

Hwang, Don, Env. Health

From: Hwang, Don, Env. Health
Sent: Tuesday, August 02, 2005 5:35 PM
To: 'info@bps.com'
Subject: Damaged monitoring well MW-6

Mr. Jeff Christoff,

We received a report that the well is damaged, without a Christy box and cap.

Please inspect and repair. Thank you, Don Hwang, Alameda County Environmental Health 567-6746

8/2/2005

Hwang, Don, Env. Health

From: Chan, Barney, Env. Health
Sent: Monday, August 01, 2005 4:08 PM
To: Hwang, Don, Env. Health
Subject: FW: Damaged well

Attachments: 2005-08-01 Jefferson.doc



2005-08-01
efferson.doc (20 K..)

Don:

Michael Rochette of the WaterBoard says this well, likely, ~~at the site~~, your site, is damaged, without a Christy box and cap. Could you contact the RP to inspect and repair this well?

BC

-----Original Message-----

From: Michael Rochette [mailto:MROchette@waterboards.ca.gov]
Sent: Monday, August 01, 2005 3:06 PM
To: Chan, Barney, Env. Health
Subject: Re: Damaged well

Barney:

Sounds like that is the Chevron Station, I was referring to at 17th Castro. Jefferson Street is parallel to Castro on block east. The well is located in Jefferson street at the northwest corner of the intersection of Jefferson and 17th streets. See attached rough sketch.

Michael

Michael Bessette Rochette P.G.
Engineering Geologist

San Francisco Bay
Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612
Phone: (510)622-2411 Fax: (510) 622-2458
Email: mrochette@waterboards.ca.gov

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

February 13, 2004

Jeff Christoff
Blue Print Service
2748 Willow Pass Rd.
Concord, CA 94519

Dear Mr. Christoff:

Subject: Fuel Leak Case No. RO0000151, Blue Print Service, 1700 Jefferson St., Oakland, CA 94612

Alameda County Environmental Health staff has reviewed "Quarterly Groundwater Remediation and Monitoring Report, April – July 1, 2003" dated October 17, 2003 and "Quarterly Groundwater Remediation and Monitoring Report, July – September, 2003" dated December 12, 2003, both by Harding ESE. The October 17, 2003 report included statistical analyses comparing pre- and post purge groundwater sample results and parameters. The report concluded that "the post-purge results of the April and July 2003 groundwater monitoring events are equivalent to the historical and contemporaneous pre-purge analytical and groundwater parameter results." Thus, pre-purge groundwater monitoring is approved. Also, ORCTM socks were removed from treatment wells MW-1A, MW-3, and MW-4, during the Fourth Quarter 2002 monitoring event, and September 17, 2003 for MW-5 to determine if the contaminant concentrations were tainted by the presence of ORCTM which had been used since September 29, 1999. Evaluation of the impact ORCTM socks on contaminant concentrations in the treatment wells will continue. A Work Plan addressing the remaining comments in our letter dated September 27, 2002 is still due. We request that you address the following remaining technical comments, perform the requested work, and send us the technical reports requested below.

TECHNICAL COMMENTS

- 1) Plume Undefined - High contaminant concentrations are still being found offsite (at monitoring well MW-5). The lateral and vertical extent of your dissolved contaminant plume is undefined. Please propose sampling locations to define the plumes associated with your site in the Work Plan requested below. Include geologic cross-sections and show soil and groundwater analytical results, utility conduits, well screens, etc., and explain your rationale for the additional sampling locations. You may want to consider

performing an investigation to quickly define the location of the contaminant plume downgradient from the release site prior to installing the permanent monitoring network. That will allow you to optimize the location and depth of the permanent wells, thereby reducing the cost of the monitoring work. Collection of groundwater samples using a one-time direct push water-sampling tool would be appropriate for this investigation. Please address in the work plan requested below.

- 2) Preferential Pathway Study – The downgradient MW-6 was nondetectable for all contaminants. We request a preferential pathway study that details the potential migration pathways and potential conduits (wells, utilities, pipelines, etc.) for horizontal and vertical migration that may be present in the vicinity of the site. Of particular concern is the identification of abandoned wells and improperly-destroyed wells that can act as vertical conduits to deeper water bearing zones, pumping wells in the vicinity of your site, and manmade conduits for shallow migration. Discuss your analysis and interpretation of the results of the preferential pathway study (including the detailed well survey and utility survey requested below). Please include an evaluation of the probability of the contaminant plumes encountering preferential pathways and conduits that could spread the contamination, particularly in the vertical direction to deeper water aquifers.

An evaluation of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s) is required as part of your study. Submittal of map(s) and cross-sections showing the location and depth of all utility lines and trenches within and near the site and plume area(s) is required as part of your study. Please report your results in the Work Plan requested below.

- 3) ORC Interim Remediation Ineffective – ORC had been used in MW-1A, MW-3, MW-4, and MW-5. Yet contaminant concentrations continue to be high in MW-1 and MW-5. Unless you can show that bioremediation is occurring using verification monitoring, propose alternative remedial actions in the work plan requested below.
- 4) Groundwater Sampling after ORC - Groundwater monitoring will need to be continued until it can be determined that contaminant concentrations will not rebound.
- 5) Migration Control required – The contaminant plume has migrated offsite. Propose means of containing the plume in the Work Plan requested below. Recommend considering reuse of the pump and treat system.
- 6) Legitimacy Statement – All technical reports shall be accompanied by a letter signed by an officer or legally authorized representative of the responsible party that states, at a minimum: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached proposal or report is true and correct to the best of my knowledge."
- 7) Historical Groundwater Monitoring Results – Please also tabulate results prior to 8/1/91.
- 8) Historical Groundwater Elevation Data - Please also tabulate data prior to 3/6/96.
- 9) Historical Monitoring Well Product Thickness Measurements - Please also tabulate measurements after 6/27/95.
- 10) Historical Gradient – Please show using a rose diagram and also include magnitude and direction.

Mr. Christoff
February 13, 2004
Page 3 of 3

TECHNICAL REPORT REQUEST

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

March 13, 2004 - Quarterly Groundwater Monitoring Report, 4th Quarter 2004
April 13, 2004 - Work Plan, Historical Groundwater Monitoring Results, Historical Groundwater Elevation Data, Historical Monitoring Well Product Thickness Measurements, Historical Gradient
60 days after Work Plan approval - Soil and Water Investigation Report
April 30, 2004 - Quarterly Groundwater Monitoring Report, 1st Quarter 2004
July 31, 2004 - Quarterly Groundwater Monitoring Report, 2nd Quarter 2004
October 31, 2004 - Quarterly Groundwater Monitoring Report, 3rd Quarter 2004;

If you have any questions, please call me at 510/567-6746.

Sincerely,



Don Hwang
Hazardous Materials Specialist
Local Oversight Program

C: David Nanstad, Harding ESE, Inc., 28 - 2nd St., Suite 700, San Francisco, CA 94105
Donna Drogos
File

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



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

September 27, 2002

Jeff Christoff
Blue Print Service
2748 Willow Pass Rd.
Concord, CA 94519

Dear Mr. Christoff:

Subject: Fuel Leak Case No. RO0000151, Blue Print Service, 1700 Jefferson St., Oakland, CA 94612

Alameda County Environmental Health staff has reviewed "Quarterly Groundwater Remediation and Monitoring Report, April 23 – June 30, 2002 ..." by Harding ESE dated June 7, 2001. We request that you address the following technical comments, perform the requested work, and send us the technical reports requested below.

TECHNICAL COMMENTS

- 1) Plume Undefined - High contaminant concentrations are still being found offsite (at monitoring well MW-5). Total petroleum hydrocarbons as gasoline (TPH-G) at 9,400 micrograms/liter (ug/l) and benzene at 2,300 ug/l were within historical ranges on April 24, 2002. Define the lateral extent of the plume. Please address these concerns in the work plan requested below.
- 2) Conduit Survey required - The downgradient MW-6 was nondetectable for all contaminants. Determine if the plume is being intercepted.
- 3) ORC Interim Remediation Ineffective - ORC has been used in MW-1A, MW-3, MW-4, and MW-5, since September 1999. Yet contaminant concentrations continue to be high in MW-1 and MW-5. TPH-G concentrations were 35,000 ug/l and 9,400 ug/l, for MW-1 and MW-5, respectively. Benzene concentrations were 4,900 ug/l and 2,300 ug/l, respectively. Unless you can show that bioremediation is occurring using verification monitoring, propose alternative remedial actions in the work plan requested below.
- 4) Groundwater Sampling after ORC - Samples were collected two weeks after ORC socks were removed from the sampled wells. We wonder if the contaminant concentrations obtained may just be temporary. Therefore, groundwater monitoring will need to be continued after ORC remediation has ceased until it can be determined that contaminant concentrations will not rebound.

- 5) Migration Control required – The contaminant plume has migrated offsite. Propose means of containing the plume in the work plan requested below. Recommend considering reuse of the pump and treat system.
- 6) Nonpurge Groundwater Sampling - Nonpurge groundwater sampling has been used since September 1999, the only time nonpurge and purge results were compared. The results were inconsistent. Also, the Regional Water Quality Control Board's "Utilization of Non-Purge Approach for Sampling of Monitoring Wells Impacted by Petroleum Hydrocarbons, BTEX, and MTBE" dated January 31, 1997 required the rate of purge and measurements of dissolved oxygen (DO), specific conductance, pH, and temperature. However, only DO was submitted. Thus, the use of nonpurge sampling needs to be reevaluated. In addition to the conditions listed, we will also require:
 - a) Pre- and post-purge DO and turbidity measurements to determine if groundwater is flowing through the well. If groundwater is flowing through the well it may be appropriate to omit purging activities.
 - b) Purging rate. Purging rate should approximate natural groundwater flow rates and should not result in significant draw down in well.
 - c) Once DO and turbidity measurements indicate that groundwater is flowing through the well screen, perform pre- and post-purge measurement of the following parameters: DO, pH, temperature, conductivity, and turbidity; and pre- and post- purge sample analysis to verify consistency in chemical concentrations in the well. You must demonstrate that no statistical difference exists between purge and no purge chemical concentration data including MTBE, and that no significant difference is detected in the measured parameters.

Please include your proposal in the work plan requested below.

- 7) Groundwater Analyses –In addition to the analyses already performed, please include tert Amyl Methyl Ether (TAME), Ethyl tert Butyl Ether (ETBE), Diisopropyl Ether (DIPE), tert Butyl Alcohol (TBA), Ethylene Dibromide (EDB), and Ethylene Dichloride (EDC). After the initial round of sampling, sample for any of these contaminants found in subsequent quarters.
- 8) MW-6 – Missing the well log and boring samples. Submit.
- 9) The California Business and Professions Code (Sections 6735 and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments must be performed under the direction of an appropriately registered or certified professional. The registered professional does not necessarily have to perform the work, but must supervise and review the work prior to signing the report. All technical reports must contain a statement of professional certification with the appropriate professional signatures and seals.
- 10) Chain of Custody – Sample stations were described as a letter and numbers. Please provide a key.
- 11) Legitimacy Statement – All technical reports shall be accompanied by a letter signed by an officer or legally authorized representative of the responsible party that states, at a minimum: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached proposal or report is true and correct to the best of my knowledge."

- 12) Historical Groundwater Monitoring Results – Please also tabulate results prior to 8/1/91.
- 13) Historical Groundwater Elevation Data - Please also tabulate data prior to 3/6/96.
- 14) Historical Monitoring Well Product Thickness Measurements - Please also tabulate measurements after 6/27/95.
- 15) Historical Gradient – Please show using a rose diagram and also include magnitude and direction.
- 16) Cross Section Diagrams – Please draw and include monitoring wells, borings, and conduits.

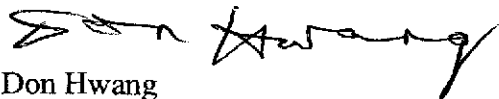
TECHNICAL REPORT REQUEST

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

- October 31, 2002 - Quarterly Groundwater Monitoring Report, 3rd Quarter 2002;
November 30, 2002 - Work Plan, Conduit Survey, MW-6 – Well Log and Boring Samples, Chain of Custody Sample Stations Key, Historical Groundwater Monitoring Results, Historical Groundwater Elevation Data, Historical Monitoring Well Product Thickness Measurements, Historical Gradient, Cross Section Diagrams;
January 31, 2003 - Comparison of Nonpurge and Purge Samples, Quarterly Groundwater Monitoring Report, 4th Quarter 2002;
April 30, 2003 - Quarterly Groundwater Monitoring Report, 1st Quarter 2003;
July 31, 2003 - Quarterly Groundwater Monitoring Report, 2nd Quarter 2003

If you have any questions, please call me at 510/567-6746.

Sincerely,



Don Hwang
Hazardous Materials Specialist
Local Oversight Program

C: David Nanstad, Harding ESE, Inc., 28 - 2nd St., Suite 700, San Francisco, CA 94105

✓ File

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KEARS, Agency Director

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

November 26, 2001

Jeff Christoff
Blue Print Service
2748 Willow Pass Rd.
Concord, CA 94519

Dear Mr. Christoff:

Subject: Blue Print Service, 1700 Jefferson St., Oakland, CA 94612;
RO0000151

"Quarterly Groundwater Remediation and Monitoring Report, April 5 – June 30, 2001..." by Harding ESE dated July 26, 2001 was reviewed. Monitoring wells MW-1, MW-3, MW-5, and MW-6 were sampled on June 28, 2001 and analyzed for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethyl benzene, xylene (BTEX), and methyl tertiary-butyl ether (MTBE). Oxygen Releasing Compound (ORC) socks continue to be used in wells MW-1A, MW-3, MW-4, and MW-5. MW-1 continued to have high BTX concentrations. These concentrations were 5,200, 4,200, and 3,900 respectively. The TPH-G concentration in MW-1 previously elevated, increased to 39,000 ug/l. The TPH-G concentration in MW-3 at 4,900 ug/l also bears watching. The TPH-G concentration in MW-5 was 3,600 ug/l but has been higher previously. MW-5 showed a significant decrease in BTEX concentrations, to a range of 11 to 300 ug/l. Other concentrations were not notable.

We concur with Harding ESE's recommendation to continue quarterly groundwater monitoring and the use of ORC. However, injection of ORC instead of using socks should be evaluated to determine if it would be more effective in distributing oxygen. If you have any questions, you may call me at 510/567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist

C: David Nanstad, Harding ESE, Inc., 90 Digital Dr., Novato, CA 94949

✓ File

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



June 15, 2001

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

Jeff Christoff
Blue Print Service
2748 Willow Pass Rd.
Concord, CA 94519

Dear Mr. Christoff:

Subject: Blue Print Service, 1700 Jefferson St., Oakland, CA 94612;
RO0000151

"Quarterly Groundwater Remediation and Monitoring Report, Blue Print Service, January 1–April 4, 2001..." by Harding ESE dated May 15, 2001 was reviewed. Oxygen Releasing Compound (ORC) socks continue to be used in wells MW-1A, MW-3, MW-4, and MW-5. Monitoring wells MW-1, MW-3, MW-5, and MW-6 were sampled on April 2, 2001 and analyzed for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethyl benzene, xylene (BTEX), and methyl tertiary-butyl ether (MTBE). MW-1 and MW-5 continue to have high BTEX concentrations. MW-1's and MW-5's benzene concentrations have declined from when use of ORC was initiated on September 29, 1999. MW-1's other constituent concentrations were within the ranges found since then or declined. The concentrations were 19,000 ug/l TPH-G, 4,700, 5,200, 570, 2,600 ug/l BTEX, and 50 ug/l MTBE. MW-5's other constituent concentrations have fluctuated since the use of ORC. The concentrations were 15,000 ug/l TPH-G, 7,400, 3,000, 1,000, 2,200 ug/l BTEX, ND<50 ug/l MTBE. MW-3's constituent concentrations have declined since the use of ORC except MTBE, which increased. MW-3's concentrations were 0.17 ug/l TPH-G, 9, 6.2, 1.4, 8.1 ug/l BTEX, and 77 ug/l MTBE. MW-6's constituent concentrations have been less than the detection limits except the latest sample of 5 ug/l MTBE and once when the concentration was at the detection limit.

We concur with Harding ESE's recommendation to continue quarterly groundwater monitoring and the use of ORC. If you have any questions, you may call me at 510/567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist

C: David Nanstad, Harding ESE, Inc., 90 Digital Dr., Novato, CA 94949

File

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



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

September 1, 2000

Jeff Christoff
Blue Print Service
2748 Willow Pass Rd.
Concord, CA 94519

Dear Mr. Christoff:

Subject: Blue Print Service, 1700 Jefferson St., Oakland, CA 94612;
Stid 4148

"Quarterly Report, April 1, 2000-June 30, 2000 Groundwater Remediation and Monitoring, Blue Print Service, 1700 Jefferson St., Oakland, CA" by Harding Lawson Associates (HLA) dated July 11, 2000 was reviewed. We concur with HLA's recommendation to continue quarterly groundwater monitoring and the use of Oxygen Releasing Compound (ORC) socks.

If you have any questions, you may call me at 510/567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist

C: Jim McCarty, Harding Lawson Associates, Engineering and Environmental Services, 383
4th St., 3rd Floor, Oakland, CA 94607

✓ file

6.5.

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 24, 2000

Jeff Christoff
Blue Print Service
2748 Willow Pass Rd.
Concord, CA 94519

Dear Mr. Christoff:

Subject: Blue Print Service, 1700 Jefferson St., Oakland, CA 94612;
Stid 4148

"Quarterly Report, January 1, 2000– March 31, 2000 Groundwater Remediation and Monitoring, Blue Print Service, 1700 Jefferson St., Oakland, CA" by Harding Lawson Associates (HLA) dated October 25, 1999 was reviewed. We concur with HLA's recommendation to continue quarterly groundwater monitoring and the use of Oxygen Releasing Compound (ORC) socks.

If you have any questions, you may call me at 510/567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist

C: Jim McCarty, Harding Lawson Associates, Engineering and Environmental Services, 383
4th St., 3rd Floor, Oakland, CA 94607

✓file
C.S.

