, groundwater remediation will be required.

A. Clark-Clough  
StID # 4457  
2662 Fruitvale Ave.  
May 20, 1994  
Page2.

4. Due to the uncertainty of the timeframe for the proposed investigation, groundwater monitoring was to be reinstated as soon as possible to help further characterize this site.

Please keep our office updated with your schedule for work at this site and inform our office **48 working hours** prior to any field activities so I may arrange to be present, if possible. If you have any comments or concerns with this letter you may contact me at (510) 271-4530.

Sincerely,



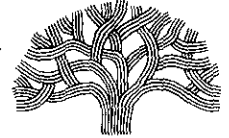
Barney M. Chan  
Hazardous Materials Specialist

cc: K. O'Dea, Baseline Environmental Consulting, 5900 Hollis St.,  
Suite D, Emeryville, CA 95608  
M. Miller, Chevron USA Products Co., P.O. Box 5004, San  
Ramon, CA 94583-0804  
3-2662Fruit

*file*



CITY OF OAKLAND



ENVIRONMENTAL PROTECTION 1993  
95 MAR 10 PM 1:58

ENVIRONMENTAL AFFAIRS • 1333 BROADWAY, SUITE 330 • OAKLAND, CALIFORNIA 94612

Department of Public Works  
March 8, 1994

(510) 238-6688  
FAX (510) 238-7286  
TDD (510) 838-7644

Mr. Barney Chan  
Alameda County Department of Environmental Health  
Division of Hazardous Materials  
1131 Harbor Bay Parkway, Room 250  
Alameda, CA 94502

**Subject: Report on Quarterly Groundwater Monitoring at 2662 Fruitvale Avenue, Oakland, California**

Dear Mr. Chan:

Please find enclosed a copy of the December, 1994 groundwater monitoring report for 2662 Fruitvale prepared by Baseline Environmental Consultants. I concur with the conclusions and recommendations. If you have any questions or require additional information, please call me at 238-6361.

Sincerely,

Andrew Clark-Clough  
Environmental Program Supervisor

enclosure

cc: Jeanne Zastara, OHND, w/ enclosure  
Rich Hiatt, RWQCB, w/ enclosure

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

January 19, 1994  
StID # 4457

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

Mr. James Cotton  
Office of Public Works  
City of Oakland  
1333 Broadway, Suite 800  
Oakland CA 94612

**Re: Comment on October 1993, Phase III Soil and Groundwater  
Investigation for 2662 Fruitvale Ave., Oakland CA 94601**

Dear Mr. Cotton:

Our office has received and reviewed the above referenced report detailing the results of soil borings and groundwater monitoring well installations at this City site. We have also discussed this site with Ms. Geneva Randle of Baseline. Please be aware, until further notice, you should continue to monitor these wells on a quarterly basis and send our office a copy of this report. The results of this report identify a number of areas which still require investigation. These items include:

1. Our office concurs with Baseline's recommendation to excavate the two areas of apparent petroleum hydrocarbon contamination; near F8, F4 and F13 and near F14. The sump should also be removed or closed with adequate sampling beneath the sump to verify no release of hydrocarbons has occurred.
2. An additional off-site well will be required to determine the extent of migration of the gasoline plume. Recall that an off-site well (MW13) installed by Chevron and located downgradient to this site has consistently detected high Total Petroleum Hydrocarbons as gas, TPHg, and BTEX concentrations.

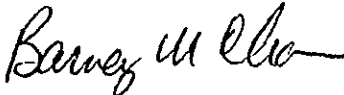
Chevron has recently installed and sampled two additional wells on the border of their site, 2681 Fruitvale Ave. The results of their samplings indicate that Chevron's gasoline plume is relatively confined to their own site. In fact, Chevron has requested discontinuing the groundwater monitoring of MW13, since groundwater contamination appears to be coming from the City's site. Our office agrees with this conclusion. You should either contact Chevron to obtain their permission to continue monitoring their well or install a well of your own in the same general location as their MW13. If you do use Chevron's well, please insure the groundwater elevation for all wells are determined relative to mean sea level.

Mr. Joseph Cotton  
StID #4457  
2662 Fruitvale Ave.  
January 18, 1994  
Page 2.

Lastly, please contact our office at least two working days prior to initiating any field work so I may witness these activities if possible. Please provide a work plan addendum which addresses the above items to our office **within 45 days or by March 8, 1994.**

You may contact me at (510) 271-4530 if you have any questions.

Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

cc: G. Randle, Baseline Environmental Consulting, 5900 Hollis  
St., Suite D, Emeryville, CA 94608  
M. Miller, Chevron USA Products Co., P.O. Box 5004, San  
Ramon, CA 94583-0804  
R. Coughlin, Texaco Refining & Marketing, 10 Universal City  
Plaza, Universal City, CA 91608  
3-2662Fr

Reed 8/6/93

# BASELINE

## ENVIRONMENTAL CONSULTING

### FAX TRANSMITTAL

Date: 8/6/93 Fax No.: 569-4757

Time: 3p

To: Barney Chan  
Alameda County Health Services

From: Dominic Roques

Subject: Work plan for 2662 Fruitvale Subsurface Investiga

Project No.: 92404AD03

Total Pages: 11  
(including transmittal)

