LOP - RECORD CHANGE REQUEST FORM

printed: 10/01/98

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

Insp: CL

AGENCY # : 10000 SOURCE OF FUNDS: F SUBSTANCE: 8006619
StID : 4987 LOC:
SITE NAME: Vacant Lot DATE REPORTED : 02/16/94
ADDRESS : 4800 San Pablo Ave DATE CONFIRMED: 02/16/94
CITY/ZIP : Emeryville 94608 MULTIPLE RPs : N

SITE STATUS

CASE TYPE: S CONTRACT STATUS: 2 PRIOR CODE:2A2 EMERGENCY RESP:
RP SEARCH: S DATE COMPLETED: 02/23/94
PRELIMINARY ASMNT: C DATE UNDERWAY: 06/16/94 DATE COMPLETED: 10/02/96
REM INVESTIGATION: DATE UNDERWAY: DATE COMPLETED:
REMEDIAL ACTION: DATE UNDERWAY: DATE COMPLETED:
POST REMED ACT MON: DATE UNDERWAY: DATE COMPLETED:

ENFORCEMENT ACTION TYPE: 1 DATE ENFORCEMENT ACTION TAKEN: 02/23/94
LUFT FIELD MANUAL CONSID: 2HSCA
CASE CLOSED: Y DATE CASE CLOSED: 09/25/98
DATE EXCAVATION STARTED : REMEDIAL ACTIONS TAKEN: ED

RESPONSIBLE PARTY INFORMATION

RP#1-CONTACT NAME: Mr. Balwand Grewal
COMPANY NAME:
ADDRESS: 754 Taylor Avenue
CITY/STATE: Alameda, California 94501

INSPECTOR VERIFICATION:

NAME SUSAN HUGO SIGNATURE Susan F. Hugo DATE 10/1/98

DATA ENTRY INPUT:

Name/Address Changes Only

ANNPGMS _____ LOP ____ DATE _____

Case Progress Changes

LOP _____ DATE _____

HydroSolutions of California, Inc.

P.O. Box 922 • 13975 Wings of Morning
Nevada City, California 95959
(916) 478-1260 • Fax (916) 478-1264

July 6, 1998

Susan Hugo
Alameda County Health Care Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

SUBJECT: GROUNDWATER MONITOR WELL ABANDONMENTS
4800 SAN PABLO AVENUE, EMERYVILLE, CALIF.

RRSP: 95286-49

Dear Susan:

This letter confirms completion of the abandonment of five groundwater monitoring wells located at the subject property (WB-7, WB-8, WB-9, WB-12 and WB-14). Each well was pressure grouted, well head and top portion of casing removed and capped with concrete. A California licensed driller was used for this work (Fast-tek). Work was completed Thursday, July 2, 1998.

Thank you for your attention throughout this remediation. It is our understanding that no further actions are required at the subject property.

Respectfully,

Stephen J. Baker
Project Manager

cc: Patrick O'Keeffe, City of Emeryville Redevelopment Agency

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

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

June 24, 1998

Mr. Patrick O'Keeffe
City of Emeryville Redevelopment Agency
2200 Powell Street, Suite 1200
Emeryville, California 94608

Subject: **Property Located at 4800 San Pablo Avenue, Emeryville, California 94608**
STID # 4987

Dear Mr. O'Keeffe:

This agency has received a request from Mr. Steve Baker of Hydro Solutions regarding the abandonment of groundwater monitoring wells at the above referenced site. As you know, the site is in the process of closure and no further groundwater monitoring is required.

The five wells (WB-7, WB-8, WB-9, WB-12 and WB-14) at the site must be properly decommissioned prior to future construction activities. A report must be submitted documenting the abandonment of the monitoring wells. Additionally, you will need to notify this office in advance of the well abandonment field activities.

If you have any questions concerning this letter, please contact me at (510) 567-6780.

Sincerely,

Susan L. Hugo
Hazardous Materials Specialist

c: Steve Baker, Hydro Solutions of California, P.O.Box 922, Nevada City, CA 95959
SH / files

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

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

March 11, 1998

Ms. Maria Bigornia Poncel
City of Emeryville Redevelopment Agency
2200 Powell Street, Suite 1200
Emeryville, California 94608

RE: Property Located at 4800 San Pablo Avenue, Emeryville, California 94608
STID # 4987

Dear Ms. Poncel:

This letter serves to summarize our telephone conversation today regarding the above referenced site.

I have reviewed the case file and will proceed with evaluating the site as a low risk groundwater case for closure. Further groundwater monitoring is not required at the subject site. A case closure summary will be prepared and has to be reviewed by two LOP staffs. After the closure summary is approved by the staff, it will be submitted to Regional Water Quality Control Board for concurrence with our recommendation that no further work is required regarding the three underground storage tanks reportedly removed from the site.

You will receive a letter from our office requesting that the groundwater monitoring wells at the site should be properly decommissioned after the case closure summary has been approved by the RWQCB. The final closure letter (Remedial Action Completion Certification) will be issued by this office after the wells have been properly decommissioned.

Please call me at (510) 567- 6780 if you have any questions concerning this letter or the subject site.

Sincerely,

Susan L. Hugo
Hazardous Materials Specialist

c: Mee Ling Tung, Director, Environmental Health
Dick Pantages, Chief, Environmental Protection
Stephen Hill, San Francisco Bay RWQCB
Steve Baker, Hydrosolutions of California , P.O. Box 922, Nevada City, CA 95959
Sh / files

CL 20589

HydroSolutions of California, Inc.

P.O. Box 922 • 13975 Wings of Morning
Nevada City, California 95959
(916) 478-1260 • Fax (916) 478-1264

July 17, 1997

Susan Hugo
Hazardous Materials Specialist
Alameda County Health Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

SUBJECT: CONSENSUS OF SOIL-GAS SAMPLING METHOD
4800 SAN PABLO AVENUE
EMERYVILLE, CALIFORNIA

RRSP: 96286-06-44

Dear Susan:

This letter documents recent activities regarding the development of a consensus for obtaining direct measurement of soil-gas vapors (i.e. benzene). Measurements will be used as a means to confirm and possibly supersede conclusions made by the Risk Based Corrective Action (RBCA) assessment.

Three different groups were contacted; Orange County Health Care Agency (714-667-3716), Los Angeles Regional Water Quality Control Board (213-266-7563) and the U.S. EPA (415-744-2078).

Anthony Martinez, Orange County Health Care Agency, has been working with the County for numerous years. When presented with our scenario, he stated that flux chambers present many problems. The main concern is related to cross contamination with outdoor air. Soil-gas survey are frequently used in the County. The County's main focus is the location of the sample probes. He suggested that multiple depths be sampled to provide the greatest confidence in the interpretation of the data.