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



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

December 15, 1999

Jeff Christoff
Blue Print Service
1057 Shary Circle
Concord, CA 94518

Re: Blue Print Service, 1700 Jefferson St., Oakland, CA 94612;
Stid 4148

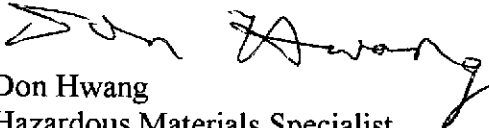
Dear Mr. Christoff:

"Quarterly Report, July 1, 1999 – September 30, 1999 Groundwater Remediation and Monitoring, Blue Print Service, 1700 Jefferson St., Oakland, CA" by Harding Lawson Associates dated October 25, 1999 was reviewed.

- 1) The non-purging approach was implemented. The measurements for dissolved oxygen were reported. Also needed are the measurements for specific conductance, pH, and temperature.
- 2) Oxygen Releasing Compound (ORC) was placed into several of the wells after the groundwater samples were collected. We will be awaiting the fourth quarter monitoring report.

Please submit the information requested within 30 days. If you have any questions, you may call me at 510/567-6746.

Sincerely,


Don Hwang
Hazardous Materials Specialist

C: Jim McCarty, Harding Lawson Associates, Engineering and Environmental
Services, 383 4th St., 3rd Floor, Oakland, CA 94607
L.S.
file



ENVIRONMENTAL
PROTECTION
93 SEP 27 PM 4:05

September 23, 1999

46559.1

Mr. Don Wayne
Alameda County Environmental Health Services
1131 Harbor by Parkway, Suite 250
Alameda, California 94502

**Groundwater Monitoring Plan
Blue Print Services Facility
17th Street and Jefferson Street
Oakland California**

Dear Mr. Wayne:

As stated in our letter dated August 17, 1999, HLA plans to begin insitu-bioremediation at the Blue Print Services site in Oakland, California. HLA will place an oxygen-releasing compound (ORC), manufactured and sold by Regenesis, Inc. in selected wells to enhance insitu-bioremediation. The ORC will be contained in socks that will be hung in the groundwater across the wells' screened intervals. The ORC socks will be placed in wells MW-1A, MW-3, MW-4, and MW-5 (Plate 1). In order to monitor groundwater conditions without the direct influence of ORC, the socks will be removed from wells MW-3 and MW-5 two weeks prior to sampling. Groundwater samples from MW-1A and MW-4 are not needed because groundwater sampled at MW-1 can monitor groundwater quality in this area. The following is a description of the groundwater sampling procedures to be followed.

HLA plans to use the non-purge approach for future sampling at this site as published by the San Francisco Bay Regional Water Quality Control Board on January 31, 1999, (see attachment). On the first quarter of implementation of this plan, HLA will collect purge samples and non-purge samples for a baseline comparative analysis.

Prior to the purging or sampling of monitoring wells MW-1, MW-3, MW-5, and MW-6, the distance from the top of the well casing to groundwater in the well will be measured with an electric water level indicator. Depth to groundwater will be measured to the nearest one-hundredth of a foot.

September 23, 1999

46559.1

Don Wayne

Alameda County Environmental Health Services

Page 2

Harding Lawson Associates

Non-Purge Method

Groundwater samples will be collected through dedicated Teflon tubing using a peristaltic pump. This tubing will be inserted into the well immediately prior to sampling during the first sampling event. In order to collect a sample, the tubing will be pulled up till the end is at a depth of 2 to 4 feet below the groundwater surface. The tubing will be connected to the peristaltic pump and after removal of approximately a volume of groundwater equal to the length of the Teflon tubing, a sample will be collected for a conductivity, pH, dissolved oxygen (DO), and temperature measurements and a groundwater sample for chemical analysis. This sample will be taken prior to using the purge method in the first sample event.

Purge Method

During the first sample event, the monitoring wells will be purged by removing a minimum of three well casing volumes of groundwater with a submersible pump or PVC bailer. Before each use, the pump or bailer will be decontaminated in a non-phosphate cleaning solution and rinsed first in tap water, then in distilled water. Conductivity, pH, and temperature of the extracted groundwater will be monitored during purging. Sampling will not take place until the aforementioned groundwater parameter measurements have stabilized. Purged groundwater from the monitoring wells will be treated by the onsite groundwater treatment system before discharge to the sanitary sewer under East Bay Municipal Water District Permit Number 500-68191. Water samples from MW-1, MW-3, MW-5, and MW-6 will be collected using a disposable Teflon bailer. After the first quarter implementation of this plan, the purge method of sampling will no longer be used.

The groundwater samples preserved in laboratory-provided sterile containers and placed in a cooler with ice packs and for submittal to a California certified analytical laboratory under chain of custody protocol.

The groundwater samples will be analyzed using the following methods:

- Total petroleum hydrocarbons (TPH) in accordance with EPA Method 8015 modified
- Benzene, toluene, ethylbenzene, total xylenes, and methyl t-butyl ether in accordance with EPA Method 8020

In monitoring events after the initial sampling, where the ORC socks are removed from the well two weeks prior to sampling, the ORC socks will be replaced in the wells following collection of the groundwater samples. DO measurements as well as chemical results will be used to determine the replacement rate of the ORC socks.

September 23, 1999
46559.1
Don Wayne
Alameda County Environmental Health Services
Page 3

Harding Lawson Associates

HLA anticipates performing the next groundwater monitoring on or about September 28, 1999 and then placing the ORC socks in the wells following the collection of the groundwater samples. HLA will continue to issue quarterly monitoring reports within one month of the end of the quarterly period. DO measurements will be reported along with the results of chemical analyses.

We trust this letter provides information required at this time. Please call if you have questions or additional information is required. We would appreciate a letter of approval documenting your acceptance of this plan.

Yours very truly,

HARDING LAWSON ASSOCIATES


James McCarty
Project Engineer

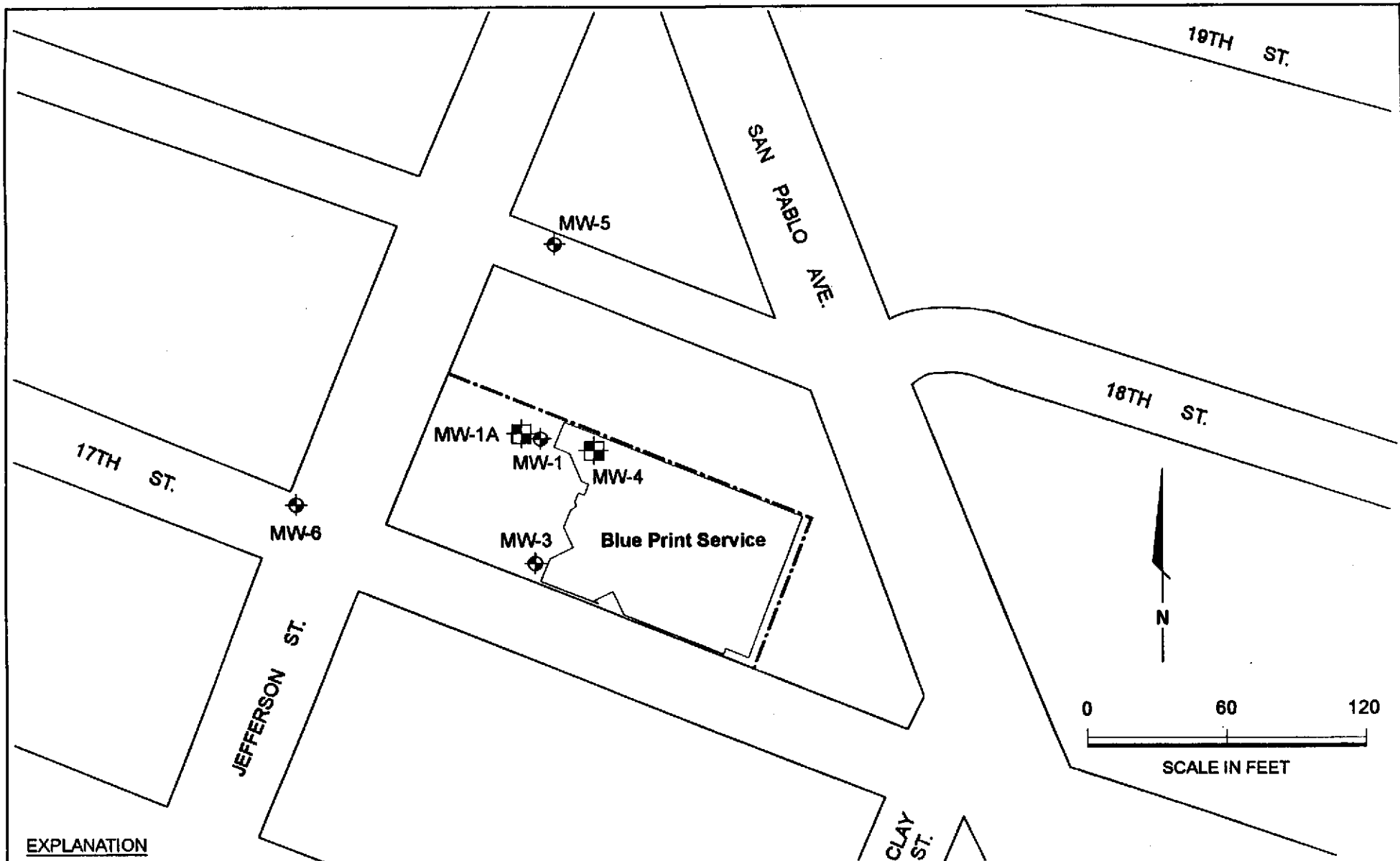
jgm/ 46559/gwplan

1 copies submitted

Attachments:

Plate 1 – Site Map
Utilization of Non-Purge Approach for Sampling of Monitoring Wells Impacted by Petroleum Hydrocarbons, BTEX, and MTBE

Mr. Jeff Christoff
Blue Print Service Company
1057 Shary Circle
Concord, California 94518



EXPLANATION

- Site Boundary
- ⊕ Monitoring Well
- ⊠ Extraction Well
- (5.03) Groundwater Elevation (In feet based on City of Oakland datum)



Harding Lawson Associates
Engineering and Environmental Services

SITE MAP
City Blue Production Facility
Oakland, California

PLATE

1

DRAWN jgm	PROJECT NUMBER 46559.1	APPROVED JGM	DATE 8/17/99	REVISED DATE
--------------	---------------------------	-----------------	-----------------	--------------

FACSIMILE TRANSMISSION

To: Don Wang

Fax Number: 510 337-9335

From: Jim McCarty

Date: September 23, 1999

Subject: City Blue Groundwater Sampling Plan

Project Number: 46559

Number of pages (Including this cover sheet): 8

Original to follow by mail: X **Yes** **No**

Remarks:

Don-

Here is a copy of letter explaining what we propose to do for groundwater monitoring. I will send you the original through the mail. If you have any comment you can reach me at 510 628-3220.

Thank
Jim McCarty

cc: _____**Transmitted by:** _____**If you do not receive all pages, please call (510) 451-1001**

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Harding Lawson Associates
Engineering and Environmental Services
383 Fourth Street, Third Floor
Oakland, CA 94607 — (510) 451-1001

FAX (510) 451-3165

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES

1131 Harbor Bay Parkway, Suite 250
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(510) 567-6700
(510) 337-9335 (FAX)

September 22, 1999

Jeff Christoff
Blue Print Service Co.
1057 Shary Circle
Concord, CA 94518

Re: Blue Print Service Co., 1700 Jefferson St., Oakland, CA 94612;
StId 4148

LANDOWNER NOTIFICATION AND PARTICIPATION REQUIREMENTS

Dear Mr. Shirar:

This letter is to inform you of new legislative requirements pertaining to cleanup and closure of sites where an unauthorized release of hazardous substance, including petroleum, has occurred from an underground storage tank (UST). Section 25297.15(a) of Ch. 6.7 of the Health & Safety Code requires the primary or active responsible party to notify all current record owners of fee title to the site of: 1) a site cleanup proposal, 2) a site closure proposal, 3) a local agency intention to make a determination that no further action is required, and 4) a local agency intention to issue a closure letter. Section 25297.15(b) requires the local agency to take all reasonable steps to accommodate responsible landowners' participation in the cleanup or site closure process and to consider their input and recommendations.

For purposes of implementing these sections, you have been identified as the primary or active responsible party. Please provide to this agency, within twenty (20) calendar days of receipt of this notice, a complete mailing list of all current record owners of fee title to the site. You may use the enclosed "list of landowners" form (sample letter 2) as a template to comply with this requirement. If the list of current record owners of fee title to the site changes, you must notify the local agency of the change within 20 calendar days from when you are notified of the change.

If you are the sole landowner, please indicate that on the landowner list form. The following notice requirements do not apply to responsible parties who are the sole landowner for the site.

Mr. Christoff
Page 2 of 2
September 22, 1999

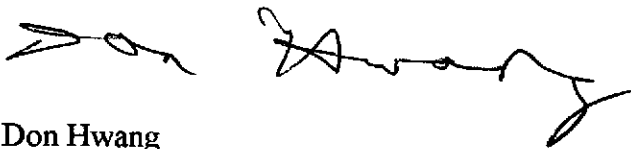
In accordance with Section 25297.15(a) of Ch. 6.7 of the Health & Safety Code, you must certify to the local agency that all current record owners of fee title to the site have been informed of the proposed action before the local agency may do any of the following:

- 1) consider a cleanup proposal (corrective action plan)
- 2) consider a site closure proposal
- 3) make a determination that no further action is required
- 4) issue a closure letter

You may use the enclosed "notice of proposed action" form (sample letter 3) as a template to comply with this requirement. Before approving a cleanup proposal or site closure proposal, determining that no further action is required, or issuing a closure letter, the local agency will take all reasonable steps necessary to accommodate responsible landowner participation in the cleanup and site closure process and will consider all input and recommendations from any responsible landowner.

Please call me at (510) 567-6746 should you have any questions about the content of this letter.

Sincerely,



Don Hwang
Hazardous Materials Specialist

Enclosures

C: file

Fax Transmission

Date: Friday, September 10, 1999

Time: 2:27:00 PM

2 Pages

To: Don Wang
Alameda County Environmental Health Services

phone: +1 (510) 567-6746

fax: 337-9335

From: James McCarty
Harding Lawson Associates

phone: 510 628-3220

fax: 510 451-3165

Re: Here is the ORC caculation sheet we prepared for the Blue
Print Services Site in Oakland.

SOURCE TREATMENT - REPLACEMENT WELLS

Dissolved Hydrocarbon Level (ppm)
 (For gasoline sites use BTEX measurements)

10

Well Diameter (in.) *enter 4 or 6 ONLY*

4

Plume Width (ft)

80

Number of Wells

3

Plume Velocity (ft/day)

0.2

Well Spacing (ft.)

27

Thickness of contamination in Saturated Zone (ft)

6

Total Number of Socks

18

Thickness of ORC Filter Socks in Saturated Zone (ft)

6

Oxygen Available (lbs)

4.95

Porosity

0.35

Cost per sock

\$ 37.50

(sand = 0.3, silt = 0.35, clay = 0.4)

Safety Factor for Barriers

2

Cost of ORC Socks per Charge

\$ 675.00

(recommended value is about 2)

Hydrocarbon Load Per Day (lbs)

0.042

Percent of O2 Available to O2 Required

22%

Oxygen Demand per Day (lbs)

0.126

Minimum number of recommended charges to complete clean up

5.00

Oxygen Required (lbs)

22.7

Total Cost of ORC Socks for Cleanup

\$ 3,375.00

APPLICATION COMMENTS

* Barrier Design should potentially handle constant mass flux requirements

Solute Transport Model

Compliance Point (ft.)

100

HC Level at compliance point after one charge in ppm

0.784

From: James McLarty, Harding Lawson Associates, Fax: 970 451-5755, Voice: 970 625-5320, To: Don Wang at: Alameda County Environmental Health Services, Page 2 of 2, Friday, September 10, 1999 2:28:16 PM

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY



DAVID J. KEARS, Agency Director

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

March 29, 1999

Jeff Christoff
Blue Print Service Company
1057 Shary Circle
Concord, CA 94518

STID 4148

Re: 1700 Jefferson St., Oakland, CA 94612

Dear Jeff Christoff:

This office has received and reviewed Quarterly Reports dated October 15, 1998 and January 9, 1999 by Harding Lawson Associates, for the above site. The following are comments concerning these reports:

This office has the following concerns pertaining to the continued operation of the groundwater pump and treat system:

1. The groundwater pump and treat system does not appear to be controlling the hydrocarbon plume, as documented by the high concentrations of petroleum hydrocarbons which have consistently been detected in the downgradient monitoring well (MW-5).
2. There still is contamination at a significant level. The absence of free product may allow for the treatment and extraction system to be removed, but will not allow the site to be closed. Closure will require far lower concentrations than simply the absence of free product. I look forward to your next quarterly report.

Please contact me at (510) 567-6782 if you have any questions regarding this letter.

Sincerely,

Thomas Peacock, Manager

c: James McCarty, Harding Lawson Associates, 383 - 4th St., 3rd Floor, Oakland, CA 94607
Dick Pantages - Files-Tom

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 26, 1998

Jeff Christoff
Blue Print Service Company
1057 Shary Circle
Concord, CA 94518

STID 4148

Re: 1700 Jefferson St., Oakland, CA 94612

Dear Jeff Christoff:

This office has received and reviewed a Quarterly Report dated April 29, 1998, and Response and Corrective Action Plan dated November 11, 1997 by Harding Lawson Associates, for the above site. The following are comments concerning these reports:

This office has the following concerns pertaining to the continued operation of the groundwater pump and treat system:

1. Analytical data obtained from the historical quarterly groundwater data indicated the concentrations of contaminants around MW-1A (the extraction well) have not gone down.
2. The groundwater pump and treat system does not appear to be controlling the hydrocarbon plume, as documented by the high concentrations of petroleum hydrocarbons which have consistently been detected in the downgradient monitoring well (MW-5).
3. Thank you for submitting the CAP. It appears that all alternatives have been examined and seem appropriate.
4. It seems that the free product was not discovered in the last round of monitoring, as predicted in the CAP report.