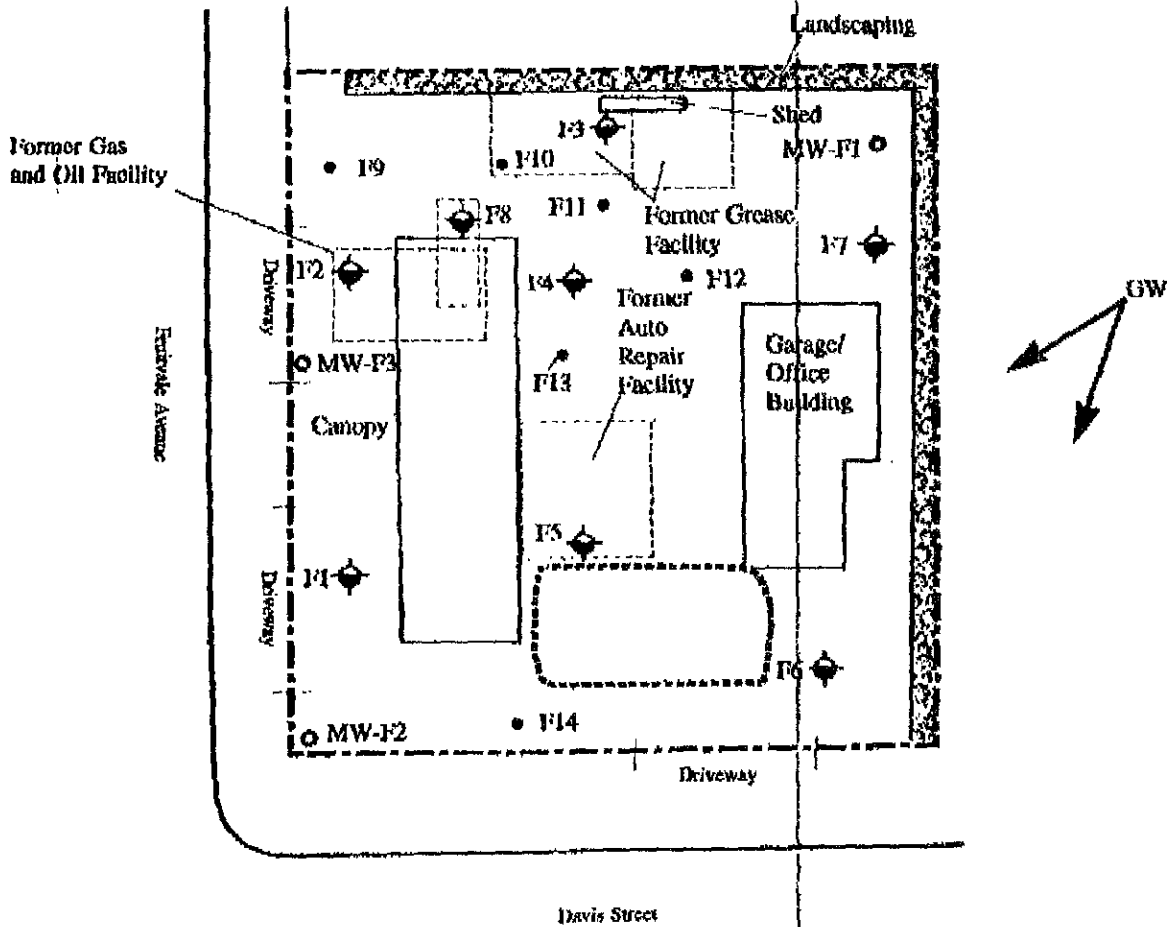
Original to follow:  Yes  No



Comments: Mr. Chan: Please review and comment.  
Full report, including appendices, mailed today.  
Thanks, Dominic

# SITE PLAN AND PROPOSED SAMPLING LOCATIONS

## Figure 2



### Legend

F2 Soil Boring Location (BASELINE, 1993)

Outline of Former Service Station Facilities (1946 Sanborn Map)

Approximate Location of Tanks Removed in 1978 (Trans Pacific, 1986)

Project Site Boundary

F9 Proposed Soil Boring Location

MW-F2 Proposed Monitoring Well Location

Approximate Geophysical Anomaly (Possible Underground Tank) (BCA Geophysics, 1993)

GW Inferred Direction of Groundwater Flow (Resna, 1991)

### 2662 Fruitvale Avenue Oakland, California

**BASELINE**



TABLE 1  
**SUMMARY OF ANALYTICAL RESULTS, SOILS**  
 2662 Fruitvale Avenue, Oakland, California  
 January 1993

Sample Location	Depth (feet)	Total Petroleum Hydrocarbons (mg/kg)			Volatile Organic Compounds (µg/kg)						
		Gasoline	Motor Oil	Oil and Grease (mg/kg)	Benzene	Toluene	Ethylbenzene	Total Xylenes	1,2-dichloroethene (total)	1,2-dichlorobenzene	Acetone
F1	2.0-2.5	<1	<10	-	∅	∅	∅	∅	-	-	-
	9.5-10.0	6	<10	-	∅	∅	14	∅	-	-	-
	11.0-11.5	66	<10	-	∅	72	260	∅	-	-	-
F2	2.0-2.5	<1	11	-	∅	∅	∅	∅	-	-	-
	8.0-8.5	1.1	<10	-	∅	∅	∅	∅	-	-	-
F3	2.0-2.5	-	<10	∅	-	-	-	-	-	-	-
	8.0-8.5	-	14	300	-	-	-	-	-	-	-
F4	2.0-2.5	3.7	940	-	∅	∅	6.4	∅	-	-	-
	10.0-10.5	15	<10	-	∅	∅	320	∅	-	-	-
F5	2.0-2.5	<1	<10	-	∅	∅	∅	∅	∅	∅	∅
	8.0-8.5	<1	<10	-	∅	∅	∅	∅	∅	∅	∅
F6	2.0-2.5	-	<10	-	∅	∅	∅	∅	∅	∅	∅
	8.0-8.5	-	<10	-	∅	∅	∅	∅	∅	∅	∅
F7	2.0-2.5	-	13	-	∅	∅	∅	∅	∅	∅	∅
	8.5-9.0	-	<10	-	∅	∅	∅	∅	∅	∅	∅
F8	2.0-2.5	220	44	-	∅	∅	3,400	17,000	-	-	-
	8.5-9.0	810	<10	-	∅	∅	3,400	∅	-	-	-
Sump		16	110,000	110,000	∅	3,000	950	2,600	1,100	1,200	4,200

Notes: Sample locations are shown in Figure 2.  
 - indicates that sample was not analyzed for this compound.

- 1 Motor oil, kerosene, and diesel were measured; however, kerosene or diesel was not detected.
- 2 Only those compounds that were present above detection limits are listed.

TABLE 2  
 SUMMARY OF ANALYTICAL RESULTS, SOIL-WATER  
 2662 Fruitvale Avenue, Oakland, California  
 January 1993

(µg/L)

Sample Location	Total Petroleum Hydrocarbons	Volatile Organic Compounds				
	Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes	Trans-1,3-dichloropropene
F1	13,000	610	18	830	46	<2.0
F4	6,800	11	<2.0	16	<2.0	7
F5	<50	-	-	-	-	-
F7	<50	-	-	-	-	-

Notes: Sample locations are shown in Figure 2.  
 - indicates that sample was not analyzed for this compound.

ground surface and immediately above the groundwater. Groundwater is estimated to be encountered approximately nine feet below ground surface based on data obtained during the Phase II investigation. Sampling procedures are described in Appendix C. The soil samples would be submitted to a California-certified analytical laboratory for TPH as gasoline, TPH as motor oil, and VOC analyses. The two soil samples collected from Borings F10 and F11 would also be submitted for oil and grease analyses.