Greg Quay, Los Angeles Regional Water Quality Control Board, has been assigned underground storage tank (UGST) assessments, remediations and closures. Although RBCA is not extensively used, soil-gas surveys are frequently performed. He was not familiar with flux chambers due to few being proposed in assessments.

Lastly, Matt Small, a geologist with the U.S. EPA, is very familiar with flux chambers and soil-gas surveys. He stated that flux chambers are not used very frequently in an urban

environment. Soil-vapor is the more reliable method. It is important to sample at several depths. The cross section must include known areas of contamination to the groundsurface.

Let me know your thoughts regarding your acceptance of the soil-gas sampling method at the subject property. Based on the results of the consensus, the field sampling program will include the following:

Two probes to be penetrated at B-2 and B-3 locations;

Soil-gas sampling intervals will be 3, 6, 9 feet below groundsurface;

Analysis will be benzene, toluene, xylene, and ethylbenzene by EPA Method 8020.

Looking forward to your rapid reply.

Respectfully submitted,

Stephen J. Baker
Project Manager

Attachment:
Boring Location Map

cc: Madhulla Logan, Alameda County Environmental Health
Maria Poncel, City of Emeryville Redevelopment Agency

1) geopump - / purge / tedlar bags / when to stop → instrument
2) what calibration

closed
RO589

SID 4987
closed

RRSP: 96286-01-37

Hydro Solutions of California, Inc

FAX TRANSMITTAL SHEET

DATE: 5-7-96

SENT TO: Alameda Co. Environmental Health Care Agency
Company Name

Susan Hugo
Contact

FROM: HYDROSOLUTIONS OF CALIFORNIA, INC.

1561 Moss Creek Circle, Suite 2

Fair Oaks, California 95628-2714

(916) 967-1223 / FAX (916) 967-1223

BY:

PAGES: 2
Including cover sheet

Re: Draft notification letter concerning request for closure for 4800 San Pablo Ave., Emeryville, CA. Please call with your comments.

RP#: 4526-96-56

5-2-96

May 1996

Re: Notice of Petroleum Contamination: 4800 San Pablo, Emeryville, California

DRAFT

The Emeryville Redevelopment Agency hereby notifies all concerned parties that the property located at 4800 San Pablo Avenue in Emeryville, California, ("Property") contains residual levels of gasoline within limited areas of soil and groundwater. As of the date of this Notice, the Property is under the jurisdiction of the Alameda Conty Health Care Services Agency with regard to the remediation and monitoring of soil and groundwater. The Agency has submitted a Contingency Management Plan to the County dated May 1996 for the long term management of existing gasoline in the subsurface. These and other documents concerning the contamination at the Property are available for review at the City of Emeryville Redevelopment Agency, 2200 Powell Street, 12th Floor, Emeryville. Purchasers of the Property may be required to perform remediation activities as a result of discoveries made during the grading and redevelopment of the Property.

_____

John A. Flores, Executive Director

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

RAFAT A. SHAHID, DIRECTOR

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

February 7, 1996
STID# 4987

Ms. Maryann Leshin
City of Emeryville Redevelopment Agency
2200 Powell Street, Suite 1200
Emeryville, California 94608

RE: Proposed Groundwater Monitoring Program
4800 San Pablo Avenue, Emeryville, CA 94608

Dear Ms. Leshin:

The Alameda County Department of Environmental Health, Environmental Protection Division has reviewed the proposed groundwater monitoring program dated January 3, 1996, prepared and submitted by Hydro Solutions of California, Inc. for the above referenced site.

The proposed groundwater monitoring program is acceptable to this department with the following modifications:

* The five monitoring wells (WB-7, WB-8, WB-9, WB-12 and WB-14) should be sampled initially for TPH gasoline and BTEX.

* TPH diesel and TPH as motor oil (by GC-FID) must be included as target compounds in addition to TPH gasoline and BTEX during the initial sampling on monitoring wells WB-8, WB-12 and WB-14.

* Monitoring wells WB-7 and WB-12 can be dropped from the quarterly monitoring program if the initial sampling results showed no detectable concentration of TPH gasoline and BTEX.

* Monitoring wells WB-8 and WB-14 must be sampled every quarter for TPH gasoline, TPH diesel, TPH motor oil and BTEX.

* Monitoring well WB-9 must be sampled every quarter for TPH gasoline and BTEX.

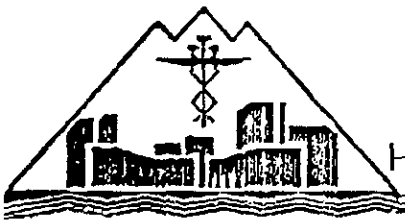
All reports and proposals must be submitted under seal of a California Registered Geologist or Registered Civil Engineer with a statement of qualifications for each lead professionals involved with the project.

If you have any questions concerning this letter, please call me at (510) 567-6780.

Sincerely,

Susan L. Hugo
Senior Hazardous Materials Specialist

cc: Jun Makishima, Interim Director, Environmental Health
Gordon Coleman, Acting Chief, Environmental Protection / files
Kevin Graves, San Francisco Bay RWQCB
Stephen Baker, HSCI - 5917 Moss Creek Circle, Suite 2, Fair Oaks, California 95628
bc Balwant Grewal, 754 Taylor Avenue, Alameda, California 94501



Hydro Solutions of California, Inc

FAX TRANSMITTAL SHEET

DATE: 1-29-96

SENT TO: Alameda Co. Envir. Health
Company Name

Susan Hugo
Contact

FROM: HYDROSOLUTIONS OF CALIFORNIA, INC.

1561 Moss Creek Circle, Suite 2

Fair Oaks, California 95628-2714

(916) 967-1222, FAX (916) 967-1223

BY: Stephen J. Baker

PAGES: 3

Including cover sheet

For your review + comment. Please call. Thanks

Steve Baker

FIGURES

APPENDICES

HydroSolutions of California, Inc.

5917 Moss Creek Circle • Suite 2
Fair Oaks, California 95628 • (916) 967-1222 • FAX (916) 967-1223

STID 4987 Intrinsic bioremediation parameters: dissolved O2, Nitrate, Iron, Sulfate, pH, alkalinity, phosphates, ammonia

January 3, 1996

Susan L. Hugo
Senior Hazardous Materials Specialist
Alameda County Health Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

SUBJECT: GROUNDWATER MONITOR PROGRAM
4800 SAN PABLO AVENUE (SUBJECT PROPERTY)
EMERYVILLE, CALIFORNIA

RRSP: 96286-04-27

Dear Susan:

This morning I spoke briefly with Maryann Leshin (City of Emeryville Redevelopment Agency) regarding our scheduled telephone conference call to be made on Monday at 9AM. Maryann asked if I would summarize, in a letter, a description of the proposed groundwater monitoring program and rational for selecting wells, analyses and monitoring frequency.