STID 4148
June 26, 1998
Blue Print Service Company
Page 2 of 2

Please contact me at (510) 567-6782 if you have any questions regarding this letter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Thomas Peacock".

Thomas Peacock, Manager

c: James McCarty, Harding Lawson Associates, 383 - 4th St., 3rd Floor, Oakland, CA 94607
Dick Pantages - **Files-Tom**

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 11, 1997

Jeff Christoff
Blue Print Service Company
1057 Shary Circle
Concord, CA 94518

STID 4148, 1700 Jefferson St., Oakland, CA 94612

Dear Jeff Christoff:

This office has received and reviewed a Semiannual Remediation and Monitoring Report dated April 16, 1997 and a preliminary Cost/Benefit Analysis dated September 26, 1996, both by Harding Lawson Associates, for the above site. The following are comments concerning these reports:

This office has the following concerns pertaining to the continued operation of the groundwater pump and treat system:

1. Analytical data obtained from the historical quarterly groundwater data indicated the concentrations of contaminants around MW-1A (the extraction well) have not gone down.
2. The groundwater pump and treat system does not appear to be controlling the hydrocarbon plume, as documented by the high concentrations of petroleum hydrocarbons which have consistently been detected in the downgradient monitoring well (MW-5).
3. Of the 3,800 pounds of contaminants removed since the remediation system began, only 300 pounds of hydrocarbons have been removed by this system (less than 8%).
4. It is obvious, due to the high cost and lack of effectiveness, that the operation of the bioreactor pump and treat system should be discontinued at once. Notify this office as soon as this occurs.

This office requires that a CAP (Corrective Action Plan) be submitted to this office within 60 days of this letter. The cap should evaluate a variety of cleanup technologies, some which were not even developed when this system began operation. A feasibility study should be conducted to evaluate potential site remediation alternatives. Some of the alternatives which can be examined include:

1. Free product removal by both active and passive measures (this has been the most effective means of contaminate removal to date)
2. Installation of ORC (oxygen releasing compounds) to promote contaminate degradation
3. bioslurping
4. vapor extraction

The plume is very poorly evaluated, especially in the downgradient direction. The CAP should also

STID 4148
September 11, 1997
Blue Print Service Company
Page 2 of 2

consider this fact and look at additional investigation so that the problem is properly understood before a solution is arrived at.

Please be advised that this letter constitutes a formal request for technical reports pursuant to California Water Code Section 13267(b) and the Health and Safety Code Sections 25299.37 and 25299.78.

The above cited report does not say anything different, as the most recent data. MW-1A, MW-4, and MW-3 all have free product. MW-5, a whole block away in the presumed downgradient direction has 12,000 ppb of benzene. This measurement has been fairly consistent for over 6 years. There also is significant MTBE in this well. It may also be prudent to look for any other sources of contamination which may be contributing to your plume. However, in this investigation, the extent of contamination is only known to the west. All other directions are unknown, including even upgradient. This is very unusual.

This case will be assigned to Pam Evans of this office. Please contact her at 510) 567-6770 if you have any questions regarding this letter.

Sincerely,



Thomas Peacock, Manager

c: James McCarty, Harding Lawson Associates, 383 - 4th St., 3rd Floor, Oakland, CA 94607
Gordon Coleman - Files
Dave Deaner, SWRCB Clean Up Fund

LOP - RECORD CHANGE REQUEST FORM

printed:
09/10/97

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

PE
Insp: ~~KT~~

AGENCY # : 10000 SOURCE OF FUNDS: F SUBSTANCE: 8006619
StID : 4148 LOC: 02/27/95
SITE NAME: City Blue Print DATE REPORTED : 07/22/87
ADDRESS : 1700 Jefferson St DATE CONFIRMED: 07/22/87
CITY/ZIP : Oakland 94612 MULTIPLE RPs : N

SITE STATUS

CASE TYPE: O CONTRACT STATUS: 7 PRIOR CODE:1B3 EMERGENCY RESP: 10/24/92
RP SEARCH: S DATE COMPLETED: 07/08/92
PRELIMINARY ASMNT: C DATE UNDERWAY: 06/03/87 DATE COMPLETED: 11/03/87
REM INVESTIGATION: C DATE UNDERWAY: 06/25/88 DATE COMPLETED: 02/02/90
REMEDIAL ACTION: U DATE UNDERWAY: 06/18/90 DATE COMPLETED:
POST REMED ACT MON: DATE UNDERWAY: DATE COMPLETED:

ENFORCEMENT ACTION TYPE: 2 DATE ENFORCEMENT ACTION TAKEN: 04/12/95
LUFT FIELD MANUAL CONSID: 3HSCAWG
CASE CLOSED: DATE CASE CLOSED:
DATE EXCAVATION STARTED : 01/01/87 REMEDIAL ACTIONS TAKEN: ED,ET,FP,GT

RESPONSIBLE PARTY INFORMATION

RP#1-CONTACT NAME: Jeff Christoff, opsmg
COMPANY NAME: Blue Print Service Company
ADDRESS: ~~149 2nd St.~~ 1057 Shary Circle
CITY/STATE: ~~San Francisco CA 94105~~
Concord 94512

INSPECTOR VERIFICATION:

NAME _____ SIGNATURE _____ DATE _____

DATA ENTRY INPUT:

Name/Address Changes Only			Case Progress Changes	
ANPNPGMS _____	LOP _____	DATE _____	LOP _____	DATE _____

Oakland Independence
Support Center, Inc.



580 - 18th St.
P.O. Box 70010, Sta. D
Oakland, CA 94612-0010
510/465-7624
Fax 510/465-4905

JAMES W. SWEENEY
Executive Director, C.E.O.

**ALAMEDA COUNTY ENVIRONMENTAL
HEALTH SERVICES**

**ENVIRONMENTAL PROTECTION DIVISION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
Telephone (510) 567-8700 Fax (510) 337-9335**

FAX COVER SHEET

DATE: 10/16, 19 96

TO: CHRISTOPHER STEVENS
VST FUND

FAX # (916) 227-4349

Total number of pages including cover sheet 5

FROM: DALE KLETTE

NOTE:

PLEASE RESPOND BY FAX ONLY. (510) 567-6880

COST/BENEFIT ANALYSIS COPY.

(SMILE) HAVE A NICE DAY
DO SOMETHING FOR OUR ENVIRONMENT



FAX TRANSMITTAL

To DALE KLETTEKE Page 1 of 4
ALAMEDA COUNTY HEALTH CARE Date 10.15.96
Fax No. (510) 337-9335

From JEFF CHRISTOFF Phone No. (510) 676-0911
Fax No. (510) 676-0116
VOILEMAIL (915) 512-6566

Message
HERE'S THE INFO YOU
REQUESTED. THANKS
FOR YOUR HELP.

BPS CONCORD
1057 Shary Circle
Concord, CA 94518
510-676-0911
510-676-0116 FAX

FACSIMILE TRANSMISSION

To: Mr. Dale Klettke

Fax Number: 510-337-9335

From: David Kleesattel

Date: 9-27-96

Subject: Blue Print Services: 1700 Jefferson St., Oakland

Project Number: 11295 012

Number of pages (including this cover sheet): 5

Original to follow by mail: Yes No

Remarks:

Dale - Attached is a copy of the cost analysis that you requested. The original will follow in the mail.

If you have any questions, please call me. My direct phone # is 415-278-2107.

Do you have E-Mail? If so, do you prefer receiving electronic versions of documents?

cc: _____

Transmitted by: _____

If you do not receive all pages, please call (415) 543-8422

The information contained in this facsimile is intended only for the use of the named recipient. It may contain privileged and confidential information. If you are not the intended recipient, you are notified that any dissemination, distribution or copying of this facsimile is prohibited. If you have received this facsimile in error, please immediately notify us by telephone and return the original to us at the address below by mail. We will reimburse you for postage. Do not disclose the contents to anyone. Thank you.



Harding Lawson Associates
Engineering and Environmental Services
150 Fourth Street, Suite 527
San Francisco, CA 94103 — (415) 543-8422

FAX (415) 777-9706

Harding Lawson Associates

ENVIRONMENTAL
PROTECTION
96 SEP 30 PM 3: 03



September 26, 1996

11295 012

Dale Klettke, Hazardous Materials Specialist
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, #250
Alameda, California 94502-6577

STD
4/198

Preliminary Cost/Benefit Analysis
City Blue Groundwater Treatment System
1700 Jefferson Street
Oakland California

Dear Mr. Klettke:

At your request, Harding Lawson Associates (HLA), on behalf of Blue Print Services (BPS), has prepared this letter to present a summary of a preliminary cost/benefit analysis of the City Blue Groundwater Treatment System (City Blue). This system is owned by BPS; consulting and operation and maintenance are provided by HLA. This report is submitted in response to your letter dated August 1, 1996, requesting an estimate of the cost of the extraction and treatment of groundwater compared to amount by weight of product removed.

Since remediation activities began, approximately 3,800 pounds of hydrocarbons have been removed from the subsurface. The initial removal cost per pound of hydrocarbon was approximately \$130. However, since the initial cost of investigation and the capital cost for the treatment system has been realized, the current remediation cost per pound of hydrocarbon is approximately \$35.

BACKGROUND

The property presently occupied by BPS formerly was the site of a gasoline service station. In October 1987 HLA documented the removal of three underground storage tanks (USTs) from the site. At that time holes were noted in the removed USTs and field observation indicated there had been a release of fuel into the soil and possibly groundwater. Subsequent investigations by HLA revealed that the soil and groundwater under and adjacent to the USTs contained substantial quantities of leaded gasoline. HLA advanced 6 soil borings during this investigation, three of which were converted to groundwater monitoring wells; MW-1, MW-2, and MW-3. The investigation of the subsurface revealed that the site consisted of brown silty to clayey sand to approximately 20 to 25 feet below ground surface (bgs) overlaying a ten to six foot thick gray sand unit. The gray sand overlays a stiff silty clay at 30 to 35 feet bgs. The groundwater in the upper 35 feet consists of a unconfined aquifer with top of groundwater being encountered at 24 to 26 feet bgs. At that time it was established that the typical groundwater gradient direction was north to northeast. In November, 1987, Monitoring well MW-2 was abandoned because of its interference with construction activities. Since that time because of the small gradient value, it has been difficult to accurately calculate the gradient and directions of the groundwater flow. In August, 1988 Monitoring well MW-5 was constructed offsite to monitor offsite migration. Between October 1987 and March 1991, BPS

September 24, 1996
11295 012
Dale Klettke
Alameda County Environmental Health
Page 2

employees manually removed an estimated 2,300 gallons of free-phase product from monitoring well MW-1 located downgradient of the former USTs. After conducting a treatment feasibility study in 1990 the groundwater treatment system was constructed along with two extraction wells, MW-1A and MW-4, also downgradient of the former USTs. In April, 1996 monitoring well MW- 6 was constructed southwest of the site to provide additional data for the analysis of groundwater gradient and flow direction. Groundwater elevation data gathered since then show a southern direction to the groundwater flow. HLA believes this apparent reversal of the gradient is the result of dewatering activities being performed at two construction sites located within a block to the south of the site.

TREATMENT SYSTEM

City Blue has a groundwater extraction and treatment system which has been in operation since June 1992. The system consists of two groundwater extraction wells equipped with air actuated submersible pumps. These pumps remain idle until filled with available fluid. When the pump becomes full, a switch activates, allowing air supplied by a compressor to displace the liquid in the pump. The groundwater is conveyed to an oil water separator where the free-phase product is separated for storage into a product convault. The groundwater then enters a 3,000 gallon polyurethane tank (bioreactor) where the hydrocarbon constituents are further reduced through an aerobic bioremediation process. During the bioremediation process, nutrient and air are injected into the tank. The groundwater in the bioreactor is constantly recirculated to allow continual mixing of the air, nutrient, a petroleum hydrocarbons. The groundwater is processed in batches of approximately 500 gallons which, after treatment, are pumped from the bioreactor, through sand filters to remove the suspended solids and then through a series of liquid phase activated carbon filters to remove the remaining hydrocarbons. After passing through a series of carbon filters the water is discharged into the sanitary sewer under a permit from East Bay Mud Utility District.

The system discharges between 700 and 1,600 gallons a day depending on groundwater elevations which effect the rate at with water enters the pumps. This equates to a combined gallon per minute (gpm) rate of approximately 0.5 to 1 gpm from the two wells. While the extraction rates of the two pumps is not individually metered, it has been observed in the field that extraction well MW-4 produces substantially more the extraction well MW-1A.

ROUTINE OPERATION AND MAINTENANCE COST

There are regular overhead costs associated with the running of the City Blue system. These costs include nutrient for the bioreactor, electricity to run the compressor and pumps, carbon filters, and weekly labor charges. Electricity costs are less than \$100 per month. The 180 pound poly activated-carbon filter cost 249 dollars plus 100 dollars for disposal. The carbon filters are anticipated to treat 150,000 gallons before reaching %100 saturation, however due to reduced efficiency caused by biomass accumulation within the carbon filters the actual treatment efficiency has been significantly lower. Carbon vessel replacement is presently taking place approximately every 3 months. Regular visits to the site by HLA personnel are necessary as the sand and carbon filters must be backwashed weekly because of accumulated biological growth which could lead to system shutdown. Additional cost are primarily associated trouble shooting and fixing electrical or mechanical problems. The discharge pump and the recycle pump have both been replaced once each since the system began operation.

September 24, 1996
11295 012
Dale Klettke
Alameda County Environmental Health
Page 3

Operation cost associated with City Blue also include extensive sampling. The system effluent characteristic are checked every forty thousand gallons a per agreement with EBMUD. This entails collecting samples from carbon filter stream to be analyzed for total petroleum hydrocarbons as gasoline (TPH-gas) and benzene, toluene, ethylbenzene, and xylenes (BTEX). The present cost of each analysis is 55 dollars per sample. The sample results are used to judge the saturation level of the carbon filters to predict when replacement is necessary. Discharge limits set by EBMUD include:

- Benzene <math><5 \mu\text{g/l}</math>
- Toluene <math><5 \mu\text{g/l}</math>
- Ethylbenzene <math><5 \mu\text{g/l}</math>
- Xylenes <math><5 \mu\text{g/l}</math>

SYSTEM MODIFICATIONS

Several modifications have been made to the treatment system from its original design. Improvements to the separator tank were necessary to keep it from fouling with biomass by replacing the coalescing unit on January 8, 1993. High level switches were installed or replaced to insure system shutdown in the event of a system malfunction on several occasions since the treatment system has been on line. An additional carbon filter was in line to provide three carbon drums in series. After recovering little or no free-phase product since December 1994; on June 27, 1995 the separator and convault were disconnected from the system, allowing groundwater to enter the bioreactor directly from the well pumps. Extraction well pumps were retrofitted from top intake to bottom intake pumps to extract dissolved hydrocarbon as opposed to free product.

PRODUCT REMOVAL

Product recovery has been the main priority at the City Blue. In the first 6 months of operation the treatment system removed approximately 350 gallons of free product. The system was not fully operational from October 24, 1992 to March 3, 1994. From March 3 1994 to January 1995, an additional 230 gallons of product were removed. During this time, MW-1 was occasionally checked for free product and any found was removed by manual bailing. Product levels in MW-1 were typically 1 to 2 foot thick during this period. Records indicate after January 1995, free product was no longer being recovered by the system. Substantial amounts of free product was also no longer being found in MW-1.

In June 1996 free product was observed on the surface of the bioreactor contents. A check of MW-1 revealed 1.5 feet of free product in the well. Free product has been manually bailed from MW-1 on a weekly bases since that time. Approximately 45 gallons of free product has been removed from MW-1 and placed in the convault in 1996.

Between July 1992 and September 1996 the City Blue treatment system has removed approximately 625 gallons of free-phase product (gasoline) from the groundwater. Assuming a value of 0.7 for the specific gravity of gasoline, this would calculate to approximately 3,500 pounds of gasoline removed.

September 24, 1996
11295 012
Dale Klettke
Alameda County Environmental Health
Page 4

From bio-reactor influent concentration data, an additional 300 pounds of gasoline in dissolved phase is estimated to have been removed by the bio-reactor and carbon filters. It is estimated that the total amount gasoline extracted from the groundwater at the site since the system started is approximately 3,800 pounds.

REMEDIATION COST

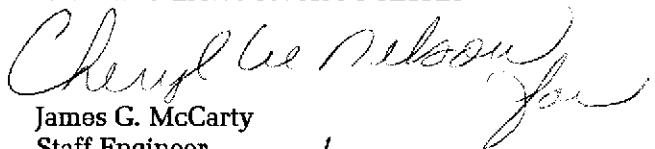
Remediation cost for this analysis are based on the amount that BPS has received from the State Underground Tank Cleanup Fund plus the \$10,000 deductible. To date, BPS has been found to be eligible and received a total of \$393,864 from the fund. This includes costs through April 1995. Including non-refundable expenses the total cost of remediation incurred by BPS are estimated to be approximately 550,000 dollars.

CONCLUSION

Based on HLA's estimates of costs to extract TPH-gas from the groundwater at the City Blue site as compared to the estimated weight of TPH-gas extracted, it is estimated that the cost per unit weight is about \$130 per pound of hydrocarbon. Free-phase product is still being observed and removed from monitoring well MW-1. Both MW-1A and MW-4 are removing gasoline saturated groundwater. Cost to operate the system in 1996 have been primarily nutrient, carbon filters, laboratory analysis, permit fees, and system operation and maintenance provided by HLA. The 1996 cost is estimated at approximately 30,000 dollars to date or about 3,500 dollars a month. Based on the last influent sample results to the system, the current estimated dissolved hydrocarbon removal rate is 35 pounds per month. An additional 70 pounds of free-phase product is being removed a month from MW-1. The current cost per unit weight is to significantly lower than the above mentioned figure or about 35 dollars per pound of hydrocarbon removed.