### **Monitoring Well Installation**

The monitoring wells would be constructed with 2-inch diameter PVC casing and machine-slotted well screen in a nominal 8-inch diameter boring. The PVC casing and end caps would be steam-cleaned prior to installation. A sand filter pack (#2/12) and approximately 2-foot bentonite pellet seal would be tremied through the hollow-stem augers into the annular space between the borehole and the well casing. The remainder of the annular space would be filled with a cement-bentonite grout. A locking well cap and a traffic-rated chest box would complete each well installation. A typical well construction diagram is shown on Figure 3. The location of the well screen interval would depend on field conditions, but would be installed to account for shallow groundwater fluctuations.

All work associated with drilling activities and well installation would be supervised by a California-registered geologist. Copies of the well logs would be submitted to the California Department of Water Resources (DWR) for their files. The laboratory analyses would be performed according to methods specified in the Tri-Regional Guidelines.

### **Well Development and Sampling**

The wells would be developed at least 24 hours after well installation by surging and pumping with a double diaphragm pump and disposable PVC hose until the wells were relatively clear of fine sediment. After 24 hours, the wells would be sampled according to procedures outlined in Appendix B. The groundwater samples would be submitted to a California-certified analytical laboratory for TPH as gasoline, TPH as motor oil, and VOCs analyses.

### **Survey**

The horizontal location and the elevation (with an accuracy of 0.01 foot with respect to mean sea level) of the monitoring wells would be surveyed by a licensed surveyor.

### **SUMMARY REPORT**

Following the receipt of the analytical results, a summary report would be prepared that documented field activities, presented results, and provided conclusions and recommendations for submittal to Alameda County Health Agency and San Francisco Regional Water Quality Control Board.

Recd 8/6/93

# BASELINE

## ENVIRONMENTAL CONSULTING

### FAX TRANSMITTAL

Date: 8/6/93 Fax No.: 569-4757

Time: 3p

To: Barney Chan  
Alameda County Health Services

From: Dominic Rogues

Subject: Work plan for ZGGZ Fruitvale Subsurface Investigation

Project No.: 92404-A2023 Total Pages: 11  
(including transmittal)

Original to follow:  Yes  No



Comments: Mr. Chan: Please review and comment.  
Full report, including appendices, mailed today.  
Thanks, Dominic

# **WORK PLAN**

**AUGUST 1993**

---

---

**PHASE III SOIL AND  
GROUNDWATER INVESTIGATION  
2662 FRUITVALE AVENUE  
Oakland, California**

For:  
Environmental Affairs Division  
Office of Public Works  
City of Oakland

---

BASELINE Environmental Consulting  
5900 Hollis Street, Suite D  
Emeryville, California 94608  
(510) 420-8686

92404-A0.03

**BASELINE****ENVIRONMENTAL CONSULTING**

5 August 1993  
92404-A0.03

Mr. Barney Chan  
Alameda County Health Care Services  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, CA 94621

**Subject: Work Plan for Phase III Soil and Groundwater Investigation, 2662 Fruitvale Avenue, Oakland, California**

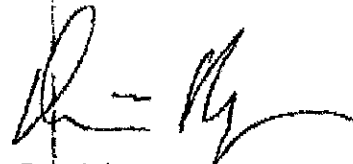
Dear Mr. Chan:

Enclosed please find one copy of the Work Plan for the proposed soil and groundwater investigation at 2662 Fruitvale Avenue in Oakland. The drilling activities are scheduled for 10 and 11 August 1993. Well development and groundwater sampling should occur during the following week. A summary report would be prepared within three weeks following receipt of all analytical results. Should you have any questions regarding this work plan, or need further information, please do not hesitate to contact us at your convenience.

Sincerely,



Yanc Nordhav  
Principal  
R.O. No. 4009



Dominic Roques  
Associate

YN/DR

Enclosure

cc: Mr. R. Hiett, San Francisco RWQCB  
Ms. Julie Carver, City of Oakland

# **WORK PLAN**

**AUGUST 1993**

**PHASE III SOIL AND GROUNDWATER INVESTIGATION  
2662 FRUITVALE AVENUE  
Oakland, California**

**For:**

**Environmental Affairs Division  
Office of Public Works  
City of Oakland**

**BASELINE Environmental Consulting  
5900 Hollis Street, Suite D  
Emeryville, California 94608  
(510) 420-8686**

82404-A0.03

## TABLE OF CONTENTS

	<u>PAGE</u>
INTRODUCTION	1
BACKGROUND	1
PROPOSED FIELD INVESTIGATION	1
SUMMARY REPORT	6

### APPENDICES

- A: Geophysical Survey Results
- B: Monitoring Well Permit, Site Safety Plan
- C: Sampling Procedures

### FIGURES

1: Regional Location	2
2: Site Plan and Proposed Sampling Locations	3
3: Well Construction Diagram	7

### TABLES

1: Summary of Analytical Results, Soil	4
2: Summary of Analytical Results, Soil-Water	5



**WORK PLAN FOR  
SOIL AND GROUNDWATER INVESTIGATION  
2662 Fruitvale Avenue  
Oakland, California**

## **INTRODUCTION**

BASLINE Environmental Consulting has been retained to conduct a Phase III soil and groundwater investigation at 2662 Fruitvale Avenue in Oakland (Figure 1). The purpose of the Phase III investigation is to further define the extent of soil affected by petroleum hydrocarbons and volatile organic compounds (VOCs) and to assess the potential impact to groundwater quality.

## **BACKGROUND**

Soil sampling was performed in January 1993 at the site during a Phase II investigation. The soil boring locations are shown on Figure 2. The analytical results of the soil samples identified the presence of total petroleum hydrocarbons (TPH) as gasoline, motor oil, oil and grease, and VOCs (Table 1). Water samples collected from the soil borings were also found to contain TPH as gasoline and VOCs (Table 2).

A magnetometer survey was conducted 18 July 1993 by BCA Geophysics to assess the location and depth of any underground storage tank(s) that may potentially still remain on-site. Two anomalies located in the northwest portion of the site in the vicinity of the former oil and gas facility (1946 Sanborn Map) may be caused by a buried metal object approximately ten feet long, weighing 2,000 pounds, and buried at an average depth of ten feet. A copy of the survey results is included in Appendix A.