Remedial action at the subject property includes activities related to petroleum hydrocarbons existing in shallow sediment and groundwater. Although excavation of sediment is not to be scheduled in early 1996, groundwater monitoring is to be initiated immediately. The groundwater monitoring program consists of observing changes that occur in different portions of the aquifer beneath the subject property. The purpose in monitoring water quality changes is to identify trends which would suggest diminishing TPH levels or an increase in concentrations or movement of the contaminant plume to down-gradient locations. Implementation of this type of program can be created with existing groundwater monitoring wells.

The most recent groundwater sampling event was June 1994, approximately one and one half years ago. It is HSCI's recommendation that due to no monitoring for this lengthy time period, all wells require resampling during the first quarterly event (January 1996). This sampling event will also support the collection of water samples for the measurement of intrinsic bioremediation parameters.

Based on the laboratory results of this sampling event, HSCI proposes to select monitor locations based on:

* the well containing the highest concentration of TPH-G/BTXE;

* the well located down-gradient, hydrologically, from the TPH groundwater plume; and

* the well located in the central area of the present TPH groundwater plume.

Data from the last sampling event indicate that monitor wells WB-8, WB-9 and WB-14 will be selected for monitoring. Monitor wells, WB-7 and WB-12, did not contain detectable TPH or BTXE in groundwater.

Selection of analysis will be according to the proposed HSCI remedial action plan dated December 1994 and Alameda County Health Care Services Agency letter dated September 11, 1995. Assuming the above wells will be selected the following suite of tests will be used:

WB-8	WB-9	WB-14
TPH-G	TPH-G	TPH-G
BTXE	BTXE	BTXE
~~418.1~~ TPH motor oil		TPH motor oil
TPH-D		TPHd

Sampling frequency will be quarterly (one sampling event per season) for a period of one year. Subsequent to the fourth quarter sampling event, monitoring data and the intrinsic bioremediation tests will be evaluated.

Based on the small size of the subject property and low concentrations of TPH/BTXE, the above recommendations appear reasonable. I look forward to our telephone conference call on Monday.

Respectfully submitted,

Stephen J. Baker
Registered Hydrogeologist (No. 181)

cc: Maryann Leshin, City of Emeryville Redevelopment Agency

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 11, 1995
STID# 4987

Ms. Maryann Leshin
City of Emeryville Redevelopment Agency
2200 Powell Street, Suite 1200
Emeryville, California 94608

RE: Proposed Remedial Action
4800 San Pablo Avenue, Emeryville, CA 94608

Dear Ms. Leshin:

The Alameda County Department of Environmental Health, Environmental Protection Division has completed review of the Proposed Remedial Action (December 1994) prepared by HydroSolutions of California , Inc. for the referenced site. The above mentioned proposal was received by this office on August 2, 1995.

The proposed remedial action consists of the following tasks:

* submittal of a remedial action plan (RAP) incorporating the non attainment provision as amended in the Basin Plan

* qualitative risk assessment to evaluate the level of protection needed for the subject site

* plume management plan which includes the groundwater monitoring program

* submittal of a health and safety plan for on site workers

* limited excavation of contaminated soil and collection of verification samples

The proposed remedial action is acceptable to this agency and can be implemented provided the following items are addressed:

1) The qualitative risk assessment should address the future land use for the site

2) The plume management plan should include institutional controls such as deed notification, contingency plan, etc. Target analyses for the ground water monitoring program should include TPH as diesel and TPH as motor oil if these contaminants are detected in the soil samples.

3) Verification soil samples collected after completion of the excavation activities must be analyzed for TPH as diesel and TPH as motor oil in addition to TPH as gasoline and BTEX.

4) Stockpiled soil maybe used as backfill with prior approval from this agency.

5) A site health and safety plan shall be submitted to this agency prior to implementing the remedial action.

6) Please notify this office 72 hours in advance of any field work at the site.

7) Any waste (hazardous or non hazardous) generated from this investigation shall be disposed appropriately. Documents of all waste disposal must be provided to this office.

8) Applicable permits from other regulatory agencies must be followed.

A report must be submitted to this agency within **45 days** after completion of any phase of the remedial action. Until clean up is complete, you will need to submit reports to this office every three months or at a more frequent interval, if specified at any time. In addition, the following items must be incorporated in your future reports or work plans:

- a cover letter from the responsible party or tank owner stating the accuracy of the report and whether he/she concurs with the conclusions and recommendations in the report or work plan

- site map delineating contamination contours for soil and groundwater based on recent data should be included and the status of the investigation and cleanup must be identified

- proposed continuing or next phase of investigation / cleanup activities must be included to inform this department of the responsible party or tank owner's intention

- any changes in the groundwater flow direction and gradient based on the measured data since the last sampling event must be explained

- historical records of groundwater level in each well must be tabulated to indicate the fluctuation in water levels

- tabulate analytical results from all previous sampling events; provide laboratory reports (including quality control/quality assurance) and chain of custody documentation

All reports and proposals must be submitted under seal of a California Registered Geologist or Registered Civil Engineer with a statement of qualifications for each lead professionals involved with the project.

If you have any questions concerning this letter, please call me at (510) 567-6780.

Sincerely,

Susan L. Hugo

Susan L. Hugo
Senior Hazardous Materials Specialist

cc: Jun Makishima, Acting Director, Environmental Health
George Young, Acting Chief, Environmental Protection / files
Kevin Graves, San Francisco Bay RWQCB
Stephen Baker, HSCI - 5917 Moss Creek Circle, Suite 2, Fair Oaks, California 95628
Balwant Grewal, 754 Taylor Avenue, Alameda, California 94501

HydroSolutions of California, Inc.

5917 Moss Creek Circle • Suite 2
Fair Oaks, California 95628 • (916) 967-1222 • FAX (916) 967-1223

STIP 4987

December 12, 1994

Susan L. Hugo
Senior Hazardous Materials Specialist
Alameda County Health Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

SUBJECT: SUMMARY OF MEETING WITH ALAMEDA COUNTY ENVIRONMENTAL HEALTH
4800 SAN PABLO AVENUE, EMERYVILLE, CA.

RRSP: 94286-03-23

Dear Susan:

This letter summarizes the remedial approach discussed in the recent meeting held on December 8, 1994 between you, Steve Baker (HydroSolutions of California, Inc. [HSCI]) and Maryann Leshin (City of Emeryville Redevelopment Agency [CITY]). The meeting was held at the offices of Alameda County Environmental Health (ACEH).