Yours very truly,

HARDING LAWSON ASSOCIATES



James G. McCarty
Staff Engineer



David R. Kleesattel
Registered Geologist

DRK/JGM/mlw 11295/020485L.DOC

cc: Jeff Christoff
Blue Print Service Company
1057 Shary Circle
Concord California 94518

Harding Lawson Associates



STD
4148

September 11, 1996

11295.012

Mr. Dale Klettke, CHMM
Alameda County Health Care Services
1131 Harbor Bay Pkwy, #250
Alameda, California 94502-6577

Blue Print Service Company
1700 Jefferson Street
Oakland, California

Dear Mr. Klettke:

Harding Lawson Associates (HLA) is requesting an extension of the due date for the cost-benefit analysis of the existing groundwater treatment system located at 1700 Jefferson Street in Oakland, California. We anticipate that HLA can submit this report to you by September 27, 1996. Based on our telephone conversations, we understand that this revised schedule will be acceptable.

HLA appreciates your assistance with this issue. If you have any questions please call me at (415) 453-8422.

Yours very truly,

HARDING LAWSON ASSOCIATES

A handwritten signature in cursive script, appearing to read 'David Kleesattel', written over the typed name.

for David Kleesattel, RG
Project Manager

DRK/jmv 112951020450L.DOC

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, DIRECTOR

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

STID 4148

August 1, 1996

Mr. Jeff Christoff
Blue Print Service Company
1057 Shary Circle
Concord, CA 94518

RE: BLUE PRINT SERVICE COMPANY, 1700 JEFFERSON STREET, OAKLAND, CA

Dear Mr. Christoff:

This office is in receipt of and has completed review of the case file for this site, up to and including the July 25, 1996, Harding Lawson Associates (HLA) "Quarterly Report April 1, 1996 through June 30, 1996".

This letter is in specific reference to the existing biodegradation groundwater treatment system which began operation in June 1992. Groundwater is pumped from extraction wells MW-1A and MW-4 for treatment in a 3,000-gallon bioreactor tank. The treated water from the bioreactor passes through three carbon adsorption vessels before being discharged to the sanitary sewer under an East Bay Municipal Utilities District (EBMUD) Wastewater Discharge Permit (Account No. 500-68191).

As stated in the HLA July 25, 1996 report, groundwater samples collected from the two extraction wells, MW-1A and MW-4, had visible hydrocarbon sheens. However, it appears from the analytical data obtained from the quarterly groundwater sampling events, that the concentrations of petroleum hydrocarbons detected in the groundwater samples collected from extraction well MW-1A, have decreased only slightly, and in some instances are slightly greater than those detected before the pump and treat system was installed in June 1992.

In addition, the pump and treat system does not appear to be controlling the hydrocarbon plume, as documented by the high concentrations of petroleum hydrocarbons which have consistently been detected in the down gradient monitoring well MW-5.

Therefore you are requested to submit a cost/benefit analysis of the existing biodegradation pump and treat system, within 45 days of the date of this letter, or no later than September 16, 1996. This analysis should include a cost per unit weight of petroleum hydrocarbons removed to date. The results from the cost/benefit analysis will be evaluated to determine whether this system should be discontinued, and whether other remediation options should be evaluated.

Mr. Jeff Christoff
RE: Blue Print Service Facility, Oakland, CA
August 1, 1996
Page 2 of 2

Please be advised that this letter constitutes a formal request for technical reports pursuant to California Water Code Section 13267(b) and Health and Safety Code Sections 25299.37 and 25299.78.

If you have any questions, please feel free to contact me directly at (510)567-6880.

Sincerely,



Dale Klettke, CHMM
Hazardous Materials Specialist

c: Thomas Peacock, LOP manager--files
David Kleesattel, Harding Lawson Associates, 1855 Gateway Blvd., Suite 500, Concord,
CA 94520
Christopher Stevens, UST Fund

4148p&t.dkt

FACSIMILE TRANSMISSION

To: Dale Klettke

Fax Number: 510-337-9335

From: Rosemary Wood

Date: Re-sent 2/29/96

Subject: Blue Print Services, Oakland

Project Number:

Number of pages (including this cover sheet): 3

Original or copy to follow by mail: Yes No

Remarks:

Dale, this was sent to the incorrect fax no. yesterday - apologies. I will call you early next week to set up a conference call with our people. Thanks

Rose Wood
415-884-3135

(WEDS)
(TUES)

cc:

Transmitted by: TRW

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Harding Lawson Associates
Engineering and Environmental Services
105 Digital Drive, P.O. Box 6107
Novato, CA 94948 — (415) 883-0112

HLA FAX (415) 884-3300

OFFICE MEMORANDUM

To: Dale Klettke, Alameda County Health Care Services
From: Rosemary Wood *REW*
Date: February 28, 1996
Subject: Blue Print Service Company, 1700 Jefferson Street, Oakland, California
Project Number: 00291 1

Thank you for the opportunity to discuss this site with you on Thursday last week. As you requested, I have put together some of the questions we have with reference to the risk-based corrective action (RBCA)-based human health risk assessment (RA) you requested to be conducted for this site in your letter to Mr. Jeff Christoff dated January 24, 1996. Discussing these issues at this stage will greatly assist us in planning our upcoming RA effort. When you have considered these questions, I would like to set up a conference call for myself and one or two colleagues, and yourself and your colleague.

First, we assume that the following exposure pathways will be quantitatively evaluated:

- Inhalation of vapors from groundwater in ambient outdoor air by hypothetical offsite resident receptors (child and adult)
- Inhalation of vapors from groundwater in indoor air by hypothetical offsite resident receptors (child and adult)
- Inhalation of vapors from groundwater in indoor air by hypothetical offsite commercial worker receptors.

We assume that there is no current or expected use of the impacted aquifer for drinking water or other domestic uses, and that groundwater is the only medium for quantitative evaluation.

Second, we assume that we will quantify risk estimates for benzene as the only chemical of potential concern (COPC). Because benzene is classified as a Group A carcinogen and has been detected in the highest concentrations to date in offsite monitoring well MW-5, it will drive both the human health RA and future groundwater remedial efforts at the site.

Third, we propose to conduct vapor flux measurements at selected offsite exposure points rather than conducting vapor flux modeling. These measurements will likely be collected in conjunction with the offsite groundwater investigation detailed in Harding Lawson Associate's (HLA's) work plan dated January 22, 1996. HLA is presently waiting for the City of Oakland to approve our encroachment permit application for the offsite groundwater investigation. We consider that vapor flux



Harding Lawson Associates
Engineering and Environmental Services
105 Digital Drive, P.O. Box 6107
Novato, CA 94948 — (415) 883-0012

OFFICE MEMORANDUM

measurements, in addition to the appropriate indoor and outdoor air dispersion models, will provide exposure point concentrations (EPCs) that are substantially more accurate than those that can be provided by modeling alone. Risk estimates based on EPCs developed in this way are likely to provide a more realistic evaluation of actual exposure conditions for the receptors.

Thank you for your consideration of these issues. I will call you later this week to set up the conference call. If you have any questions or concerns, please call me at (415) 884-3135.

RW:mb/MH44659.mem-RISK

cc: Teri Copeland
Dave Scrivner

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



ARNOLD PERKINS, DIRECTOR
RAFAT A. SHAHID, DEPUTY DIRECTOR

DEPARTMENT OF PUBLIC HEALTH
499 Fifth Street
Oakland, California 94607
(510)

STID 4148

January 25, 1996

Mr. Jeff Christoff
Blue Print Service Company
1057 Shary Circle
Concord, CA 94518

RE: BLUE PRINT SERVICE COMPANY, 1700 JEFFERSON STREET, OAKLAND, CA

Dear Mr. Christoff:

This office is in receipt of and has completed review of the case file for this site, up to and including the January 22, 1996, Harding Lawson Associates (HLA) "Work Plan, Offsite Groundwater Investigation".

The objectives of this work plan is to further delineate the lateral extent of soil and groundwater hydrocarbon impact, and to evaluate the possibility of other plumes impacting the above referenced site. The petroleum hydrocarbons which have been detected beneath the site consist of a mixture of gasoline constituents. The distribution of the petroleum hydrocarbons have been detected in two primary phases: adsorbed in the soils and dissolved in the groundwater.

It is my understanding that one additional groundwater monitoring well (MW-6) will be installed on the west side of Jefferson Street. Subsequently, the results of the MW-6 well installation, gradient determination, and analysis of groundwater samples collected from all five wells (MW-1A, MW-3, MW-4, MW-5 and MW-6), will be used to select the locations and number of subsequent offsite data points. These offsite data points will be selected for the installation of temporary well points (TWPs), which will then be sampled in an attempt to define the lateral extent of the plume.

This work plan is approved with the stipulation that groundwater samples be analyzed for TPHg, BTEX and methyl-tert-butyl-ether (MTBE). In addition, a minimum of one soil sample should be collected from each boring (MW-6 and the TWPs) and analyzed for TPHg, BTEX and MTBE.

These soil samples should be collected as close as possible to the soil-groundwater interface. The analytical data obtained from these collected soil samples can be used to define the lateral extent of offsite petroleum hydrocarbon impacted soils.

Mr. Jeff Christoff
RE: Blue Print Service Facility, Oakland, CA
January 25, 1996
Page 2 of 2

Please notify this office at least 72 hours in advance of field operations in order that I may schedule time to be on site.

If you have any questions, please feel free to contact me directly at (510)567-6880.

Sincerely,



Dale Klettke, CHMM
Hazardous Materials Specialist

c: Thomas Peacock, LOP manager--files
bc David Scrivner, Harding Lawson Associates, 1855 Gateway Blvd., Suite 500, Concord,
CA 94520

4148wpok.dkt

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



ARNOLD PERKINS, DIRECTOR
RAFAT A. SHAHID, DEPUTY DIRECTOR

STID 4148

January 24, 1996

Mr. Jeff Christoff
Blue Print Service Company
1057 Shary Circle
Concord, CA 94518

Alameda County CC4580
Environmental Health Services
1131 Harbor Bay Pkwy., #250
Alameda CA 94502-6577
(510)567-6700 FAX(510)337-9335

RE: BLUE PRINT SERVICE COMPANY, 1700 JEFFERSON STREET, OAKLAND, CA

Dear Mr. Christoff:

This office is in receipt of and has completed review of the case file for this site, up to and including the January 16, 1996, Harding Lawson Associates (HLA) "Quarterly Report".

Review of the analytical data indicate that groundwater samples collected from all four (4) monitoring wells have exhibited elevated levels of total petroleum hydrocarbons as gasoline (TPHg) and the aromatic hydrocarbons benzene, toluene, ethyl benzene and total xylene isomers (BTEX). In addition, the extent of the petroleum hydrocarbon contamination has not been sufficiently defined. Of particular interest are the extremely high concentrations of benzene in groundwater sampled from off-site groundwater monitoring well MW-5, located in the "confirmed" down-gradient direction from the former underground storage tank (UST) excavation. Laboratory analysis of groundwater sampled from this well detected 13,000 ug/L (ppb) benzene for the December 13, 1995 sampling event. This benzene concentration, as well as those concentrations detected in monitoring well MW-1A, exceed the 1E-04 Tier 1 Risk-Based Screening Level (RSBL) of 7,400 ug/L (ppb) for vapor intrusion from groundwater to buildings, as published in the ASTM ES 38-94 document entitled "Emergency Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites" for the commercial/industrial receptor scenario.

For your information, the ASTM ES 38-94 guidance covers risk-based corrective action (RBCA) that is a consistent decision-making process for the assessment and response to subsurface contamination, based on the protection of human health and environmental resources. The RBCA process utilizes a tiered approach where assessment and remediation activities are appropriately tailored to site-specific conditions and risks whose flexibility allows for a more cost-effective approach for petroleum fuel releases.

At this time you are requested to have a qualified consultant evaluate the human health risk following the ASTM standard approach to assure that all gasoline constituents are within acceptable levels for the protection of human health. If these levels are not deemed appropriate, you will be required to provide a work plan detailing additional risk-based corrective action to be performed to remediate this site to such acceptable levels, or otherwise mitigate perceived risk.

Mr. Jeff Christoff
RE: Blue Print Service Facility, Oakland, CA
January 24, 1996
Page 2 of 2

This risk-based site evaluation is due no later than 90 days from the date of this letter, or by April 24, 1996.

For your information, I have recently taken over management of this case from Thomas Peacock of this office. Please feel free to contact me directly at (510)567-6880 with any questions or concerns about the content of this letter.

Sincerely,



Dale Klettke, CHMM
Hazardous Materials Specialist

5015
c: **Thomas Peacock, LOP manager--files**
Ravi Arulanantham, PhD, Regional Water Quality Control Board
Gil Jensen, Alameda County District Attorneys Office
David Scrivner, Harding Lawson Associates, 1855 Gateway Blvd., Suite 500, Concord,
CA 94520

4148rbca.dkt

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

2101 WEBSTER STREET, Suite 500

OAKLAND, CA 94612

Tel: (510) 286-1255

FAX: (510) 286-1380

BBS: (510) 286-0404



CLAIM # 000605

ANNA TORRES

(916) 227-4380
P. Wheeler -0743
C. Stuenkel -4519

January 5, 1996

MEMORANDUM

To: San Francisco Bay Area Agencies Overseeing UST Cleanup and Other Interested Parties

Subject: Regional Board Supplemental Instructions to State Water Board December 8, 1995,
Interim Guidance on Required Cleanup at Low-Risk Fuel Sites

These supplemental instructions are intended for the regulatory and technical audience¹ to expand on the interim guidance provided in the December 8, 1995, letter from Walt Pettit, Executive Director of the State Water Resources Control Board regarding the findings of the report entitled "Recommendations to Improve the Cleanup Process for California's Leaking Underground Fuel Tanks (LUFTs)" issued by the Lawrence Livermore National Laboratory (LLNL). Mr. Pettit's letter urges cleanup agencies to proceed aggressively to close low risk soil only cases and not to require active remediation of low risk groundwater cases.

The LLNL report indicates that bioremediation of petroleum is an important factor in stabilizing plumes and may be the only remedial activity necessary in the absence of free product. After a review of existing literature, white papers submitted to the SB1764 committee, and an extensive study of leak cases statewide, the LLNL report found that petroleum plumes tend to stabilize close to the source, generally occur in shallow groundwater and rarely impact drinking water wells in the state.

It is in light of these findings and the "lessons learned" over the past ten years in San Francisco Bay Region that these supplemental instructions are written. Strategies are presented for closing low risk soil only cases and managing low risk groundwater impact cases utilizing natural bioremediation as the preferred remedial alternative.

These two classes of sites, low risk soils and low risk groundwater, are not intended to include the whole universe of petroleum leaks. There are higher risk sites that may require immediate action and remediation to protect human health and the environment. The responsibility still lies with the discharger for investigation of the subsurface to gather the data necessary to make these decisions. It is the responsibility of the regulator to only request that information which is required to make the necessary regulatory decisions regarding the site.

It is the responsibility of everyone in the process, particularly consultants and regulators, to keep up with current research on site investigation, fate and transport of contaminants, analytical methods, and other topics that affect the decision making process. Training and education should be a high priority for all parties participating in the site cleanup process. The State and Regional Boards will be providing training to the local agencies and others affected. In addition, consulting by the Regional Board's toxicologist, Dr. Ravi Arulanantham, is available on a limited basis to local agencies.

¹ Additional supplemental information is also provided from the Regional Board in the form of a Fact Sheet in a "Question and Answer" format.

Subject: Supplemental Instructions to State Water Board December 8, 1995,
Interim Guidance on Required Cleanup at Low Risk Fuel Sites
January 5, 1996 / Page 4

LOW RISK GROUNDWATER CASE

Definition

- 1) The leak has been stopped and ongoing sources, including free product, have been removed or remediated (see Low Risk Soils Case Definition #1). ✓
- 2) The site has been adequately characterized (see Low Risk Soils Case Definition #2).

The presence or absence of horizontal and vertical conduits which could act as preferential pathways for the dissolved plume should be evaluated as a part of the site characterization process.

- 3) The dissolved hydrocarbon plume is not migrating. — *GW Investigation & Monitoring*
The LLNL report found that petroleum plumes in the subsurface tend to stabilize once the source is removed. Natural biodegradation of hydrocarbons is the main reason why this stability occurs.

Chemical concentrations of hydrocarbons in groundwater that decrease or do not change with time are the best indicators of a stable plume. Comparison of background and hydrocarbon plume concentrations of inorganic ions such as oxygen, iron, nitrate, sulfate, and others, can provide evidence of biodegradation at a given site. These data may not be required to determine plume stability but can supplement other lines of evidence.

Stable or decreasing plumes often display short term variability in groundwater concentrations. These effects are due to changes in groundwater flow, degradation rates, sampling procedures, and other factors which are inherently variable. This behavior should not necessarily be construed as evidence of an unstable plume but may be the natural variations of a stable plume in the environment.

- 4) No water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted. ✓
- 5) The site presents no significant risk to human health. — *Risk Assessment*

For this analysis, the groundwater ingestion pathway need not be considered if the groundwater is not currently used as a source of drinking water or projected to be used within the life of the plume. (See Low Risk Soils Case Definition #5)

- 6) The site presents no significant risk to the environment. — *Risk Assessment*

RBCA has no specific guidance for evaluating environmental risk although the basic framework is appropriate if site specific exposure pathways and ecological receptors are included. If the site has a potential to significantly impact surface water, wetlands, other sensitive receptors, it should not be considered low risk. (See Low Risk Soils Case Definition #6)

Management Strategy

- 1) Passive bioremediation should be the preferred remedial alternative unless there is a compelling reason to do otherwise.

A partial list of reasons that may justify active remediation are listed below:

Subject: Supplemental Instructions to State Water Board December 8, 1995,
Interim Guidance on Required Cleanup at Low Risk Fuel Sites
January 5, 1996 / Page 5

- Groundwater within the plume is likely to be used before natural biodegradation is projected to complete the cleanup.
- Sensitive receptors have been identified and are projected to be adversely impacted.
- The plume is migrating significantly.
- Another remedial alternative is shown to be more cost effective.