## **PROPOSED FIELD INVESTIGATION**

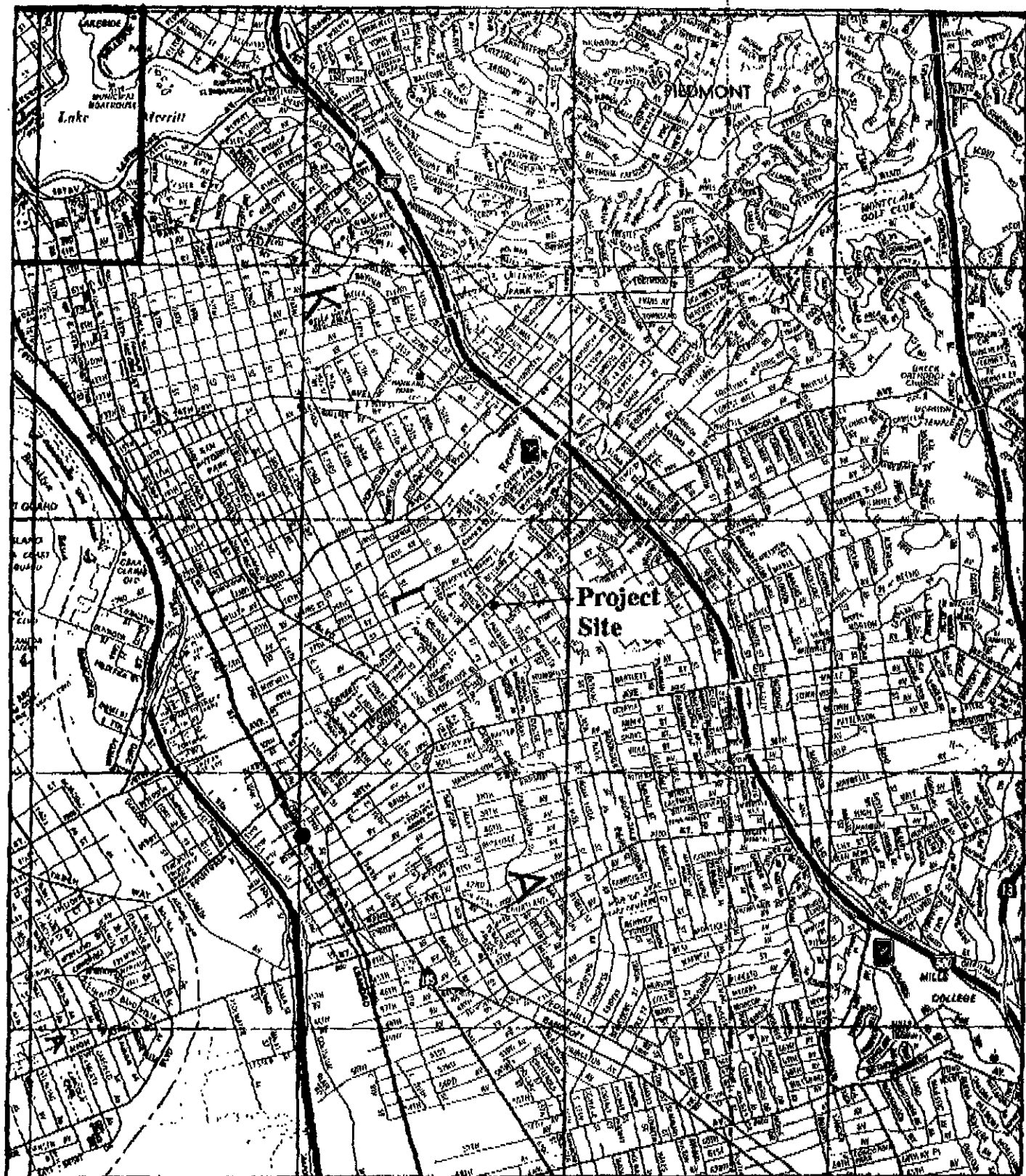
BASLINE proposes to install six soil borings, F9 through F14, and three groundwater monitoring wells, MW-F1 through MW-F3, at the locations shown on Figure 2. The soil boring and well locations were selected on the basis of the soil sample results from the Phase II investigation, groundwater data from the nearby Chevron site at 2681 Fruitvale Avenue, and the results of the geophysical survey. The soil and well borings would be advanced to the depth of the groundwater table using hollow-stem augers. The augers and soil sampling equipment would be steam-cleaned prior to drilling and between borings. A copy of the monitoring well permit and site safety plan for the field activities are included in Appendix B.

### **Soil Sampling**

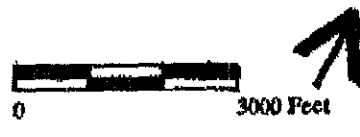
Soil samples would be collected at approximately five foot intervals for lithologic description. Soil samples for chemical analyses would be collected at depths of approximately three feet below the