Subsequent to summarizing site characterization results, tenative development plans were presented. Preliminary plans include an at grade parking lot along the southern and eastern portions of the subject property. A building consisting of groundfloor commercial and second floor residential will occupy the western section.

ACEH concerns are primarily limited to:

1) the presence of gasoline (i.e. benzene) in groundwater surrounding the WB-14 location and

2) worker safety during grading activities to be completed during construction.

Properties located in the City of Emeryville, according to your comments at the meeting, are appropriate candidates for utilizing the non-attainment policy. Sites, however, must be evaluated on a

site specific basis according to the general non-attainment policy guidelines summarized in the draft memorandum dated October 21, 1994 (File No. 1210.49 [DDD]).

Remedial actions for the subject property will include the following tasks.

1) Information will be assembled regarding evaluation criteria identified in the non-attainment policy document.

2) A qualitative screening assessment of risk will be completed to evaluate the level of protection needed for the subject property, if any.

2) Plume management will consist of quarterly groundwater monitoring of existing monitor wells on the subject property. Sample analysis will include total petroleum hydrocarbons-gasoline (TPH-G), benzene, toluene, xylene, and ethylbenzene (BTXE).

3) A health and safety plan will be developed and implemented during grading and excavation portions of construction.

4) Soil sampling and analysis for TPH-G, total petroleum hydrocarbons-diesel (TPH-D) and BTXE will be completed during excavation activities. Samples will be collected from the walls and floor of selected excavations.

ACEH will continue to be the lead agency for this property. The Regional Water Quality Control Board however must be provided a copy of the proposal for remedial action. Ultimately, HSCI and the City will require a letter of approval concerning the accepted remedial action plan.

A remedial action proposal is currently being completed by HSCI according to the above identified tasks and will be submitted to the City.

If additions, omissions or corrections are needed, please contact me as soon as possible. If HSCI is not contacted, the understanding described above will be considered as accurately reflecting the concerns of the ACEH. Thank you for your time last week.

Respectfully,

Stephen J. Baker
Project Management

cc: Maryann Leshin, City of Emeryville Redevelopment Agency

HydroSolutions of California, Inc.

5917 Moss Creek Circle • Suite 2
Fair Oaks, California 95628 • (916) 967-1222 • FAX (916) 967-1223

94 JUN -7 PM 2:21
ALCO HAZMAT

June 3, 1994

Susan Hugo
Department of Environmental Health
Alameda County Health Agency
80 Swan Way, Room 350
Oakland, California 94621

SUBJECT: SITE CHARACTERIZATION
4800 SAN PABLO AVENUE (SUBJECT PROPERTY)
EMERYVILLE, CALIFORNIA

RRSP: 94286-03-10

Dear Susan:

At your request, I submit this letter briefly summarizing site characterization activities to be performed at the subject property. As you know, this work has been requested by the City of Emeryville Redevelopment Agency for the purpose of evaluating pollution liabilities of a real estate transaction. A meeting was held on February 23, 1994 with Alameda County Environmental Health, Regional Water Quality Control Board, City of Emeryville Redevelopment Agency and HydroSolutions of California, Inc.. The purpose of this meeting was to enhance communication with the regulating agencies concerning the environmental integrity of the subject property. It is the City's intention to characterize, up front, the environmental integrity of the subject property and quantify cleanup costs. Essentially, this goal requires total site assessment of the subject property.

The following objectives have been identified:

Define the lateral and vertical extent of TPH contaminated sediment;

Evaluate the existence of benzene, toluene, xylene, and ethylbenzene, waste oil and gasoline in sediment located above the groundwater aquifer and its potential to migrate to groundwater;

Evaluate the significants of elevated TPH concentrations detected in the 418.1 analysis (conducted in December 1993) both spatially and its' potential migration to the shallowmost groundwater aquifer;

Define clean-up objectives for soil clean-up;

Estimate cost and conditions (limitations, advantages and disadvantages) for implementing soil cleanup;

Evaluate the existence of benzene, toluene, xylene, and ethylbenzene, waste oil and gasoline in the shallowmost groundwater aquifer (i.e. 25 foot depth, approximately);

Evaluate the likelihood for the adjacent creek to act as a source of TPH contamination on the subject property;

Evaluate the likelihood for the sanitary and storm sewers to act as a source of TPH contamination to the subject property;

Estimate cost and conditions (limitations, advantages and disadvantages) for implementing groundwater cleanup, if needed.

Eight (8) exploratory borings will be completed (see attached figure). Drilling depths will be 12, 25 and 30 feet and include four groundwater monitor wells penetrating the 30 foot depth and one groundwater monitoring well penetrating the perched groundwater condition adjacent B-6. Borings will be 25 feet in depth. One boring is proposed to be drilled on 48th Street. Drill cuttings, purged groundwater and rinseate will be placed in 55-gallon drums, lids secured, labeled and temporarily placed on-site.

Well head locations will be surveyed and a relative land elevation assigned. Water level measurements will be collected from each well to evaluate the direction of groundwater table slope.

Chemical analysis results will be accompanied with the following quality assurance and quality control information:

Date sample collected;
Date sample analyzed;
Method of analysis;
Reporting limit;
Dilution factor;
Surrogate recovery results and acceptable range;
Matrix spike summary;
Chain-of-custody form; and
Statement of sample condition.

Generally, soil samples will be collected in brass tubes at five foot intervals. One sample will be collected from each depth interval in brass tubes, wrapped on the ends with aluminum foil, capped with PVC caps, taped, and labeled. All samples will be stored at reduced temperature in an ice chest and delivered to the laboratory. Standard chain-of-custody forms will accompany all soil samples. The samplers and brass tubes will be

decontaminated prior to each sampling event. This will be followed by a distilled water rinse. Wash and rinse baths will be cleaned and refilled prior to completing each boring.

In additional to brass tube samples, some sediment will be transferred to labeled zip-lock plastic bags and characterized for logging purposes at the end of each day. Accompanying each soil sample description will be a field organic vapor (OV) headspace reading and notes as to odors observed by the geologist. Organic vapor headspace readings and odors will be recorded immediately after samples are removed from the borings.

Samples will be examined according to the following criteria:

Visual logging: Each soil sample will be logged in the field. Samples with signs of obvious contamination (e.g. stained soil, discoloration, oily) will be noted as well as geologic descriptions;

Odor: Samples with odor characteristics of petroleum hydrocarbons will be noted;

Field detector: An Hnu photoionization detector will be utilized by holding a closed plastic bag partially filled with the sample and inserting the probe. A volatile emission reading will then be recorded. Organic vapor readings were recorded in the field log.