Generally, if any of these conditions or others deemed to be compelling are met, a more aggressive remedial approach may be appropriate.

2) Monitor the site to determine plume stability and the effectiveness of the remedial strategy. —

*may need
some offsite
wells*

Monitoring is necessary to determine if site conditions will remain stable or improve over time. One hydrologic cycle (four quarters) of monitoring data is usually considered to be the minimum necessary to determine site conditions. This assumes depth to groundwater has significant seasonal variation and that no longer term variation occurs. If little seasonal fluctuation is expected, then one year of monitoring may not be required. Conversely, if depth to groundwater is expected to change significantly from year to year due to droughts, adjacent pumping, or other factors, then one year of monitoring may not be adequate.

Data from adjacent or nearby sites may be useful in determining groundwater fluctuations and other regional aquifer characteristics. Frequency of monitoring and the number of monitoring points may be adjusted after site characterization is completed. At many existing sites, these data may already have been collected.

Coordinated &
Prepared by:

Kevin L. Graves, P.E.
Morse, P.E.
Associate Water Resources Control Engineer
January 5, 1996

Concur: Stephen I.

Chief, Toxics Cleanup Division
January 5, 1996

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

June 7, 1995
STID 4148

Blue Print Service Co.
ATTN: Mr. Jeff Christoff, Operations Manager
149 - 2nd St.
San Francisco, CA 94105

RE: 1700 Jefferson St., Oakland, CA 94612

Dear Jeff Christoff:

This office has received and reviewed a report dated May 11, 1995 by Harding Lawson Associates concerning the above site. Within this report was a Quarterly Report dated April 28, 1995, and a Semiannual Report dated January 11, 1995 (which this office never received), also by Harding Lawson Associates.

The following comments are regarding the Notice of Violation dated April 12, 1995:

1. Thank you for continuing with quarterly groundwater monitoring. Reports should be received by this office within 45 days of sampling. Please notify this office at least 3 days before any field work is done.
2. We recognize that the capture area of the pumping system has been described, but also recognize that the lateral extent of contamination has not been defined. We recognize that the City of Oakland has objected to your investigation on their property, but you have also said you could explore an investigation on private property. Also, you could inquire again with the City of Oakland, as you said. Please submit a proposal for what you will do to define the lateral extent of the plume.

If you have any questions or comments, please contact this office at (510) 567-6782.

Sincerely,

Thomas Peacock, Supervising HMS
Hazardous Material Division

c: Mee Ling Tung, Acting Chief - files
David Scrivner, Harding Lawson Associates, 303 Second St.,
630 North, San Francisco, 94107
Dave Deaner, SWRCB Cleanup Fund

DELIVERY RECEIPT

DATE	5 / 12 / 19 95	BPS Prod. No.:	_____
FROM:	BPS Reprographic Services		
TO:	Mr. Thomas Percock		
	1131 Harbor Bay Parkway		
	Alameda, CA. 94502		
P.O. No.:	_____	Jacket No.:	_____
Program No.:	_____	TOTAL No. of Packages:	1
Received By:	Ben Diego		

ENVIRONMENTAL PROTECTION
 95 MAY 12 AM 10:09

Must be returned to production department the same day the job is delivered.

ENVIRONMENTAL PROTECTION
 95 MAY 12 AM 10:09

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

April 12, 19954
STID 4148

Blue Print Service Co.
ATTN: Mr. Jeff Christoff, Operations Manager
149 - 2nd St.
San Francisco, CA 94105

RE: 1700 Jefferson St., Oakland, CA 94612

Notice of Violation

Dear Jeff Christoff:

This office has not received any correspondence from you or your consultant concerning this site since June 21, 1994. Although you have a remediation system installed, there are several items that you must take care of concerning the cleanup of your site, as follows:

1. There still has been **no sampling** done on **any of the 5 monitoring wells** for this site for about 9 months. You are required to submit Quarterly Reports which say what has occurred during the previous quarter, including monitoring of wells.
2. There is no data to conclude what the capture area of the treatment system is. It is not known whether or not it includes the off-site well. If it does not, because no extraction is being done from there, then the off-site contamination is not contained. **It is being allowed to migrate further off-site.** This was mentioned in previous letters dated as early as May 24, 1993.
3. Please submit a proposal for what to do to define and contain the plume.
4. This office looks forward to the next quarterly report. Please include answers to the above questions and expected further investigation to be done.
5. Items 1. through 3. above were mentioned in the last 3 letters from this office dated November 22, 1992, May 24 October 19, 1993, and March 3, 1994, yet there has not been any response to these items. Responses must be forthcoming in your next report, especially monitoring wells which have not been monitored for almost a year.

April 12, 1995
Blue Print Services Co.
1700 Jefferson St., Oakland 94612
STID # 4148
Page 2 of 2

6. Since you have been issued a letter of commitment from the Cleanup Fund it is imperative that you stay in compliance with directives of the Local Implementing Agency.

If you have any questions or comments, please contact this office at (510) 567-6782.

Sincerely,



Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: Edgar Howell, Chief - files
David Scrivner, Harding Lawson Associates, 303 Second St.,
630 North, San Francisco, 94107
Gil Jensen, Alameda County District Attorney's Office
Dave Deaner, SWRCB Cleanup Fund
Steve Morse, RWQCB

**STATE WATER RESOURCES CONTROL BOARD
DIVISION OF CLEAN WATER PROGRAMS**

2014 T STREET, SUITE 130
P.O. BOX 944212
SACRAMENTO, CALIFORNIA 94244-2120
(916) 227-4360
(916) 227-4530 (FAX)

ST10 4148



FEB 27 1995

Blue Print Service Company
149 Second St.
San Francisco, CA 94105

UNDERGROUND STORAGE TANK CLEANUP FUND, CLAIM NO. 000605, FOR SITE ADDRESS: 1700 Jefferson St., Oakland, CA 94612

The State Water Resources Control Board (SWRCB) takes pleasure in issuing the attached Letter of Commitment in an amount not to exceed **\$380,000**. This Letter of Commitment is based upon our review of the corrective action costs incurred to date and your application received on January 15, 1992 and may be modified by the SWRCB in writing by an amended Letter of Commitment.

The SWRCB will take steps to withdraw this Letter of Commitment after 90 calendar days from the date of this transmittal letter unless you proceed with due diligence with your cleanup effort. This means that you must take positive, concrete steps to ensure that corrective action is proceeding with all due speed. For example, if you have not started your cleanup effort, you must obtain three bids and sign a contract with one of these bidders within 90 calendar days. If your cleanup effort has already started and was delayed, you must resume the expenditure of funds to ensure that your cleanup is proceeding in an expeditious manner. You are reminded that you must comply with all regulatory agency time schedules and requirements. We constantly review the status of all active claims, and failure to proceed with due diligence will be grounds for withdrawal of this Letter of Commitment.

You should read the terms and conditions listed in the Letter of Commitment. Also attached you will find:

- A "Reimbursement Request Instructions" package. **You should retain this package for future reimbursement requests.** Among other information, the package includes instructions for completion of the "Reimbursement Request" form and the "Spreadsheet". These instructions must be followed when seeking reimbursement for corrective action costs incurred after January 1, 1988. Included in these instructions are samples of Reimbursement Request forms and completed Spreadsheets. Within the package also included are:
 - A "Bid Summary Sheet" to document data on bids received.
 - Recommended Minimum Invoice Cost Breakdown.
 - A "Certification of Non-Recovery From Other Sources" which must be returned before any reimbursements can be made.
- "Reimbursement Request" forms which you must use to request reimbursement of costs incurred.
- "Spreadsheet" forms which you must use in conjunction with your Reimbursement Request.
- "Vendor Data Record" (Std. Form 204) which must be completed and returned with your first Reimbursement Request.

If you have any questions regarding the Letter of Commitment or the Reimbursement Request package, please contact Blessy Torres at (916) 227-4535.

Sincerely,

Dave Deaner, Manager
Underground Storage Tank
Cleanup Fund Program

Attachments

cc: Mr. Steve Morse
California Regional Water Quality
Control Board, San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Mr. Tom Peacock
Alameda County EHD
1131 Harbor Bay Pkway, 2nd Fl
Alameda, CA 94502-6577

ST10 4148

LETTER OF COMMITMENT FOR REIMBURSEMENT OF COSTS

CLAIM NO: 000605

AMENDMENT NO: 0

CLAIMANT: Blue Print Service Company

BALANCE FORWARD: \$0

CO-PAYEE: None

JOINT CLAIMANT: None

THIS AMOUNT: \$380,000

NEW BALANCE: \$380,000

CLAIMANT ADDRESS: 149 Second St.
San Francisco, CA 94105

TAX ID/SSA NO: 94-1586288

Subject to availability of funds, the State Water Resources Control Board (SWRCB) agrees to reimburse Blue Print Service Company (Claimant) for eligible corrective action costs at Blue Print Service Company 1700 Jefferson St., Oakland, CA 94612 (Site). The commitment reflected by this Letter is subject to all of the following terms and conditions:

1. Reimbursement shall not exceed \$380,000 unless this amount is subsequently modified in writing by an amended Letter of Commitment.
2. The obligation to pay any sum under this Letter of Commitment is contingent upon availability of funds. In the event that sufficient funds are not available for reasons beyond the reasonable control of the SWRCB, the SWRCB shall not be obligated to make any disbursements hereunder. If any disbursements otherwise due under this Letter of Commitment are deferred because of unavailability of funds, such disbursements will promptly be made when sufficient funds do become available. Nothing herein shall be construed to provide the Claimant with a right of priority for disbursement over any other claimant who has a similar Letter of Commitment.
3. All costs for which reimbursement is sought must be eligible for reimbursement and the Claimant must be the person entitled to reimbursement thereof.
4. Claimant must at all times be in compliance with all applicable state laws, rules and regulations and with all terms, conditions, and commitments contained in the Claimant's Application and any supporting documents or in any payment requests submitted by the Claimant.
5. No disbursement under this Letter of Commitment will be made except upon receipt of acceptable Standard Form Payment Requests duly executed by or on behalf of the Claimant. All Payment Requests must be executed by the Claimant or a duly authorized representative who has been approved by the Division of Clean Water Programs.
6. Any and all disbursements payable under this Letter of Commitment may be withheld if the Claimant is not in compliance with the provisions of Paragraph 5 above.
7. Neither this Letter of Commitment nor any right thereunder is assignable by the Claimant without the written consent of the SWRCB. In the event of any such assignment, the rights of the assignee shall be subject to all terms and conditions set forth in this Letter of Commitment and the SWRCB's consent.
8. This Letter of Commitment may be withdrawn at any time by the SWRCB if completion of corrective action is not performed with reasonable diligence.

IN WITNESS WHEREOF, this Letter of Commitment has been issued by the SWRCB this 8th day of February, 1995.

STATE WATER RESOURCES CONTROL BOARD

BY [Signature]
Manager, Underground Storage Tank Cleanup Fund Program

BY [Signature]
Chief, Division Administrative Services

STATE USE: CALSTARS CODING: 0550-569.02 - 30530 \$ _____

B P S

REPROGRAPHIC SERVICES

June 21, 1994

Mr. Thomas Peacock
Alameda County Health Care Services
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621

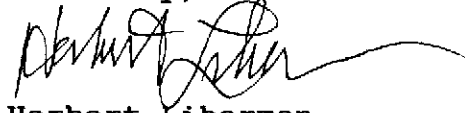
Dear Mr. Peacock:

Regarding the groundwater treatment system located at the Blue Print Service Company(BPS) facility located at 1700 Jefferson Street(City Blue) in Oakland, the attached memo describes the corrective actions that has been taken as a result of the malfunction that occurred on April 13, 1994. As a result of the efforts of Harding Lawson Associates(HLA), the groundwater treatment system has been functioning continuously since May 11,1994 without any alarm conditions or malfunctions.

Based upon the data submitted by HLA in the attached memo, and other data previously transmitted to your office, BPS feels that we are in compliance with the regulations of the groundwater treatment program. BPS requests that you communicate to the State of California Underground Storage Tank Cleanup Fund Program that we are in compliance, and eligible for dispersement of funds previously requested. Our claim number is 605 and our contact is Blessy Torres.

Your attention to this matter would be greatly appreciated. Should you need any further information, please contact me.

Sincerely,



Herbert Liberman
President

cc: David Scrivner
Harding Lawson Associates

encl.

149 Second Street
San Francisco, CA 94105
415 • 495 • 8700
415 • 495 • 2773 FAX

1147 Mission Street
San Francisco, CA 94103
415 • 431 • 8900
415 • 552 • 8576 FAX

250 Broadway
San Francisco, CA 94111
415 • 421 • 0587
415 • 391 • 9805 FAX

1700 Jefferson Street
Oakland, CA 94612
510 • 444 • 6771
510 • 444 • 1262 FAX

1057 Shary Circle
Concord, CA 94518
510 • 676 • 0911
510 • 676 • 0116 FAX

2230 Camino Ramon
San Ramon, CA 94583
510 • 866 • 7272
510 • 866 • 8498 FAX

2182 Rheem Drive
Pleasanton, CA 94566
510 • 846 • 8111
510 • 846 • 8105 FAX

1201 Main Street
Redwood City, CA 94063
415 • 368 • 1478
415 • 368 • 0465 FAX

TRANSMITTAL

To: Mr. Herbert E. Liberman
Blue Print Service Company
149 Second Street
San Francisco, California 94105

From: David F. Scrivner

Date: June 20, 1994

Subject: Groundwater Treatment System Malfunction
Blue Print Service Company Facility
1700 Jefferson Street, Oakland, California

Project Number: 11295 012

This memo serves to notify you of the corrective actions that have been taken by Harding Lawson Associates (HLA) after a malfunction of the groundwater treatment system at the Blue Print Service Company (BPS) facility at 1700 Jefferson Street in Oakland, California. The treatment system malfunction resulted in approximately 50-gallons of gasoline being released from the recovered product tank on April 13, 1994.

The Oakland Fire Department and the Alameda County Hazardous Materials Response Unit responded to the spill and contained the gasoline with absorbent materials. The treatment system was shutdown and the spilled gasoline was cleaned up that night by Erickson Inc., a hazardous materials response contractor, under HLA supervision.

The following day, HLA began diagnosing the cause of the malfunction. We discovered several electrical problems that likely caused an overflow of the oil/water separator into the recovered product tank. The recovered product tank subsequently overflowed gasoline into the parking lot and street.

HLA subcontracted an instrument and controls specialist from Calcon Systems Inc. to further troubleshoot the treatment system controls and recommend modifications. The following modifications were recommended by Calcon Systems and agreed to by HLA as being sufficient to safeguard against another such malfunction:

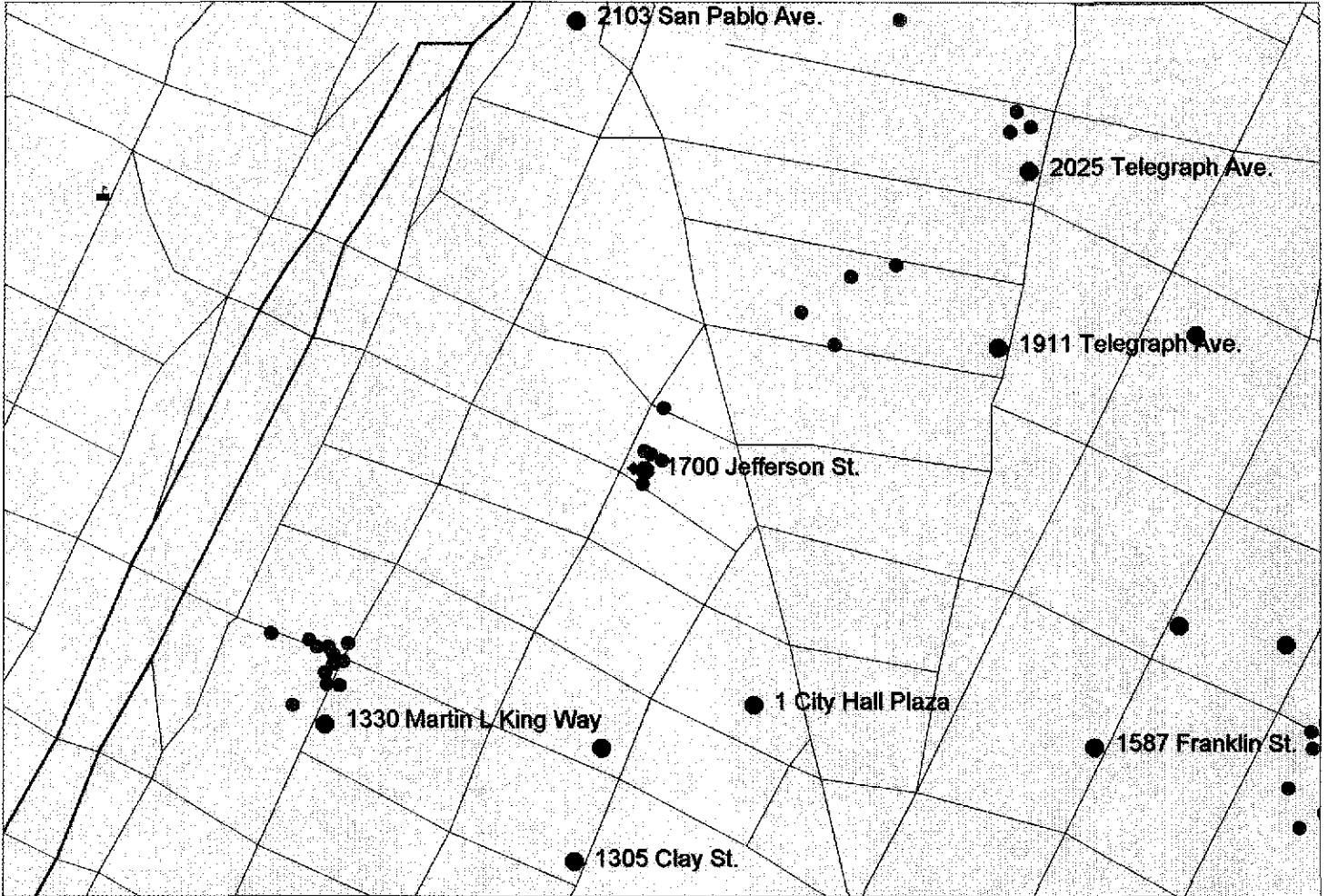
- Independent level control switches were installed in the oil/water separator and bioreactor
- A new high level switch was installed in the recovered product tank
- A new DC power supply unit for the level control switches was installed in the control panel
- A backup air solenoid valve was installed to shut-off compressed air to the pneumatic extraction pumps

These modifications were completed by Calcon Systems on April 26, 1994. HLA resumed full-time operation of the groundwater treatment system on May 11, 1994 and has maintained continuous operation since that date with no alarm conditions or malfunctions. HLA has been performing routine maintenance and monitoring the performance of the treatment system on a weekly basis.