# REGIONAL LOCATION

# Figure 1

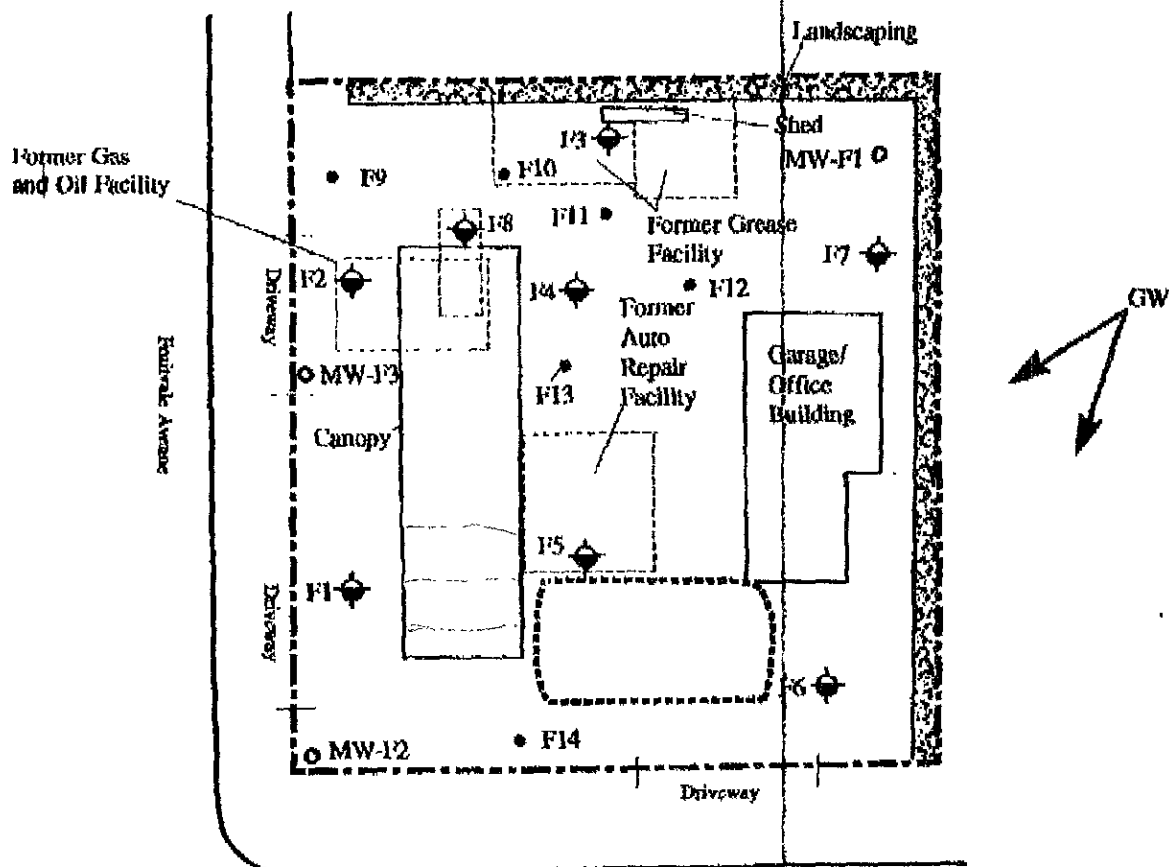


**2662 Fruitvale Avenue  
Oakland, California**



# SITE PLAN AND PROPOSED SAMPLING LOCATIONS

## Figure 2



### Legend

F2 Soil Boring Location (BASELINE, 1993)

Outline of Former Service Station Facilities (1946 Sanborn Map)

Approximate Location of Tanks Removed in 1978 (Trans Pacific, 1986)

Project Site Boundary

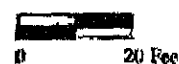
F9 Proposed Soil Boring Location

MW-F2 Proposed Monitoring Well Location

Approximate Geophysical Anomaly (Possible Underground Tank) (BCA Geophysics, 1993)

GW Inferred Direction of Groundwater Flow (Resna, 1991)

### 2662 Fruitvale Avenue Oakland, California



**BASELINE**

# BASELINE

## ENVIRONMENTAL CONSULTING

25 June 1993  
92404-A0.03

*expect awp w/ 1 mo -  
7/25/93*

Mr. Barney Chan  
Alameda County Health Care Services  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, CA 94621

**Subject: Subsurface Investigation at 2662 Fruitvale Avenue, Oakland, California (STID #4457)**


Dear Mr. Chan:

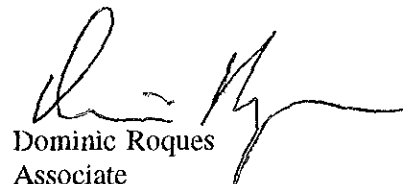
We have received a copy of your letter dated 13 May 1993 to the City of Oakland pertaining to the April 1993 Phase II Site Assessment prepared by BASELINE for 2662 Fruitvale Avenue, Oakland. As discussed in your letter, future work proposed at the site includes a geophysical survey and a soil and groundwater investigation. We will schedule and proceed with the geophysical survey immediately. Within three weeks of receiving the survey results, BASELINE will prepare and submit a specific work plan for the proposed soil and groundwater investigation for review by the City of Oakland and Alameda County. The locations of the soil borings and monitoring well locations will be selected on the basis of results from the survey, the Phase II investigation, and data from the nearby Chevron site at 2681 Fruitvale Avenue, presumed downgradient of the site. Field work will be scheduled shortly thereafter.

We would appreciate being notified of the status of the nearby investigation at the Chevron site, 2681 Fruitvale Avenue, and would like to request copies of the report(s) pertaining to the soil and groundwater investigation at that site so that we may incorporate that information in the development of the subsurface investigation at 2662 Fruitvale Avenue.

If you have any further questions or comments, please contact us at your convenience.

Sincerely,

  
Yanc Nordhav  
Principal

  
Dominic Roques  
Associate

YN:DR:cr

cc: Ms. Julie Carver, City of Oakland  
Mr. R. Hiatt, San Francisco RWQCB

92404A03-6/25/93

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

May 13, 1993  
StID # 4457

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

*James Cattan*

Ms. Julie Carver  
Office of Public Works  
City of Oakland  
1333 Broadway, Suite 800  
Oakland CA 94612

**Re: Status of Subsurface Investigation at 2662 Fruitvale Ave.,  
Oakland CA 94601**

Dear Ms. Carver:

Thank you for the submission of the April 1993 Phase II Site Assessment for the above site performed by Baseline Environmental Consulting. As mentioned in this report, it appears that there has been a release of petroleum hydrocarbons from this site and that soil and groundwater has been impacted. You may be aware that I have previously contacted Texaco and asked for all records detailing the removal of underground tanks from this site. I will be copying Mr. Rose Coughlin of Texaco to make her aware of the results of this Phase II Assessment. However, until further notice I will be directing all correspondence to you and the City of Oakland as the responsible party for this site.

I would also like to make you aware of the current investigation being performed across the street at 2681 Fruitvale Ave., a former Chevron station. For several years this site has been investigating a gasoline release which has impacted the groundwater. As part of their investigation, several offsite wells were installed attempting to determine the limits of the groundwater contamination. One of these wells, MW-13, was installed on Davis St., south of the 2662 Fruitvale site. This well is in the downgradient location relative to the 2662 Fruitvale site if we assume the groundwater gradient of the Chevron site. Chevron is in the midst of installing two additional wells, one on Davis St. and one on Fruitvale, in hopes of better defining the gradient and groundwater plume emanating from their site. At this time, given the results of the grab water sample from boring F1 and the assumed gradient, the contamination being found in MW-13 is likely coming from the 2662 site. Part of your future investigation should include verifying the source of offsite contamination and consideration of remedial options. Mr. Mark Miller of Chevron is also being copied to inform him of the City's progress in the investigation.