Groundwater will be sampled by developing each well, purging 3-5 casing volumes of groundwater and sampling. One sampling event is included in the proposed cost. Discharged groundwater will be stored in 55-gallon drums and temporarily placed on-site. Analysis will include EPA Methods 418.1, 8015, 8020 and fecal coliform. Nitrate will be tested with a LaMotte test kit in the field. Selected soil samples will also be analyzed for EPA Methods 418.1, 8015 and 8020.

Evaluation of TPH migration from sediment to groundwater will be examined by conducting a TCLP test for gasoline. This test analyzes the leachability of a contaminant from a sediment sample. Resulting from this test is a crude measurement of the potential for future groundwater contamination. Other information will also be used to evaluate the potential for groundwater contamination from the unsaturated zone.

Information collected from the field and laboratory will be examined, at a minimum, by the following methods:

Cross-sections;
Estimation of TPH in unsaturated and saturated zones;
Groundwater table map;
Evaluate the boiling point distribution of petroleum in sediment and groundwater removed from the contaminated zone, if necessary;
Evaluate water quality with respect to nitrate and fecal coliform which may potentially contribute to TPH presence in the subsurface.

Based on the above data interpretation, HSCI will make recommendations for the most cost-efficient and effective method of corrective action, if necessary.

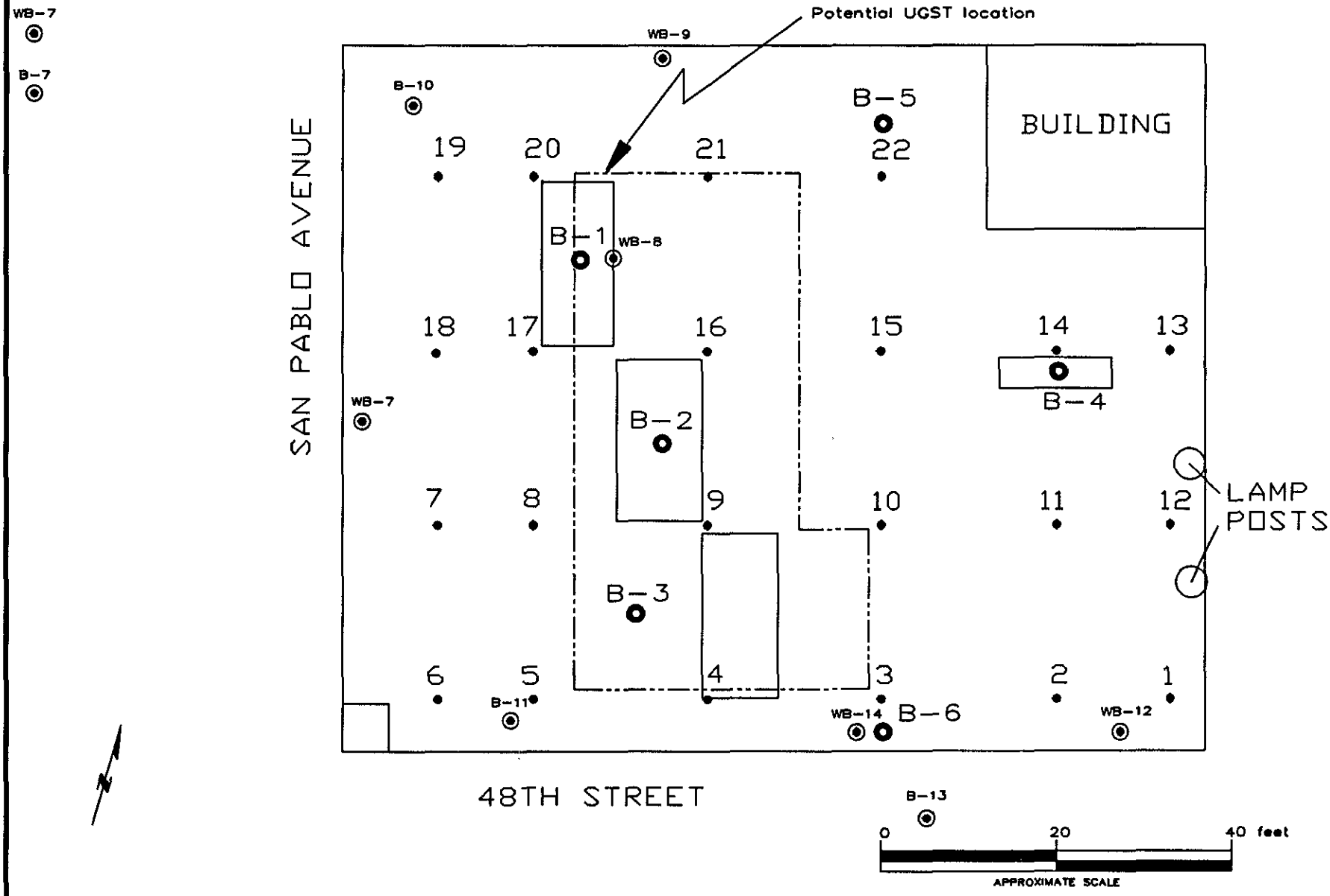
A report will be completed which defines the vertical and lateral extent of contamination in soil and groundwater. Anticipated corrective actions will also be briefly discussed as conclusions of the assessment. This report will be submitted to Alameda County Environmental Health and Regional Water Quality Control Board.

The tentative drilling schedule is June 17-18, 1994. If you have any questions regarding the proposed work, please contact me. You indicated in a telephone conversation yesterday that one of the boring locations should be moved. Please illustrate this change on the enclosed figure and fax it back to HSCI (916-967-1222). Thanks for your help.

Respectfully submitted,

Stephen J. Baker
Project Manager

cc: Maryann Leshin, City of Emeryville Redevelopment Agency



HydroSolutions of California, Inc. 11470 Sunrise Gold Circle, Suite 4 Rancho Cordova, California 95742 (916) 852-0188	Title: PROPOSED BORING/WELL LOCATIONS Site: 4800 SAN PABLO AVENUE EMERYVILLE, CALIFORNIA	Project Number: 93286-02 Date: 02-24-94 Scale: AS SHOWN	FIGURE

CITY OF EMERYVILLE

ALCO
HAZMAT
94 MAR 25 PM 12:38

MARYANN LESHIN
Projects Coordinator

3/24/94

STID 4987

Susan:

Attached is a copy of our Consultant's recommendations, re: additional testing of 4800 San Pablo Avenue, Emeryville.

Please give me a call & let me know when you can either meet, or do a conference call to discuss. Consultant is not available until week of April 4th. Perhaps we can do it 4/6 or 4/7.