DFS/pkp 034637P/M17



Harding Lawson Associates
Engineering and Environmental Services
1855 Gateway Boulevard, Suite 500
Concord, CA 94520 - (510) 687-9660



TRANSMITTAL

To: Mr. Thomas Peacock
 Alameda County Health Care Services
 Department of Environmental Health
 Hazardous Materials Program
 80 Swan Way, Room 200
 Oakland, California 94621

From: David F. Scrivner

Date: June 14, 1994

Subject: Blue Print Service Company Facility
 1700 Jefferson Street, Oakland, California

Project Number: 11295 012

ALCOO
HAZMAT
JUN 15 P11 2:36
SID 414
120
5/25

Harding Lawson Associates (HLA) and Blue Print Service Company (BPS) representatives would like to meet with you to discuss the ongoing groundwater remediation effort at the BPS facility at 1700 Jefferson Street in Oakland, California (City Blue). In particular, we would like to discuss:

- The current status of the remediation effort, including the treatment system effectiveness, separate phase and dissolved contaminant levels, and capture zone
- Short term and long term groundwater monitoring requirements
- Defining the lateral extent of the dissolved contaminant plume
- Groundwater remediation goals
- The status of the site with respect to the State of California Underground Storage Tank Cleanup Fund Program.

Recent submittals from HLA to Alameda County regarding the City Blue site include the most recent quarterly report dated April 29, 1994 and a letter dated March 9, 1994 responding to a notice of violation.

Please contact me at (510) 687-9660 to schedule a meeting to discuss this project. Thank you for your cooperation.

DFS/pkp 034586P/M17

cc: Mr. Jeff Christoff
 Blue Print Service Company
 149 Second Street
 San Francisco, California 94105

6-20-94
 Herb Leberman
 (415) 495-8700



Harding Lawson Associates
 Engineering and Environmental Services
 1855 Gateway Boulevard, Suite 500
 Concord, CA 94520 - (510) 687-9660

STATE WATER RESOURCES CONTROL BOARD

DIVISION OF CLEAN WATER PROGRAMS
2014 T STREET, SUITE 130
P.O. BOX 944212
SACRAMENTO, CALIFORNIA 94244-2120
(916) 227-4413
(916) 227-4530 (FAX)



4530

TRANSMITTAL OF FAX MATERIAL

Date: 4-19-94

To: Tom Peacock

Fax # (510) 569-4757

From: **Blessy Torres**
Division of Clean Water Programs
(916) 227-4535

RE: Blue Print Serv. Co.
STID # 4148
claim # 605

No. of pages 3 (including this sheet)

- For your information
- Per your request
- For your review and comments

REMARKS:

Tom, I understand that claimant has already responded
to 10/19/93 notice of violation. If claimant's response
is acceptable, please sign the attached form and
return.

Thanks!

CLAIM NO. 605

LOCAL AGENCY NO. 4148

SITE ADDRESS 1700 Jefferson St., Oakland 94612

CORRECTIVE ACTION COMPLIANCE DOCUMENTATION PAGE 3

DATE	ACTION REQUIRED/RESPONSE
2-19-87	RIs discovered.
6-17-87	3 UST'S remed.
10-1-87	UST removal rept submitted by Harding Lawson Assoc.
11-3-89	final GW investigation rept submitted by Harding.
1-15-88	Soil remediation proposal submitted " "
2-24-88	Alameda ltr to clmnt - complete GW monitoring asap.
5-25-88	Soil & GW remediation w/p submitted by Harding.
11-28-88	OFF-site Hydrogeologic Investigation rept submitted by Harding.
9-26-90	Rec'd Add'l off-site investigation rept from Harding dtd 10/4/89
2-2-90	Aquifer Testing & GW Treatment cost Feasibility Study submitted by Harding.
6-18-90	Bioremediation Treatability Study submitted by Harding.
10-24-91	Extraction/Treatment Process specs submitted by Harding.
10-15-90	Alameda ltr to clmnt - bioremediation treatment study is app'd.
8-9-92	Ltr from Harding requesting County to furnish letter stating sampling requirements.
7-17-92	Quarterly rept submitted by Harding.
10-13-92	Quarterly GW rept " " "
11-2-92	Alameda ltr to clmnt re insufficient data on Quarterly rept.
12-8-92	Ltr from Harding - next quarterly rept due 6/1/93.
1-20-93	Quarterly rept submitted by Harding.
3-22-93	Alameda ltr to clmnt - quarterly rept, still insufficient.
4-15-93	Quarterly rept submitted by Harding.
5-24-93	Alameda ltr to clmnt - must respond to comments to above rept asap.
9-9-93	Quarterly rept submitted by Harding.

CONFIRMATION OF CORRECTIVE ACTION COMPLIANCE: After reviewing the lead agency site file, the claim reviewer has determined that the claimant is in substantial compliance with corrective action requirements.

LEAD AGENCY CONCURRENCE: As of this date, the lead agency representative concurs with the determination that the claimant is in compliance with applicable corrective action requirements.

REVIEWER'S SIGNATURE: *Thomas Deaugh*

DATE SIGNED: 7-5-94

STAFF RECOMMENDATION: () APPROVED () REFERRED TO TEAM LEADER - See Comments, Page 2.

REVIEWER'S SIGNATURE: _____ DATE SIGNED: _____

Blessy

TRANSMIT REPORT

1994.07-05 20:32
 510 337 9335
 ALAMEDA CO EHS HAZ-OPS

COM No.	REMOTE STATION	START TIME	DURATION	PAGES	RESULT	USER ID	REMARKS
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7499402045

CLAIM NO. 605 LOCAL AGENCY NO. 4148
 SITE ADDRESS 1700 Jefferson St., Oakland 94612

CORRECTIVE ACTION COMPLIANCE DOCUMENTATION

PAGE 3

DATE	ACTION REQUIRED/RESPONSE
2-19-87	Ris. discovered.
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10-1-87	UST removal rept submitted by Harding Lawson Assoc.
11-3-87	Final GW investigation rept submitted by Harding.
1-15-88	Soil remediation proposal submitted " "
2-24-88	Alameda ltr to client - complete GW monitoring equip.
5-25-88	Soil + GW remediation W/P submitted by Harding.
11-28-88	Off-site Hydrogeologic Investigation rept submitted by Harding.
9-26-90	Rec'd Add'l off-site investigation rept from Harding dtd 10/4/89
2-2-90	Aquifer Testing + GW Treatment Cost Feasibility Study submitted by Harding.
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3-9-92	Ltr from Harding requesting County to furnish letter stating sampling requirements.
7-17-92	Quarterly rept submitted by Harding.
10-13-92	Quarterly GW rept " " "
11-2-92	Alameda ltr to client re insufficient data on Quarterly rept.
12-8-92	Ltr from Harding - next quarterly rept due 6/1/93.
1-21-93	Quarterly rept submitted by Harding.
3-22-93	Alameda ltr to client - quarterly rept still insufficient

Harding Lawson Associates

ALCO
HAZMAT
94 MAR 10 PM 12:44



March 9, 1994

ST 10 4148

11295-012

Mr. Thomas Peacock
Alameda County Health Care Services Agency
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, California 94621

**Groundwater Remediation
Blue Print Service Company Facility
1700 Jefferson Street
Oakland, California**

Dear Mr. Peacock:

This letter responds to your notice of violation letter dated October 19, 1993. Your letter concerned groundwater remediation and groundwater monitoring at the Blue Print Service Company (BPS) facility at 1700 Jefferson Street (City Blue) in Oakland, California. In your letter you presented five comments to be considered. A copy of your letter is attached for reference.

Your first comment concerns groundwater sampling of the five monitoring wells for this site. The four onsite monitoring wells (MW-1, MW-1A, MW-3 and MW-4) all contain **separate-phase gasoline (floating product)**. Product thicknesses were last measured in January 1994 and are tabulated along with past measurements in Table 1. We do not recommend that groundwater in these wells be sampled as long as they contain floating product as the product continues to act as a source for the dissolved hydrocarbon concentrations. We plan to resume sampling of onsite wells when they no longer contain floating product. In the meantime we will be monitoring product thicknesses, bailing floating product from MW-1 and MW-3 on a weekly basis, and sampling the groundwater entering the treatment system from extraction wells MW-1A and MW-4 on a monthly basis. The results of these activities will be presented in the next quarterly report in April 1994.

The offsite monitoring well, MW-5, was sampled on January 13, 1994. Prior to purging, MW-5 was checked for floating product with an electric interface probe and a PVC bailer. No floating product or sheen was detected. The analytical results for MW-5 show an increase in total petroleum hydrocarbons as gasoline (TPH-G), benzene, and toluene since the previous sampling event in March 1993. Over this period the groundwater treatment system was not in operation due to system upgrades. MW-5 was previously sampled in August 1991 and September 1992. The analytical results from the August 1991

March 9, 1994
11295-012
Mr. Thomas Peacock
Alameda County Health Care Services Agency
Page 2

Harding Lawson Associates

and September 1992 sampling events show a **dramatic decrease in TPH-G, benzene, and toluene concentrations over that period.** We believe that this decrease may be due to the continuous operation of the groundwater treatment system within that period. The treatment system began operating in June 1992, three months before the September 1992 sampling. **We plan to sample MW-5 on a quarterly basis in 1994 to measure the effect of the groundwater extraction and treatment system on this well.**

The second comment concerned the lack of data on the capture area of the extraction wells and whether or not it includes the offsite well, MW-5. HLA presented the results of aquifer testing and a groundwater treatment cost feasibility study for this site in a report dated February 2, 1990. HLA performed slug tests on MW-3 and MW-5 to evaluate expected short-term and long-term flow rates from extraction wells. A hydraulic conductivity estimate of 1.48 feet/day was derived from a slug test performed on MW-3. Computer simulations indicated that pumping rates from the extraction wells would likely be less than 1 gallon per minute (gpm) per well and that long-term pumping rates will likely decrease to less than 0.25 gpm per well. Additional computer simulations indicated that these pumping rates will effectively capture groundwater in the vicinity of the former UST excavation. Actual pumping rates will be measured by HLA in this quarter and presented in the next quarterly report. **We do not believe that MW-5 is within the capture area of the extraction wells.** The groundwater treatment system was primarily designed to remove the source of groundwater contamination (floating product) from beneath the site. Final remediation of dissolved hydrocarbons in groundwater will be considered after product removal has been accomplished. Due to numerous documented groundwater contaminant plumes in the area, it may not be technically feasible to fully remediate dissolved concentrations in groundwater using the present pump-and-treat system.

The third comment was a request for BPS to submit a proposal for what to do to define and contain the plume. HLA previously pursued additional offsite wells in the public right-of-way but was denied the necessary permits by the City of Oakland. **BPS and HLA would like to meet with you to discuss this issue.** In the meantime we will contact the City of Oakland to determine if they have changed their policy regarding permits for monitoring wells in the public right-of-way.

In response to your fifth comment, HLA responded to your November 2, 1992 letter in a letter dated December 8, 1992. A copy of that letter is attached.

The groundwater treatment system resumed full time operation on March 3, 1994. We will be issuing our next quarterly report in April 1994 for the period of December 31, 1993 through March 31, 1994. **After you have reviewed our quarterly report we would like to meet with you to discuss this project.**

March 9, 1994
11295-012
Mr. Thomas Peacock
Alameda County Health Care Services Agency
Page 3

Harding Lawson Associates

If you have any questions, please contact Mr. David Scrivner at (510)687-9660.

Yours very truly,

HARDING LAWSON ASSOCIATES



David F. Scrivner
Project Engineer



Cheryl Lee Nelson
Senior Environmental Scientist

DFS/prm/A14494-CT68

Attachments: Table 1. Product Thickness Measurements
October 19, 1993 Notice of Violation Letter
December 8, 1992 HLA Letter to Alameda County

cc: Blessy Torres
State of California
Underground Storage Tank Clean Up Fund Program
2014 T Street, Suite 130
P.O. Box 944212
Sacramento, California 94244-2120

Herbert Liberman
Blue Print Service Company
149 Second Street
San Francisco, California 94105

Table 1. Monitoring Well Product Thickness Measurements

Date	MW-1	MW-1A	MW-3	MW-4	MW-5
07/08/87	30	NA	0	NA	NA
07/12/89	21.6	18.6	0	25.2	0.4
06/18/92	34	NM	NM	NM	NM
07/02/92	18	NM	NM	NM	NM
07/23/92	10	NM	NM	NM	NM
08/18/92	10	NM	NM	NM	NM
09/30/92	NM	NM	4.1	NM	0
11/11/92	13	NM	2	NM	NM
01/29/93	25.2	NM	1.7	NM	NM
02/12/93	10.2	13	1.3	8.8	0
03/30/93	NM	NM	NM	NM	0.06
01/06/94	14.8	16.2	2.2	6.2	0

All measurements in inches.

NM = Not measured

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

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

March 3, 1994
STID 4148

Blue Print Service Co.
ATTN: Mr. Jeff Christoff, Operations Manager
149 - 2nd St.
San Francisco, CA 94105

RE: 1700 Jefferson St., Oakland, CA 94612

Second Notice of Violation

Dear Jeff Christoff:

This office has received and reviewed a letter dated February 11, 1994 by Harding Lawson Associates concerning the above site. The following comments are to be considered:

1. There still has been no **sampling done on any of the 5 monitoring wells** for this site for about a year. The letter just mentions how the treatment system will be put back on line. This letter does not say anything about whether the contamination is being cleaned up or not.
2. There is no data to conclude what the capture area of the treatment system is. It is not known whether or not it includes the off-site well. If it does not, because no extraction is being done from there, then the off-site contamination is not contained. **It is being allowed to migrate further off-site.** This was mentioned in the previous letter dated May 24, 1993.
3. Please submit a proposal for what to do to define and contain the plume.
4. This office looks forward to the next quarterly report. Please include answers to the above questions and expected further investigation to be done.
5. Items 1. through 3. above were mentioned in the last 3 letters from this office dated November 22, 1992, May 24 and October 19, 1993, yet there has not been any response to these items. Responses should be forthcoming in your next report, especially monitoring wells which have not been monitored for a year.

March 3, 1994
Blue Print Services Co.
1700 Jefferson St., Oakland 94612
STID # 4148
Page 2 of 2

If you have any questions or comments, please contact this office
at (510) 271-4530.

Sincerely,



Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: Edgar Howell, Chief - files
David Scrivner, Harding Lawson Associates, 303 Second St.,
630 North, San Francisco, 94107
Gil Jensen, Alameda County District Attorney's Office



February 11, 1994

11295.012

Ms. Molly Ong
East Bay Municipal Utility District
Source Control Division - Mail Slot #702
P.O. Box 24055
Oakland, California 94623-1055

**Status Report
City Blue Groundwater Treatment System
1700 Jefferson Street
Oakland, California**

Dear Ms. Ong:

This letter presents the status of the groundwater treatment system at the Blue Print Service Company facility at 1700 Jefferson Street (City Blue) in Oakland, California.

The groundwater treatment system was not in operation for the quarterly period of September 31, 1993 through December 31, 1993. We have not issued a quarterly report for this period because there was no discharge from the treatment system to the sanitary sewer for this period.

Since the end of December 1993, HLA has been making repairs and adjustments to the treatment system. We plan to resume full-scale operation before the end of February. We will notify EBMUD when repairs are complete and we are ready to resume operation. HLA will continue to monitor and sample the influent and effluent of the groundwater treatment system at City Blue on a monthly basis when the system is back in operation.

BPS personnel will maintain the system after operations resume and the workers have been trained by HLA. When the system is restarted, the biotreatment tank will not be discharged until laboratory analyses indicate that an effective microorganism population has been established to degrade the hydrocarbons to an acceptable level for carbon adsorption. The analytical results from startup activities, sampling of the offsite monitoring well MW-5, and the resumed monthly sampling schedule will be presented in the next quarterly report. MW-5 was last sampled on January 13, 1993.

February 11, 1994
11295.012
Ms. Molly Ong
Source Control Representative
Page 2

Harding Lawson Associates

If you have any questions, please contact either of the undersigned.

Yours very truly,

HARDING LAWSON ASSOCIATES



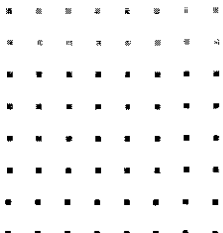
David F. Scrivner
Project Engineer

DFS/CLN/B18392-CT131

cc: Blue Print Service Company
149 Second Street
San Francisco, California 94105
Attention: Mr. Jeff Christoff

Alameda County Health Care Services
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, California 94621
Attention: Mr. Thomas Peacock

B P S



REPROGRAPHIC SERVICES

January 27, 1994

Thomas Peacock
Hazardous Material Division
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

ALCO
HAZMAT
94 JAN 31 AM 11:16

Re: 1700 Jefferson St., Oakland, CA 94612

This is to notify your office that Paul Koze is no longer with Blue Print Service Co. All further correspondence to come to the attention of Jeff Christoff, 149 2nd Street, San Francisco, CA 94105.