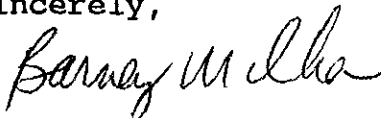
The future work proposed for the site includes a geophysical survey to determine whether any underground tanks still exists. *exists*  
After this, you intend to drill approximately 10 borings and convert three of these into groundwater monitoring wells. In

Ms. Julie Carver  
City of Oakland  
StID 4457  
2662 Fruitvale Ave.  
May 13, 1993  
Page 2.

addition, you intend to remove the contents as well as the sump which remains at this site. Our office would like to review the specific work plan for this proposed work like you suggested in your cover letter. We would also appreciate a timetable for all future work, accurate to the best of your ability. Your work plan says that you will begin the additional investigation within 75 calendar days or by early July. I would also hope to have received a work plan for the installation of the borings and monitoring wells by this time. I would also hope that the City would also include the proposal for the installation of offsite borings or wells in this work plan due to the likelihood of offsite migration.

I hope this serves to clarify the situation at this site. If you have any questions or comments please contact me at (510) 271-4530.

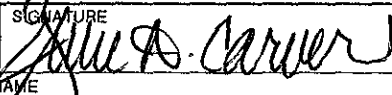
Sincerely,



Barney M. Chan  
Hazardous Materials Specialist

cc: G. Jensen, Alameda County District Attorney Office  
R. Hiett, RWQCB  
R. Coughlin, Texaco Refining & Marketing, 10 University City  
Plaza, Universal City, CA 91608  
M. Miller, Chevron USA Products Co., P.O. Box 5004, San  
Ramon, CA 94583-0804  
files  
1-2662Fr

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

EMERGENCY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.		
REPORT DATE 04/26/93		CASE #		SIGNED: <u>Barney Chan</u> DATE: <u>5-12-93</u>		
REPORTED BY	NAME OF INDIVIDUAL FILING REPORT Julie A. Carver		PHONE (510) 238-6688		SIGNATURE 	
	REPRESENTING <input type="checkbox"/> LOCAL AGENCY <input checked="" type="checkbox"/> OTHER <u>Current property owner</u>		<input type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD		COMPANY OR AGENCY NAME City of Oakland	
	ADDRESS 1333 Broadway, Suite 330 <span style="float: right;">Oakland California 94612</span>					
RESPONSIBLE PARTY	NAME <input checked="" type="checkbox"/> UNKNOWN		CONTACT PERSON		PHONE ( )	
	ADDRESS STREET CITY STATE ZIP					
SITE LOCATION	FACILITY NAME (IF APPLICABLE) Former Texaco facility		OPERATOR Currently owned by the City of Oakland		PHONE (510) 238-6688	
	ADDRESS 2662 Fruitvale Avenue <span style="float: right;">Oakland Alameda 94601</span>					
	CROSS STREET Davis Street					
IMPLEMENTING AGENCIES	LOCAL AGENCY Alameda County Health Care Services		AGENCY NAME		CONTACT PERSON Mr. Barney Chan	
	REGIONAL BOARD San Francisco Bay Region		CONTACT PERSON Mr. Lester Feldman		PHONE (510) 271-4530	
SUBSTANCES INVOLVED	(1) Gasoline		NAME		QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN	
	(2) Motor Oil		NAME		QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN	
DISCOVERY/ABATEMENT	DATE DISCOVERED 04/03/93		HOW DISCOVERED <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS <input type="checkbox"/> TANK TEST <input type="checkbox"/> TANK REMOVAL <input checked="" type="checkbox"/> OTHER <u>Subsurface Investigation</u>			
	DATE DISCHARGE BEGAN <input checked="" type="checkbox"/> UNKNOWN		METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input type="checkbox"/> REMOVE CONTENTS <input type="checkbox"/> CLOSE TANK & REMOVE <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> REPAIR TANK <input type="checkbox"/> CLOSE TANK & FILL IN PLACE <input type="checkbox"/> CHANGE PROCEDURE <input type="checkbox"/> REPLACE TANK <input type="checkbox"/> OTHER			
	HAS DISCHARGE BEEN STOPPED? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE					
SOURCE/ CAUSE	SOURCE OF DISCHARGE <input type="checkbox"/> TANK LEAK <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER		CAUSE(S) <input type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> SPILL <input type="checkbox"/> CORROSION <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> OTHER			
	CASE TYPE CHECK ONE ONLY <input checked="" type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)					
CURRENT STATUS	CHECK ONE ONLY <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED <input type="checkbox"/> POLLUTION CHARACTERIZATION <input type="checkbox"/> LEAK BEING CONFIRMED <input checked="" type="checkbox"/> PRELIMINARY SITE ASSESSMENT UNDERWAY <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> REMEDIATION PLAN <input type="checkbox"/> CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) <input type="checkbox"/> CLEANUP UNDERWAY					
	REMEDIAL ACTION CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS) <input type="checkbox"/> CAP SITE (CD) <input type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> VACUUM EXTRACT (VE) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> VENT SOIL (VS) <input type="checkbox"/> OTHER (OT)					
COMMENTS	The investigation which uncovered this subsurface contamination was performed by a consultant under contract to the City of Oakland. The City never owned or operated underground storage tanks at this site as defined in the Health & Safety Code. This investigation is being conducted by the City prior to developing the property.					



Texaco Refining  
and Marketing Inc

# 4457

505.317.1130

*4/19/93 Converter  
From J. Carver*

April 15, 1993

ENV - STUDIES, SURVEYS & REPORTS

Mr. Barney M. Chan  
Hazardous Materials Specialist  
Alameda County Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, California 94621

*1/20 + 1/21/93  
8 borings  
+ maybe grab  
two spec*

RE: 2662 Fruitvale, Oakland, CA.

Dear Mr. Chan:

*Will send analysis results w/i 30 days*

As per your written request dated March 4, 1993, enclosed please find Texaco's records regarding the removal of underground storage tanks at the above referenced facility. Our records indicate that four tanks were removed by Texaco in 1978. Additionally, our records indicate that the property was sold to the City of Oakland in 1984, and that additional site exploration work was conducted by the City (not Texaco) in 1987. Our records regarding the City's exploration efforts are also enclosed.

We trust that the information attached is adequate at this time. If you have any questions or require additional information please contact me in our Richmond office (510) 236-1112.

Best Regards,

Texaco Environmental Services

Gary R. Jacobson  
Environmental Project Coordinator

grj/saf

s:\grj\2662frui.bmc

Enclosures

cc: LKim-RZielinski

pr: *KRP*





# Winter

PETROLEUM SERVICE, INC.  
COMPLETE SERVICING  
Licensed Contractors—All Work Guaranteed  
Pumps, Hoists & Compressors  
Meter Exchange, Hoses, Belts, etc.  
May 5, 1978

Fire Prevention Bureau  
City of Oakland  
Room 201  
14th. & Washington  
Oakland, Calif.