Thanks!

Maryann
596-4358

1994
1987

HydroSolutions of California, Inc.

5917 Moss Creek Circle • Suite 2
Fair Oaks, California 95628 • (916) 967-1222 • FAX (916) 967-1223

STID 4987

February 25, 1994

Maryann Leshin
Project Coordinator
City of Emeryville Redevelopment Agency
2200 Powell Street, Suite 1200
Emeryville, California 94608

SUBJECT: DRILLING PROGRAM OF SITE ASSESSMENT PROPOSAL (PHASE II)
4800 SAN PABLO AVENUE (SUBJECT PROPERTY)
EMERYVILLE, CALIFORNIA

PROPOSAL: P77747

Dear Maryann:

HydroSolutions of California, Inc. (HSCI) is pleased to submit this proposal describing the work tasks and costs for the second phase of site characterization at the subject property.

The general approach for characterization of this property has included answering the following questions:

1. Are underground storage tanks presently existing beneath the subject property?

2. Does petroleum hydrocarbon contamination exist in the subsurface of the subject property?

These questions have been answered in the first series of tests (i.e. tanks are unlikely to exist and petroleum contamination does exist beneath the subject property).

The remaining questions are as follows:

1. To what extent is the subject property contaminated and how much contamination has migrated off-site, if any?

2. What are the goals for cleanup as requested by the County and Regional Water Quality Control Board?

3. What is the cost of remediation at the subject property and time required to complete remediation to a degree acceptable for initiating redevelopment?

A meeting was held on February 23, 1994 with Alameda County Environmental Health, Regional Water Quality Control Board, City of Emeryville Redevelopment Agency and HydroSolutions of California, Inc.. The purpose of this meeting was to enhance communication with the regulating agencies concerning the environmental integrity of the subject property. Comments of Richard Hiett, Regional Water Quality Control Board and Susan Hugo, Alameda County Environmental Health (local oversight group) are critical in formulating assessment objectives that satisfy technical issues and their associated costs. It is the City's intention to characterize, up front, the environmental integrity of the subject property and quantify cleanup costs. Essentially, this goal requires total site assessment of the subject property.

The following objectives have been identified:

Define the lateral and vertical extent of TPH contaminated sediment;

Evaluate the existence of benzene, toluene, xylene, and ethylbenzene, waste oil and gasoline in sediment located above the groundwater aquifer and its potential to migrate to groundwater;

Evaluate the significants of elevated TPH concentrations detected in the 418.1 analysis (conducted in December 1993) both spatially and its' potential migration to the shallowmost groundwater aquifer;

Define clean-up objectives for soil clean-up;

Estimate cost and conditions (limitations, advantages and disadvantages) for implementing soil cleanup;

Evaluate the existence of benzene, toluene, xylene, and ethylbenzene, waste oil and gasoline in the shallowmost groundwater aquifer (i.e. 25 foot depth, approximately);

Evaluate the likelihood for the adjacent creek to act as a source of TPH contamination on the subject property;

Evaluate the likelihood for the sanitary and storm sewers to act as a source of TPH contamination to the subject property;

Estimate cost and conditions (limitations, advantages and disadvantages) for implementing groundwater cleanup, if needed.

Work will be accomplished in the following manner:

Task 1. Field Work Preparation
Task 2. Field Drilling Program
Task 3. Water Sampling Event
Task 4. Data Interpretation
Task 5. Report Writing

Estimated cost for this work is $ 23,500.00.

Eight (8) exploratory borings will be completed (see attached figure). Drilling depths will be 12, 25 and 30 feet and include four groundwater monitor wells penetrating the 30 foot depth and one groundwater monitoring well penetrating the perched groundwater condition adjacent B-6. Borings will be 25 feet in depth. One boring is proposed to be drilled on 48th Street. Drill cuttings will be placed in 55-gallon drums, lids secured, labeled and temporarily placed on-site. Two days of drilling is estimated for this proposal.

Well head locations will be surveyed and a relative land elevation assigned. Water level measurements will be collected from each well to evaluate the direction of groundwater table slope.

Groundwater will be sampled by developing each well, purging 3-5 casing volumes of groundwater and sampling. One sampling event is included in the proposed cost. Discharged groundwater will be stored in 55-gallon drums and temporarily placed on-site.

Evaluation of TPH migration from sediment to groundwater will be examined by conducting a TCLP test for gasoline. This test analyzes the leachability of a contaminant from a sediment sample. Resulting from this test is a crude measurement of the potential for future groundwater contamination. Other information will also be used to evaluate the potential for groundwater contamination from the unsaturated zone.

Estimated field drilling costs assume the boring location is easily accessible, asphalt paved, and free of underground utility lines. An auger drilling rig will be utilized for the proposed work. If downward penetration and/or well construction is restricted due to heaving sands, gravels, cobbles, rock, or any other obstacle, variations in the method and/or location of drilling may be necessary and will be an additional cost of this proposal. Furthermore, no hazardous concentrations of chemicals (requiring a health and safety program and safety equipment) will be encountered during the field drilling program.

Laboratory costs are based on a two week turnaround time. If more rapid data analysis is requested, the laboratories will use a 1.5-2.0 multiplier. Up to 18 samples will be analyzed for total petroleum hydrocarbons (EPA Method 418.1 and TPH-G) and BTXE (EPA Method 8020) five samples analyzed for nitrates and two samples analyzed for colliform and fecal. If additional analysis is required, cost will be up to $200 per sample. This cost will be added to the proposed budget.

The proposed cost does not include any permits or fees enforced by any environmental or regulatory agencies with exception to an encroachment permit ($150.00). If this is required, associated costs will be added to the proposed cost estimate. Alameda County does not require a fee to obtain boring permits.