149 Second Street
San Francisco, CA 94105
415 • 495 • 8700
415 • 495 • 2773 FAX

1147 Mission Street
San Francisco, CA 94103
415 • 431 • 8900
415 • 552 • 8576 FAX

250 Broadway
San Francisco, CA 94111
415 • 421 • 0587
415 • 391 • 9805 FAX

1700 Jefferson Street
Oakland, CA 94612
510 • 444 • 6771
510 • 444 • 1262 FAX

1057 Shary Circle
Concord, CA 94518
510 • 676 • 0911
510 • 676 • 0116 FAX

2230 Camino Ramon
San Ramon, CA 94583
510 • 866 • 7272
510 • 866 • 8498 FAX

2182 Rheem Drive
Pleasanton, CA 94566
510 • 846 • 8111
510 • 846 • 8105 FAX

1201 Main Street
Redwood City, CA 94063
415 • 368 • 1478
415 • 368 • 0465 FAX

Looking forward to corresponding with your office.

Sincerely,
BLUE PRINT SERVICE COMPANY, INC.

Jeff Christoff
Operations Manager

JC/mbr

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

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

October 19, 1993
STID 4148

Blue Print Service Co.
ATTN: Mr. Paul Koze, President
149 - 2nd St.
San Francisco, CA 94105

RE: 1700 Jefferson St., Oakland, CA 94612

Notice of Violation

Dear Paul Koze:

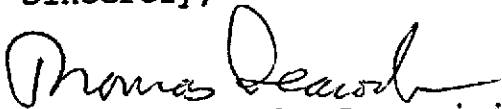
This office has received and reviewed a Quarterly Report dated September 9, 1993 by Harding Lawson Associates concerning the above site. The following comments are to be considered:

1. There was no sampling done on any of the 5 monitoring wells for this site. The only analysis was concerning the operation of the treatment system, which is apparently back in operation. This is a very inadequate report because it does not say anything about whether the contamination is being cleaned up or not.
2. There is no data to conclude what the capture area of the treatment system is. It is not known whether or not it includes the off-site well. If it does not, because no extraction is being done from there, then the off-site contamination is not contained. It is being allowed to migrate further off-site. This was mentioned in the previous letter dated May 24, 1993.
3. Please submit a proposal for what to do to define and contain the plume.
4. This office looks forward to the next quarterly report. Please include answers to the above questions and expected further investigation to be done.
5. Items 1. through 3. above were mentioned in the last 2 letters from this office dated November 22, 1992 and May 24, 1993, yet there has not been any response to these items. Responses should be forthcoming in your next report, especially monitoring wells which have not been monitored for a year.

October 19, 1993
Blue Print Services Co.
1700 Jefferson St., Oakland 94612
STID # 4148
Page 2 of 2

If you have any questions or comments, please contact this office
at (510) 271-4530.

Sincerely,



Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: Edgar Howell, Chief - files
David Scrivner, Harding Lawson Associates, 303 Second St.,
630 North, San Francisco, 94107
Gil Jensen, Alameda County District Attorney's Office

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 24, 1993
STID 4148

Blue Print Service Co.
ATTN: Mr. Paul Koze, President
149 - 2nd St.
San Francisco, CA 94105

RE: 1700 Jefferson St., Oakland, CA 94612

Dear Paul Koze:

This office has received and reviewed a Quarterly Report dated April 15, 1993 by Harding Lawson Associates concerning the above site. The following comments are to be considered:

1. The results for the off-site well, MW-5 showed an increase in TPHg to 74,000 ppb and an increase in benzene to 16,000 ppb. This is in the downgradient direction and 1 block off-site. This level is extremely high. The lateral extent of contamination has not been defined because this is the only well in that direction.
2. There is no data to conclude what the capture area of the treatment system is. It is not known whether or not it includes the off-site well. If it does not, because no extraction is being done from there, then the off-site contamination is not contained. It is being allowed to migrate further off-site.
3. Although there are results of analysis in this report, there are no recommendations for what to do about the above situation. The off-site well also had a measured product thickness of 0.06 inches. Please submit a proposal for what to do to define and contain the plume.
4. This office looks forward to the next quarterly report. Please include answers to the above questions and expected further investigation to be done.
5. Items 1. through 3. above were mentioned in the last letter from this office dated November 22, 1992, yet there has not been any response to these items. Responses should be forthcoming in your next report, which will be due very soon.

May 24, 1993
Blue Print Services Co.
1700 Jefferson St., Oakland 94612
STID # 4148
Page 2 of 2

Thank you for your cooperation. If you have any questions or comments, please contact this office at (510) 271-4530.

Sincerely,



Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: Richard Hiett, RWQCB
Edgar Howell, Chief - files *EBA*
David Scrivner, Harding Lawson Associates, 303 Second St.,
630 North, San Francisco, 94107

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

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

March 22, 1993
STID 4148

Blue Print Service Co.
ATTN: Mr. Paul Koze, President
149 - 2nd St.
San Francisco, CA 94105

RE: 1700 Jefferson St., Oakland, CA 94612

Dear Paul Koze:

This office has received and reviewed a letter dated December 8, 1992 and a Quarterly Report by Harding Lawson Associates dated January 20, 1993 concerning the above site. The following comments are to be considered:

1. There was not any groundwater monitoring data for the three active wells on-site and the 1 off-site well. Quarterly monitoring should be accomplished (re-implemented as soon as possible) so that the site contamination may be properly evaluated. The only measure of present contamination levels is the average of 230 ppm of TPHg entering the bioreactor. There is no measure of the off-site contamination.
2. The last analysis of the off-site well MW-5 showed a level of 20,000 ppb benzené. This is in the downgradient direction and 1 block off-site. This level is extremely high. The lateral extent of contamination has not been defined because this is the only well in that direction.
3. There is no data to conclude what the capture area of the treatment system is. It is not known whether or not it includes the off-site well. If it does not, because no extraction is being done from there, then the off-site contamination is not contained. It is being allowed to migrate further off-site.
4. This office looks forward to the next quarterly report. Please include answers to the above questions and expected further investigation to be done.
5. Items 1. through 3. above were mentioned in the last letter from this office dated November 22, 1992, yet there has not been any response to these items. Responses should be forthcoming in your next report, which will be due very soon.

March 22, 1993
Blue Print Services Co.
1700 Jefferson St., Oakland 94612
STID # 4148
Page 2 of 2

Thank you for your cooperation. If you have any questions or comments, please contact this office at (510) 271-4530.

Sincerely,



Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: Richard Hiett, RWQCB
Edgar Howell, Chief - files
David Scrivner, Harding Lawson Associates, 303 Second St.,
630 North, San Francisco, 94107

R>compute all InspTm from ndaily where activity between 100 and 300 and Insp+
+>dat between 02/09/92 and 02/15/92
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+>dat between 02/02/92 and 02/08/92
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Maximum = 2.5
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Average = 0.75
Std Dev = 0.549459
Variance = 0.301905

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Maximum = 2.
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Variance = 0.205515

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



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

December 8, 1992

11295-012

Alameda County Health Care Services Agency
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, California 94621

Attention: Mr. Thomas Peacock
Supervising Hazardous Materials Specialist

Gentlemen:

**Groundwater Remediation System
City Blue Production Facility
1700 Jefferson Street
Oakland, California**

This letter responds to your letter, dated November 2, 1992 to Blue Print Service (BPS) Company. Your letter discussed site remediation and the groundwater treatment system at the BPS facility at 1700 Jefferson Street in Oakland, California.

BACKGROUND

The groundwater treatment system was constructed and began operating on June 1, 1992. Harding Lawson Associates (HLA) has been operating, monitoring, and maintaining the system since the startup date, in accordance with our proposal to BPS dated January 31, 1992.

Air and water samples from the treatment system were collected by HLA for chemical analysis daily for the first three days of operation; weekly for the first three weeks; and monthly thereafter. The monitoring wells are being sampled semi-annually. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) and for benzene, toluene, ethyl benzene, and xylenes (BTEX). Quarterly reports presenting the analytical results were issued on July 17, 1992 and October 13, 1992. The Alameda County Health Care Services Agency (ACHCSA) is included on the distribution list for these reports. The next quarterly report is due January 15, 1993.

Your letter to BPS outlined four site remediation issues that you would like HLA to address. The first issue concerned quarterly monitoring of the onsite and offsite wells. You requested that quarterly monitoring be performed so that the site contamination may be properly evaluated. In a letter dated March 9, 1992, HLA submitted the

December 8, 1992
11295-012
Mr. Thomas Peacock
Alameda County Health Care Services Agency
Page 2

sampling schedule for the treatment system to the ACHCSA for comment and review. Our letter responded to questions by Mr. Paul M. Smith that were raised during a telephone conversation with HLA on February 20, 1992. In that letter we presented the sampling schedule and rationale and requested that the ACHCSA comment on the sampling schedule if they found it to be insufficient. We did not receive any comments from your office regarding the sampling program. We have followed the sampling program described above since the system began operating.

HLA has monitored product thicknesses in the onsite wells since the system began operating. The substantial amount of floating product in the onsite wells (several inches to several feet) has precluded sampling of these wells. The offsite monitoring well, MW-5, is the only well that does not contain floating product. The next scheduled sampling of the offsite monitoring well is in March 1993.

The second issue concerned high benzene levels in Monitoring Well MW-5, which is the only downgradient offsite monitoring well. MW-5 was last sampled on September 30, 1992. The laboratory analyses detected TPH-G at a concentration of 51 parts per million (ppm) and the BTEX compounds at concentrations of 13, 5.9, 1.4, and 2.6 ppm, respectively. These concentrations have decreased since the previous sampling event (referenced in your letter) performed on August 2, 1991. The laboratory analyses from the August 1991 event detected TPH-G at a concentration of 120 ppm and the BTEX compounds at concentrations of 20, 14, 1.9, and 4.9 ppm, respectively.

We are aware that the lateral extent of contamination has not been adequately defined. Negotiations with the City of Oakland for permits to install additional offsite wells in public right-of-ways has been unsuccessful. The city has denied our requests for such permits. We may pursue installing wells on private properties in the area after product recovery has been accomplished and final remediation to cleanup levels has begun.

The third issue concerned the lack of data on the capture area of the extraction wells and whether the capture area includes dissolved contaminants near Monitoring Well MW-5. The groundwater treatment system was primarily designed to remove the source of groundwater contamination (free product) from beneath the 1700 Jefferson Street site. The removal of the source has decreased contaminant concentrations in Monitoring Well MW-5 as documented above and in the quarterly reports. Final remediation of dissolved contaminants in groundwater will be considered after product removal has been accomplished. The treatment system may need to be modified at that time and may include soil-gas venting. Due to numerous documented groundwater contaminant plumes in the area, it may not be technically feasible to fully remediate dissolved concentrations in groundwater using the present pump-and-treat system.

The fourth issue concerned a release of gasoline from the system that solicited a response from the Oakland Fire Department. On October 24, 1992, the level control switches in the oil/water separator failed, resulting in overfilling of the recovered

December 8, 1992
11295-012
Mr. Thomas Peacock
Alameda County Health Care Services Agency
Page 3

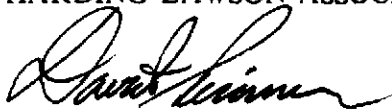
product tank with gasoline and water. The recovered product tank overflowed into the BPS parking lot and into the street. The Oakland Fire Department was notified by an anonymous caller, who in turn contacted the manager of the BPS facility. The facility manager shut down the treatment system. HLA was notified of this incident on Monday, October 26, 1992 when an HLA technician visited the site for routine maintenance. The treatment system contractor determined that the level control switches had been fouled by a sludge buildup consisting of emulsified gasoline and water. The contractor cleaned the switches however the system has not yet been fully operational since that time. Modifications to the system to reduce the chance of a recurring failure are pending. HLA expects the system to be fully operational by January 1993.

HLA is preparing an operation manual that will include contingency plans for automatic shutdowns, accidental spills, leaks, and equipment failure. Presently, a contingency/information sheet is posted in the treatment system area. This sheet includes emergency shutdown procedures, emergency telephone numbers, and contacts at HLA and BPS.

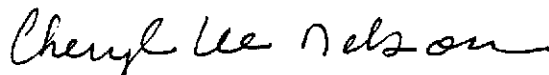
Your office will be receiving the next quarterly report in January 1993. We hope this letter provides the information you request at this time. If you require additional information, please do not hesitate to contact either of the undersigned.

Yours very truly,

HARDING LAWSON ASSOCIATES



David F. Scrivner
Project Engineer



Cheryl Lee Nelson
Senior Hydrogeologist

DFS/CLN/dm/B13547-CT79

cc: Blue Print Services Company
149 Second Street
San Francisco, California 94105
Attention: Mr. Jeff Christoff

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

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

November 2, 1992
STID 4148

Blue Print Service Co.
ATTN: Mr. Paul Koze, President
149 - 2nd St.
San Francisco, CA 94105

RE: 1700 Jefferson St., Oakland, CA 94612

Dear Paul Koze:

This office has received and reviewed the Quarterly Report by Harding Lawson Associates dated July 17, 1992 concerning the above site. The following comments are to be considered:

1. There was not any groundwater monitoring data for the three active wells on-site and the 1 off-site well. Quarterly monitoring should be accomplished (re-implemented as soon as possible) so that the site contamination may be properly evaluated. The only measure of present contamination levels is the average of 150 ppm of TPHg entering the bioreactor. There is no measure of the off-site contamination.
2. The last analysis of the off-site well MW-5 showed a level of 20,000 ppb benzene. This is in the downgradient direction and 1 block off-site. This level is extremely high. The lateral extent of contamination has not been defined because this is the only well in that direction.
3. There is no data to conclude what the capture area of the treatment system is. It is not known whether or not it includes the off-site well. If it does not, because no extraction is being done from there, then the off-site contamination is not contained. It is being allowed to migrate further off-site.
4. On October 24, 1992 there was a leak from the treatment system which required a response from the Oakland Fire Department, Engine # 12. The system was subsequently shut down. Please submit a report concerning this occurrence including corrective actions taken and expected time to get the system operating again.
5. The above mentioned report is the last one. It has been another quarter. This office looks forward to the next quarterly report. Please include answers to the above questions and expected further investigation to be done.

November 2, 1992
Blue Print Services Co.
1700 Jefferson St., Oakland 94612
STID # 4148
Page 2 of 2

Enclosed is a format the Regional Board would like followed for site closure.

Thank you for your cooperation. If you have any questions or comments, please contact this office at (510) 271-4530.

Sincerely,

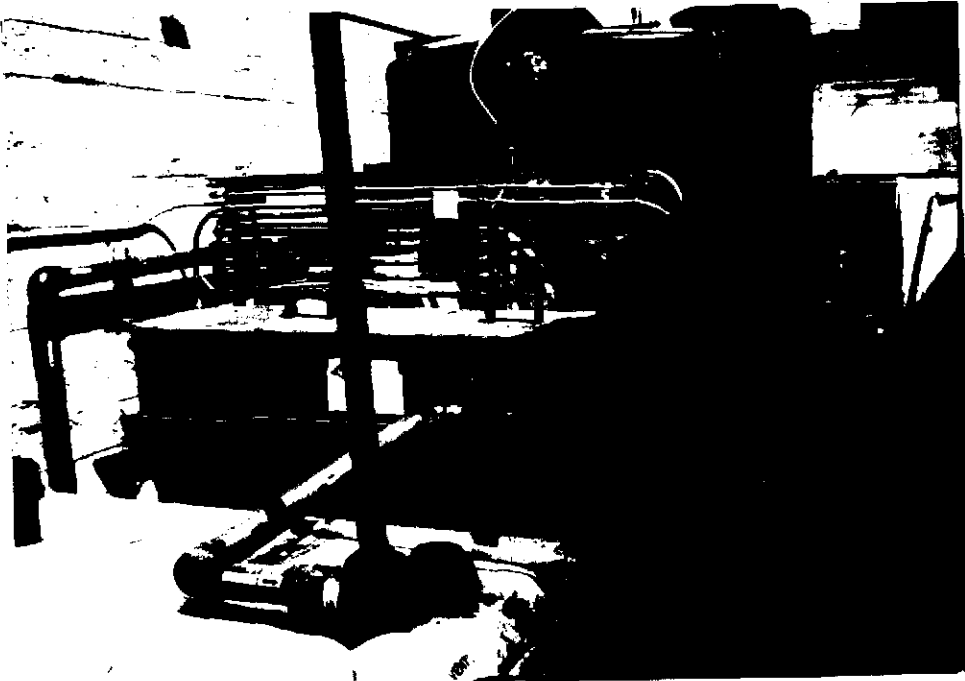


Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: Richard Hiett, RWQCB
Edgar Howell, Chief - files
David Scrivner, Harding Lawson Associates, 303 Second St.,
630 North, San Francisco, 94107
Enclosure

PHOTO RECORD

SITE NAME: City Blue Prints
SITE ADDRESS: 1700 Jefferson Street
PHOTOGRAPHER: S. SEERY AFFILIATION: ACDET
DATE OF PHOTO: Sept. 22, 1992 PROGRAM: LOP



NNW N NNE
NW PHOTO **NE**
WNW TAKEN ENE
W TAKEN E
WSW LOOKING... ESE
SW SE
SSW S SSE

Description:
View of C-W treatment system, located on the SE end of CBS building.

**SEE ADDITIONAL
Photo murals (2)**

NNW N NNE
NW PHOTO NE
WNW TAKEN ENE
W TAKEN E
WSW LOOKING... ESE
SW SE
SSW S SSE

Description:
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LIMIT-ONE ROLL PER ENVELOPE

CLERK

FILE LETTER

NAME Sony
 ADDRESS _____
 CITY _____ PHONE _____
 TIME IN _____ TIME PROMISED 11

218943
 DATE _____
 2235
 CK

KODAK	FUJI	KONICA	3M	OTHER	SLIDES	MOVIES

FILM SIZE	EXPOSURES	REPRINTS AND ENLARGEMENTS		
<input type="checkbox"/> DISC	<input type="checkbox"/> 12	NO. OF NEG. STRIPS _____	QUAN.	NEG. NO.
<input type="checkbox"/> 110	<input type="checkbox"/> 15	<input type="checkbox"/> REPRINTS	_____	_____
<input type="checkbox"/> 126	<input type="checkbox"/> 20	<input type="checkbox"/> 5x7	_____	_____
<input type="checkbox"/> 135	<input type="checkbox"/> 24	<input type="checkbox"/> 8x10	_____	_____
_____ OTHER	<input type="checkbox"/> 36	<input type="checkbox"/> 8x12	_____	_____
_____ OTHER	_____ OTHER	<input type="checkbox"/> 11x14	_____	_____

SPECIAL INSTRUCTIONS <u>DEVELOP ONLY</u>	NO. OF PRINTS <u>268</u>	LAB USE ONLY	
		@	<u>349</u>
		@	
		@	<u>356.60</u>
		TAX	<u>1.50</u>
	TOTAL		



ORDER REPRINTS & ENLARGEMENTS OF YOUR FAVORITE PHOTOS

City Blue - 1700 Jefferson

ST 10 - 4148

10-28-92

John Weir -

HayRat 12 - 444-3322

Next works ~~Thurs~~ ^{Wed.} - leak

for treatment was fixed.