Attention: Inspector Mockel

Dear Inspector Mockel;

On April 28, 1978 Winter Petroleum Service, Inc. employees removed from the City of Oakland in a safe manner the following:

1. Two 10,000 gallon underground tanks.
2. One 7,000 gallon underground tank.
3. One 285 gallon underground tank.

These tanks were removed from 2662 Fruitvale Ave., Oakland, Calif.

Thank-you

Sincerely,



H.G. Winter  
President

tp

*Removed + approved.  
D.J. Mockel #6*



SAN JOSE  
661 Kings Row  
(408) 270 2570

SAN FRANCISCO  
50 Shotwell Street

SACRAMENTO  
2230 Colfax Street

DAVIS ST.

LINE

PROPERTY

PROPERTY LINE

LAV

LAV

STORAGE

OFFICE

LUBE

ROOM

10,000 GAL.  
7500 GAL.  
10,000 GAL.

3 PUMPS

3 PUMPS

3 PUMPS

DOUGLAS OIL CO.  
SERVICE STATION  
2668 FRUITVALE

AVE.

FRUITVALE

50'

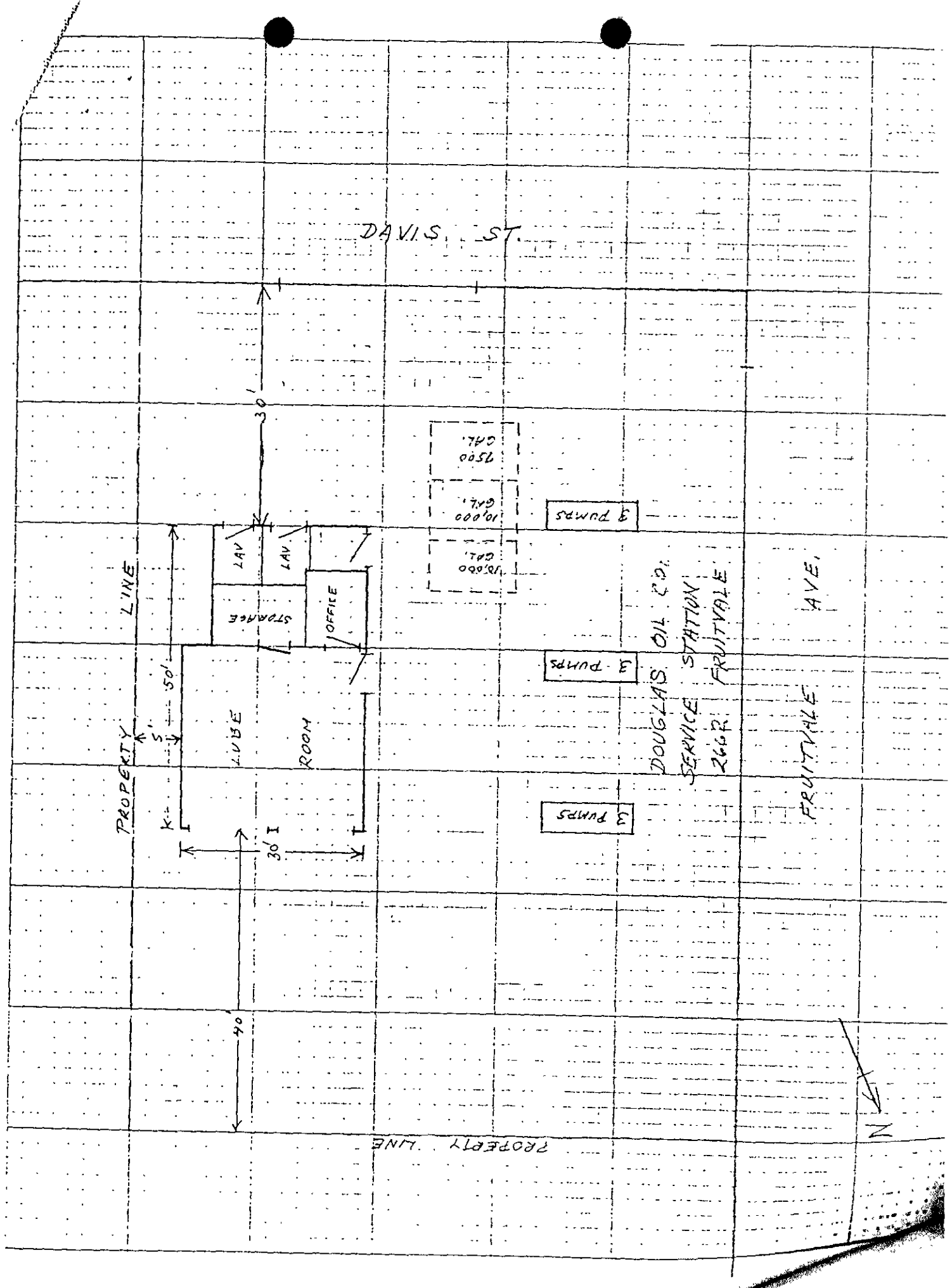
5'

30'

40'

30'

N



Copy for INSPECTOR

Excavation Permit Granted \_\_\_\_\_ No. \_\_\_\_\_

# CITY OF OAKLAND

Tank Permit No. **8867**

## Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks.

March 3,

Oakland, California, \_\_\_\_\_

PERMISSION IS HEREBY GRANTED TO ~~INSTALL~~ remove ~~X~~ Gasoline tank and excavate commencing \_\_\_\_\_ feet inside \_\_\_\_\_ property

on the \_\_\_\_\_ side of \_\_\_\_\_ Street Avenue \_\_\_\_\_ feet \_\_\_\_\_ of \_\_\_\_\_ Street Avenue

House No. 2662 Fruitvale Avenue Present Storage \_\_\_\_\_

Owner City of Oakland Address One City Hall Plaza Phone \_\_\_\_\_

Applicant Paradiso Construction Co. Address 9220 "G" Street 94603 Phone 500 562-5511

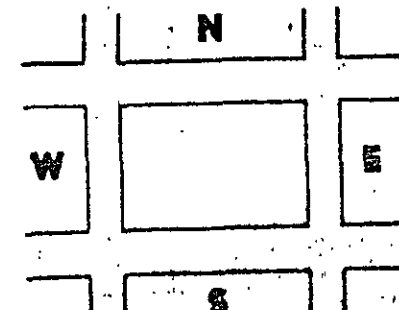
Dimensions of street (sidewalk) surface to be disturbed \_\_\_\_\_ X \_\_\_\_\_ Number of Tanks 1 Capacity 2000 Gallons \_\_\_\_\_

Remarks: Notified by Applicant that NO TANKS ~~WERE~~ LOCATED FOR REMOVAL

This Permit is granted in accordance with existing City Ordinances.  
Owner hereby agrees to remove tanks on discontinuance of use or when notified by the City Authorities.  
When installing, removing or repairing tanks, no open flame to be on or near premises.