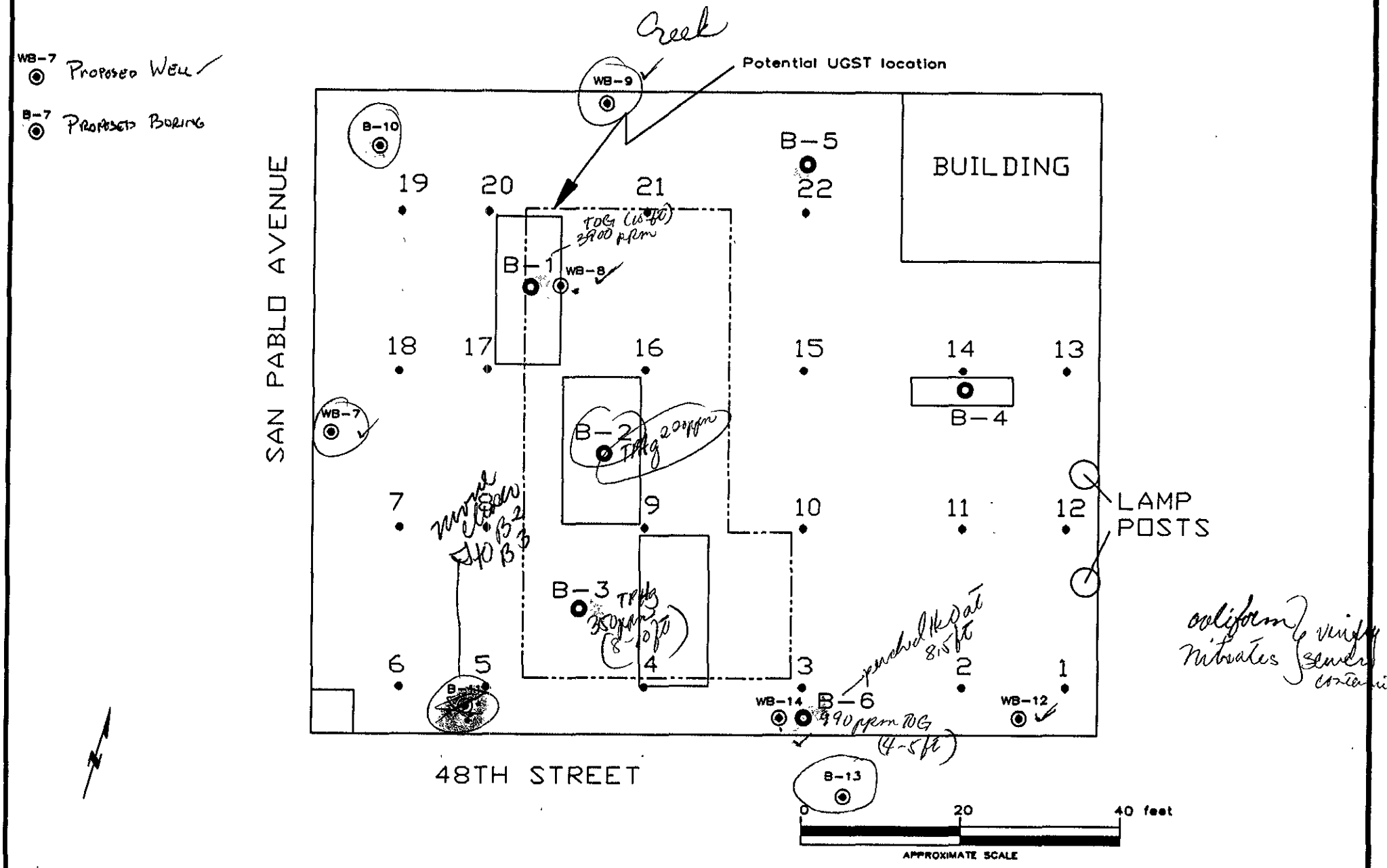
HSCI will require approval, by Emeryville Redevelopment Agency or representative, of the boring locations prior to initiating the field program. Emeryville Redevelopment Agency will also be responsible for the disposal of all soil and water resulting from this investigation. It is expected that 2-4 55-gallon drums of rinseate from steam cleaning the equipment and 12 drums of drill cuttings will be left on-site. HydroSolutions of California, Inc. will, at the request of Emeryville Redevelopment Agency, arrange for the disposal of drill cuttings and water. Disposal cost is not included in this proposal and will be added to the proposal limit.

HSCI and its subcontractors will exercise due care in the investigative and drilling process. However, HSCI will not be responsible for damages, direct or indirect, caused to underground utilities or other structures whether on-site or off-site. Such additional costs will be the responsibility of the client for payment.

Work will be initiated upon receipt of the signed Authorization to Proceed. Estimated time for completion of this work is two weeks for the field work and three additional weeks for laboratory analysis and report writing. If you have questions regarding this proposal, please contact me. Looking forward to your reply.

Respectfully submitted,

Stephen J. Baker
Project Manager



HydroSolutions of California, Inc. 11470 Sunrise Gold Circle, Suite 4 Rancho Cordova, California 95742 (916) 852-0188	Title: PROPOSED BORING/WELL LOCATIONS	Project Number: 93286-02	FIGURE
	Site: 4800 SAN PABLO AVENUE EMERYVILLE, CALIFORNIA	Date: 02-24-94	
		Scale: AS SHOWN	

TABLE 1. LABORATORY ANALYSIS

Sample Location	B	T	X	E	TPH-G	418.1
B-1- (6-7)	ND	ND	ND	ND	ND	ND
B-1- (10-10.5)	ND	0.019	0.36	0.044	7.1	3900
B-2- (8-10)	0.13	0.4	1.8	0.63	220	ND
B-2- (13-15)	ND	ND	ND	ND	ND	ND
B-3- (8-10)	0.96	ND	1.6	0.64	350	ND
B-3- (13-15)	ND	ND	ND	ND	ND	ND
B-4A- (8-10)	ND	ND	ND	ND	ND	ND
B-6- (4-5)	ND	ND	ND	ND	ND	990
B-6- (8.5-10)	0.063	ND	0.75	0.32	40	ND

Results reported in mg/kg (ppm).
No detectable levels of TPH-D and STLC Lead were detected in the above samples.
BTXE is benzene, toluene, xylene, and ethylbenzene.
BTXE analysis by EPA Method 8020. Reporting limit is 0.005 mg/kg.
TPH-Gasoline analysis by EPA Method 5030 Purge-and-trap, Reporting limit is 1 mg/kg.
TPH-Diesel analysis by modified EPA Method 8015. Reporting limit is 1 mg/kg.
Oil & Grease analysis by EPA Method 418.1 (IR Spectrophotometer). Reporting limit is 50 mg/kg.
Soluble Lead analysis by Lead STLC. Reporting limit is 0.05 mg/kg.
Lowest reporting limits are listed above. If sample extraction is diluted, reported limit increases accordingly (see laboratory reports).

SFID 4987

DATE: 2/22/94

TO : Local Oversight Program

FROM: SUSAN

SUBJ: Transfer of Eligible Local Oversight Case

Site name: VACANT LOT

Address: 4800 SAN PABLO AVE. city EMERYVILLE Zip 94608

TO BE ELLIGIBLE FOR LOP A CASE MUST MEET 3 QUALIFICATIONS:

1. Number of **Tanks:** NA removed? Y N Date of removal NA

2. Samples received? Y N **Contamination** level: _____
(ppm and type of test)

Contamination should be over 100 ppm TPH to qualify for LOP

3. **Petroleum** Y N Types: Avgas Jet leaded unleaded Diesel fuel oil waste oil kerosene solvents

DepRef remaining $_____ Closed with Candace/Leslie? Y N (If no explain why?)

IF YOUR SITE MEETS ALL OF THE ABOVE QUALIFICATIONS YOU SHOULD DO THE FOLLOWING TO TRANSFER THE SITE:

1. YOU MUST CLOSE THE DEPOSIT REFUND CASE AT THIS TIME. YOU MUST ACCOUNT FOR ALL TIME YOU HAVE SPENT ON THE CASE AND TURN IN THE ACCOUNT SHEET TO LESLIE. IF THERE ARE FUNDS STILL REMAINING IT IS STILL BETTER TO TRANSFER THE CASE TO LOP AS THE RATE FOR LOP ALLOWS THE ADDITION OF MANAGEMENT AND CLERICAL TIME. DO NOT ATTEMPT TO CONTINUE TO OVERSEE THE SITE SIMPLY BECAUSE THERE ARE FUNDS REMAINING!

2. COMPLETE THE A AND B PERMIT APPLICATION FORMS AND GIVE TO CONNIE/ELAINE

3. GIVE THE ENTIRE CASE TO THE PROPER LOP STAFF UPSTAIRS FOR THEM TO DO THE REST OF THE TRANSFER AND YOU ARE DONE!

RRSP: 93286-01-07

HYDROSOLUTIONS OF CALIFORNIA, INC.

LETTER OF TRANSMITTAL

TO: ALAMEDA Co. HEALTH AGENCY
80 SWAN WY, Rm 350
OAKLAND, CA 94621

ATT: SUSAN HUGO

DATE: 2-16-94

SUBJECT: 4800 SAN PABLO AVENUE
EMERYVILLE, CA

We are enclosing: ___Herewith ___Under Separate Cover

No. of Copies	Description
1	ORIGINAL COMPLETED UNAUTHORIZED RELEASE FORM

94 FEB 18 PM 2:43 ALCO HAZMAT

STATUS	SENT FOR YOUR	PLEASE NOTE
___Preliminary	∝ Approval	___Revisions
___Revised	∝ Signature	___Additions
___Approved	∝ Use	___Deletions
___Reviewed	∝ File	___Corrections
___ _____	∝ Information	___ _____

Remarks: Please contact me if you require additional information. Looking forward to our meeting.

cc: Mr. BALWAND S. GREWAL
MARYANN LESHIN
File

By: [signature]

5917 Moss Creek Circle, Suite 2, Fair Oaks, California 95628
(916) 967-1222, FAX (916) 967-1223

4987 R0589 CL File copy

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

EMERGENCY ☐ YES ☒ NO

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

REPORT DATE M 2 M 16 D 0 D 94 Y Y — CASE #

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.
SIGNED Susan L Hugo DATE 2/18/94

REPORTED BY
NAME OF INDIVIDUAL FILING REPORT: Stephen J. Baker
PHONE: (916) 967-1222
SIGNATURE: Stephen J Baker
REPRESENTING ☒ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☐ OTHER
COMPANY OR AGENCY NAME: HydroSolutions of California, Inc.
ADDRESS: 5917 Moss Creek Circle, Suite 2, Fair Oaks, CA 95628-2714 (STREET, CITY, STATE, ZIP)

RESPONSIBLE PARTY
NAME: Mr. Balwand S. Grewal ☐ UNKNOWN
CONTACT PERSON: same
PHONE: (510) 521-8295
ADDRESS: 754 Taylor Avenue, Alameda, CA 94501 (STREET, CITY, STATE, ZIP)

SITE LOCATION
FACILITY NAME (IF APPLICABLE): -----
OPERATOR: -----
PHONE: ( ) -----
ADDRESS: 4800 San Pablo Avenue, Emeryville, CA Alameda County (STREET, CITY, COUNTY, ZIP)
CROSS STREET: 48th Street & San Pablo Avenue

IMPLEMENTING AGENCIES
LOCAL AGENCY / AGENCY NAME: Alameda Co. Health Agency
CONTACT PERSON: Susan Hugo
PHONE: (510) 271-4530
REGIONAL BOARD: San Francisco Bay
PHONE: (510) 286-1255

SUBSTANCES INVOLVED
(1) NAME: Gasoline/Hydrocarbons — QUANTITY LOST (GALLONS): ____ ☒ UNKNOWN
(2) NAME: ____ QUANTITY LOST (GALLONS): ____ ☐ UNKNOWN

DISCOVERY/ABATEMENT
DATE DISCOVERED: M 1 M 18 D D 94 Y Y
HOW DISCOVERED: ☐ INVENTORY CONTROL ☐ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK TEST ☐ TANK REMOVAL ☒ OTHER Real Estate Assessment
DATE DISCHARGE BEGAN: M M D D Y Y ☒ UNKNOWN
HAS DISCHARGE BEEN STOPPED? ☒ YES ☐ NO IF YES, DATE M M unknown D D Y Y
METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)
☐ REMOVE CONTENTS ☐ CLOSE TANK & REMOVE ☐ REPAIR PIPING
☐ REPAIR TANK ☐ CLOSE TANK & FILL IN PLACE ☐ CHANGE PROCEDURE
☐ REPLACE TANK ☒ OTHER unknown

SOURCE/CAUSE
SOURCE OF DISCHARGE: ☐ TANK LEAK ☒ UNKNOWN ☐ PIPING LEAK ☐ OTHER
CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☒ UNKNOWN ☐ OTHER

CASE TYPE
CHECK ONE ONLY
☒ UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS
CHECK ONE ONLY
☐ NO ACTION TAKEN ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED ☐ POLLUTION CHARACTERIZATION
☐ LEAK BEING CONFIRMED ☒ PRELIMINARY SITE ASSESSMENT UNDERWAY ☐ POST CLEANUP MONITORING IN PROGRESS
☐ REMEDIATION PLAN ☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) ☐ CLEANUP UNDERWAY

REMEDIAL ACTION
CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)
☐ CAP SITE (CD) ☐ EXCAVATE & DISPOSE (ED) ☐ REMOVE FREE PRODUCT (FP) ☐ ENHANCED BIO DEGRADATION (IT)
☐ CONTAINMENT BARRIER (CB) ☐ EXCAVATE & TREAT (ET) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ REPLACE SUPPLY (RS)
☐ VACUUM EXTRACT (VE) ☐ NO ACTION REQUIRED (NA) ☐ TREATMENT AT HOOKUP (HU) ☐ VENT SOIL (VS)
☒ OTHER (OT) TO BE DETERMINED

COMMENTS

HSC 05 (8/90)