Approved \_\_\_\_\_ Fire Marshal

Approved \_\_\_\_\_ Drainage Division Engineering Dept.



### EXCAVATING PERMIT

Issued in accordance with Ord. No. 278 CMS, Sec. 6-2.04

\_\_\_\_\_ square feet of digging or removal granted.

The receipt of \$ \_\_\_\_\_ special deposit is hereby acknowledged.

GENERAL DEPOSIT.

BUREAU OF PERMITS AND LICENSES.

Inspection Fee Paid \_\_\_\_\_ \$50.00 ck#003458 rec#113391

Received by G. Johnson

FIRE PREVENTION BUREAU

### CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Inspected and passed on \_\_\_\_\_

By choyce Fire Marshal

### NOTICE

Before Covering Tanks, Above Certificate Must Be Signed.

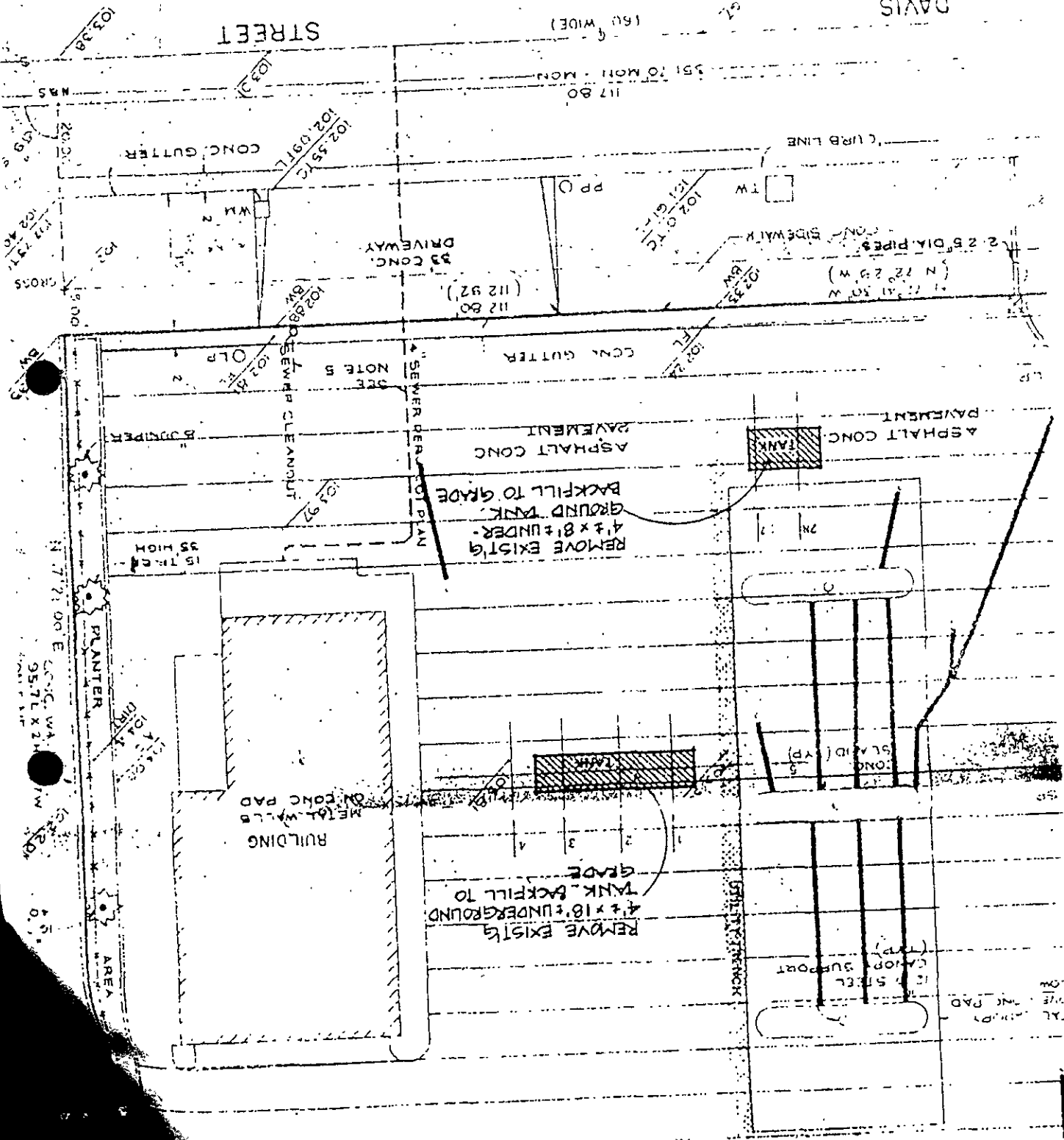
When ready for inspection notify Fire Prevention Bureau, 278-3651

**THIS PERMIT MUST BE LEFT ON THE WORK AS AUTHORITY THEREFOR.**

DAVIS

STREET

(60' WIDE)



REMOVE EXIST'G  
4' x 18' UNDERGROUND  
TANK. BACKFILL TO  
GRADE

REMOVE EXIST'G  
4' x 8' UNDER-  
GROUND TANK.  
BACKFILL TO GRADE

BUILDING

METAL WALL  
ON CONC PAD

PLANTER

REMOVE EXIST'G  
4' x 8' UNDER-

GROUND TANK.  
BACKFILL TO GRADE

ASPHALT CONC  
PAVEMENT

ASPHALT CONC  
PAVEMENT

15' T. CH.  
35' HIGH

SEE  
NOTE 5

SEWER DEPT. OF PLAN  
SEWER CLEANOUT

CONC. GUTTER

2.25" DIA. PIPES  
CONC. SIDEWALK  
(N 22.25' W  
112.21' 50" W)

33 CONC.  
DRIVEWAY

CONC. GUTTER

CURB LINE

117.80  
151' TO MONT. MON.

M.S.

CROSS

DRIVEWAY

CONC. WALL  
95.71' x 12.11'

AREA

4.5'

AREA

AREA

AREA

AREA