Danding Lawson is consultant

CPT Gaston

10-30-92

O.F.D. #12

Spill was 10-24-92

17th & San Pablo Gasoline in Street
Groundwater Recovery System overflowed.



HOUSING FOR INDEPENDENT PEOPLE, INC.

A NON PROFIT HOUSING DEVELOPMENT CORPORATION

Serving California

San Jose Office Phone (408) 283-2200

FAX (408) 283-2249

Los Angeles Office Phone (213) 362-0622

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Paul Woodall
Byron Brawley
Trinidad Gonzalez

October 26, 1992

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

Dear Mr. Smith,

This letter is to restate my request for a copy of the most recent available quarterly monitoring report from the City Blue Print Co. site, located at 1700 Jefferson Street in Oakland. I understand that there is a \$71 per hour fee to review the file and a \$1 per page copying charge.

Thank you for your attention to this matter.

Sincerely,

Dan Sawislak
Project Manager

**Alameda County Department of Environmental Health
Hazardous Materials Division**

80 Swan Way, Rm. 200, Oakland, CA 94621
Ph: 510-271-4320

BILLING FOR SERVICES

LOP
SID# 4148

A. Site Name City Blue Print Company Phone (408) 283-2200
 Site Address 1700 Jefferson St Oakland 94612
(If no address, description of area) Number Street City Zip
 Prior Business Name _____ Prior Owner's Name _____

B. Service Requestor Dan Sawislak Housing for Independent People
Contact Person Company Name Phone
 Billing Address P.O. Box 90148 San Jose CA 95109
Number Street City Zip

<u>Category of Service</u>		#Hours		\$
<input type="checkbox"/> Site Search		<u>1</u>	x \$ <u>71</u> /Hr	\$ <u>71.00</u>
<input type="checkbox"/> File Search			x \$ _____ /Copy	\$ _____
<input type="checkbox"/> Other _____			x \$ _____	\$ _____
TOTAL CHARGE:				\$ <u>71.00</u>

REMARKS: site search remediation file for City Blue Print Co.
at above address 1:35 - 2:30

You will receive an invoice in accordance with Article 11 of Chapter 6, Title 3 of the Ordinance Code of Alameda County

Service Requestor Dan Sawislak [Signature] Date 9/18/92
printed name signature
 HazMat Specialist Paul Smith [Signature] Date 9/18/92
printed name signature

9/18/92

Scott, Tom

I met with Don Sawislak with Housing for Independent People who is trying to purchase a property for low income housing beneath which is contaminated (see MW-5). As a consequence he can't get a loan. I realize that this is not our problem, but noticed while reviewing the file that there appears to be additional work & the resumption of quarterly monitoring required at the site.

Please refer to an HLA report ^{March 9, 1992} (1st paragraph) where I had orally requested that quarterly monitoring be re-initiated. ~~was requested by me~~. Cheryl Nelson ^{HLA} basically said she was going to continue with semi annually.

Also I don't think they ever found the lateral extent of soil or groundwater contamination ^{off} ~~at this site~~. MW-5 shows 20,000 ppb benzene 1 block downgradient.

I am encouraged by the pump & treat system which has recently been installed & made operative dealing with the onsite pollution but I'm thinking they need a boost to pursue the offsite nature & extent of the problem.

Please see me if you feel so inclined

Thanks

Paul

10/27/92
Tom,
As per our Triage
system this case
needs work. Please
see me if you feel
so inclined

Paul

**Alameda County Department of Environment & Health
Hazardous Materials Division**

80 Swan Way, Rm. 200, Oakland, CA 94621
Ph: 510-271-4320

BILLING FOR SERVICES

STD# 4148

A. Site Name City Blue Print Company Phone _____
 Site Address 1700 Jefferson St. Oakland CA 94612
(If no address, description of area) Number Street City Zip
 Prior Business Name _____ Prior Owner's Name _____

B. Service Requestor Don Sawistak Housing for Independent People Inc. (408) 283-2200
Contact Person Company Name Phone
 Billing Address 25 East Hedding St. San Jose, CA 95112
Number Street City Zip

<u>Category of Service</u>		#Hours	x \$	/Hr	\$
..... Site Search		1		71	
..... File Search					
..... Other					
		Other			
					TOTAL CHARGE: \$ 71.00

REMARKS: Site search review of July 17, 1992 and Dec 12, 1991

You will receive an invoice in accordance with Article 11 of Chapter 6, Title 3 of the Ordinance Code of Alameda County

Service Requestor Don Sawistak [Signature] Date 10/27/92
printed name signature
 HazMat Specialist Paul M. Smith [Signature] Date 10/27/92
printed name signature



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Bruce Ellithorpe
Paul Woodall
Byron Brawley
Trinidad Gonzalez

September 1, 1992

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

82-1-11 0-28376

Dear Mr. Smith,

Your co-worker, Scott Seary asked me to write you concerning my request to access a file on a leaking tank site in Oakland. The site is at the City Blue Print Co., located at 1700 Jefferson Street in Oakland. I understand that there is a \$71 per hour fee to review the file, and I am willing to pay that fee.

My interest in the site is that the organization I work for, Housing for Independent People, is in process of applying for a loan to purchase a building at 1825 Jefferson Street. A Phase One report found that waste product from the City Blue Print site is likely to have migrated under the building we are interested in purchasing. However, Mr. Seary indicated that remediation of the leak was in progress.

My hope is to learn more about this leak and the regulatory action being implemented in order to make more informed decisions concerning this purchase. Please call me at 408-283-2225 to let me know how I may view this file.

Thank you for your attention to this matter.

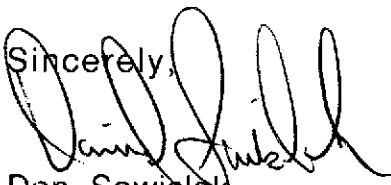
Sincerely,

Dan Sawislak
Project Manager

Table 1
City Blue
Groundwater Analytical Data

Well Number	Date of Sampling	Detectable Product	TPH as Gasoline (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)
MW-1A	08/02/91	1 foot of product	350	17000	31000	3000	22000
MW-1	08/02/91	1 foot of product	1700	22000	80000	19000	120000
MW-3	08/02/91	4 inches of product	74	1600	4600	670	4300
MW-4	08/02/91	1.5 foot of product	86	1500	6200	1000	7300
MW-5	08/02/91	Gasoline odor	120	20000	14000	1900	4900

MDC

50
ppb 5
ppb

ppm = parts per million
ppb = parts per billion

4/30/92

= Jennifer,
Did you end up w/ this case? PS

FAX TRANSMITTAL

Date: 4/29/92

HARDING LAWSON ASSOCIATES
Engineering and Environmental Services

Marathon Plaza
303 Second Street, Suite 630 North
San Francisco, California 94107
(415) 543-8422
FAX: (415) 777-9706

TO: Paul Smith
FAX #: (510) 569-4757
FROM: David Scrivner
SUBJECT: City Blue Remediation
NUMBER OF PAGES (INCLUDING COVER SHEET): 1

HLA JOB NUMBER: 18106012.04 NON-CHARGEABLE: _____

INSTRUCTIONS/REMARKS: The bioremediation system at City Blue, 1700 Jefferson St in Oakland is near completion. EBMUD discharge permit should be issued on May 11. The system should be operational by May 4. Please call if you have any questions.

new start up date Mon June 1, 1992

COPIES TO:

1. _____ 2. _____

IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CALL (415) 543-8422

Received/Sent by: [Signature]
Time: 3:20



92117 12 512:11

March 9, 1992

18106,012.04

Alameda County Health Care Services
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, California 94621

Attention: Mr. Paul M. Smith
Hazardous Materials Specialist

Gentlemen:

**Groundwater Remediation System
City Blue Production Facility
1700 Jefferson Street
Oakland, California**

This letter responds to questions and comments raised in our telephone conversation of February 20, 1992 regarding the groundwater remediation system for the City Blue Production facility (City Blue) at 1700 Jefferson Street in Oakland, California.

During our conversation, you requested that HLA re-initiate quarterly monitoring of the wells that do not have floating product, and include other wells when floating product has been removed by the remediation system. HLA currently monitors all wells semiannually. The bioremediation system will extract groundwater from Monitoring Wells MW-1A and MW-4, which are 4-inch-diameter wells. MW-1 is no longer functioning properly, MW-2 has been abandoned, and **MW-3 had floating product at the time of the last sampling event.** MW-5 would be the only candidate for quarterly monitoring. HLA will sample groundwater extracted from MW-1A and MW-4 two hours after remediation system startup, daily for four days, weekly for the first three weeks, and monthly thereafter (Table 1). If our sampling schedule is not sufficient, please furnish HLA with a letter stating your sampling requirements.

Another issue raised during our conversation was chemical analysis for halocarbons. We understand that you would like groundwater analyzed for halocarbons at least once. In July 1990, a groundwater sample from MW-1A was analyzed for semivolatile organics (EPA Method 625); organochlorine pesticides, PCBs (EPA Method 608), and priority pollutant metals. The results of these analyses are attached for your review. X Analysis for purgable halocarbons (EPA Method 601/8010) has not been performed for this project. HLA judges that the analyses performed to date are sufficient and that additional analyses for halocarbons will not result in any new significant findings.

March 9, 1992
18106,012.04
Mr. Paul M. Smith
Alameda County Health Care Services
Page 2

In our conversation, you had asked if the remediation system was designed with a contingency for leaks. The remediation system will be designed with leak detection, and the bioreactor tank will be mounted on skids with a containment lip around the base. HLA, in conjunction with the installation contractor, will write an Operations Manual. The manual will include contingency plans for automatic shutdowns, accidental spills, leaks, and equipment failure.

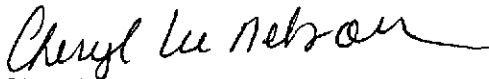
We hope this letter presents the information you request at this time. If there is any additional information you require, please do not hesitate to contact either of the undersigned.

Yours very truly,

HARDING LAWSON ASSOCIATES



David F. Scrivner
Project Engineer



Cheryl Lee Nelson
Senior Hydrogeologist

DFS/CLN/dm/B13547-CT79

Attachment: Laboratory Reports
Table 1 - City Blue Groundwater Remediation System Schedule for
Sampling Measurement, and Analysis

cc: Blue Print Services Company (without attachments)
149 Second Street
San Francisco, California 94105
Attention: Mr. Paul Koze



December 12, 1991

18106,012.04

Alameda County Health Care Services
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, California 94621

Attention: Mr. Paul M. Smith
Hazardous Materials Specialist

Gentlemen:

**Status of Groundwater Remediation System
City Blue Production Facility
1700 Jefferson Street
Oakland, California**

As requested in our phone conversation of December 5, 1991, this letter presents a brief background of site investigations and summarizes the status of the groundwater remediation system for the City Blue Production Facility (City Blue) at 1700 Jefferson Street in Oakland, California. Attached to this letter are recent groundwater monitoring data and the specifications for the extraction/treatment system.

BACKGROUND

In February 1987, Harding Lawson Associates (HLA) collected soil samples for chemical analyses from five soil borings at the site to assess whether gasoline had leaked to the soil from three gasoline underground storage tanks (USTs) located beneath the subject property. The USTs were used by a former gasoline service station on the northwestern portion of the property. Total Petroleum Hydrocarbon (TPH) concentrations were detected in the soil ranging from 46 parts per million (ppm) to 3300 ppm, confirming that the tanks had leaked.

no the usts still remain? no

In June 1987, HLA observed the removal of the USTs, and the excavation and aeration of contaminated soil from within the tank backfill. The affected soil was aerated to below detectable concentrations and used as backfill for the excavation. Also during this phase of the investigation, six groundwater wells were installed to assess the impact of TPH on groundwater. Free-floating product was found in three of the onsite wells.

result for post aeration?

In October 1989, HLA performed additional investigations at the site to evaluate historical uses of the property. The site history review and contact with regulatory

91 DEC 15 PM 09 19

December 12, 1991
18106,012.04
Mr. Paul M. Smith
Alameda County Health Care Services
Page 2

agencies identified several potential hydrocarbon source areas upgradient of the site. An offsite soil-gas survey was attempted in the streets surrounding the site; however, thick reinforced concrete beneath the asphalt prevented penetration of the soil gas probes.

In February, 1990, HLA performed an aquifer test and prepared a groundwater treatment cost feasibility study for the site. On the basis of our study, HLA recommended product removal and bioremediation as the most cost effective groundwater treatment. In June, 1990, HLA performed a bioremediation treatability study and used the data generated from this study as the basis for design of the full scale treatment system.

Since February 1990, HLA has obtained air and sewer permits from the Bay Area Air Quality Management District (BAAQMD) and East Bay Municipal Utility District (EBMUD), respectively. ~~Groundwater wells at the site were last sampled on August 2, 1991.~~ Table 1 summarizes the analytical results; the laboratory reports are attached. Also attached is HLA's report titled "City Blue Extraction/Treatment Process Specifications, Oakland, California". not

CURRENT PROJECT STATUS

Harding Construction Services (HCS) developed a bid package for this project and submitted this package to six qualified contractors. The bids are due back to HCS on Friday, December 13, 1991. HCS will evaluate the bids and present their recommendations to City Blue within 1 week of bid receipt. HCS will then assist City Blue in negotiating a contract with the selected contractor. Depending upon the negotiation process a contractor may be selected within approximately 3 to 4 weeks. Once selected, the contractor should begin work within 3 weeks and complete the project within 4 to 6 weeks. We therefore estimate that the system will be operational in approximately 13 weeks or approximately early March 1992. HLA is required to give EBMUD 30 days notice of intent to discharge to the sewer system. HLA will at that time also notify you of our intent to operate the system and arrange a site visit with you.

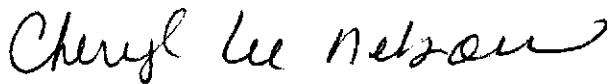
As we discussed, the Department of Toxic Substances Control (DTSC) has not responded to our request for clarification on whether the new proposed permit-by-rule regulations will apply to this project. HLA has therefore assumed that these regulations will apply once they are promulgated and has taken steps to ensure compliance with these regulations. As stated within the proposed regulations, the owner/operator of the system will have 30 days from promulgation of the regulations to file the notice of intent and 90 days to file the site-specific information forms. Copies of all correspondence with the DTSC will be forwarded to your office.

December 12, 1991
18106,012.04
Mr. Paul M. Smith
Alameda County Health Care Services
Page 3

We hope that this letter presents the information you request at this time. If there is any additional information you require please do not hesitate to contact either of the undersigned.

Yours very truly,

HARDING LAWSON ASSOCIATES



Cheryl Lee Nelson
Senior Hydrogeologist



Mark G. Filippini
Engineering Geologist

CLN/MGF/dm/B12920-CT73

cc: Blue Print Services Company (without attachments)
149 Second Street
San Francisco, California 94105
Attention: Mr. Paul Koze

Attachments: Table 1 - Groundwater Analytical Data
Laboratory Reports
HLA report titled "City Blue Extraction/Treatment System, Treatment
Process Specification, Oakland, California" dated October 24, 1991.

Table 1
City Blue
Groundwater Analytical Data

Well Number	Date of Sampling	Detectable Product	TPH as Gasoline (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)
MW-1A	08/02/91	1 foot of product	350	17000	31000	3000	22000
MW-1	08/02/91	1 foot of product	1700	22000	80000	19000	120000
MW-3	08/02/91	4 inches of product	74	1600	4600	670	4300
MW-4	08/02/91	1.5 feet of product	86	1500	6200	1000	7300
MW-5	08/02/91	Gasoline odor	120	20000	14000	1900	4900

MDE

50
ppb 5
ppb

ppm = parts per million
ppb = parts per billion

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



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

FACSIMILE TRANSMITTAL

TO:

846-8105 Floor/Room # _____
Fax Phone Number

Name: Jeff Christoff Title/Section _____

Agency: Blue Print Service Co

Address: Pleasanton office

Phone #: ()

FROM:

_____ Floor/Room # _____
Fax Phone Number

Date: 10/30/91 Time Sent: 3:25

Sender: Paul Smith Title/Section _____

Phone #: () 271-4320

Number of Pages Including Transmittal Sheet: 3

Special Instructions/Comments:

Jeff,
Enclosed is the last correspondence I have of this site.
Please direct any response to my attention.
Thank you
Paul

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



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

October 15, 1990

Mr. Paul Koze
President
Blue Print Service Company
149 Second Street
San Francisco, CA 94105

415-495-8700

**RE: City Blue Production Facility
1700 Jefferson Street, Oakland, CA 94612**

Dear Mr. Koze:

We have received the bioremediation treatment study and proposal for the above site. Given the level of petroleum contamination identified in the earlier reports and the presence of free floating product we are concerned that the treatment system which you propose may be considered a treatment process for hazardous waste.

The remediation proposal is approved providing that:

- 1) The State Department of Health Services is contacted and the permit requirements are worked out with them. According to the CA Code of Regulations Title 22, Article 4, Section 66370 a permit is required for the treatment of hazardous waste.
- 2) Submit reports of all work performed at this site to:

Lester Feldman
San Francisco Regional Water Quality Control Board
1800 Harrison Street, Suite 700
Oakland, CA 94612

Howard Hatayama
CA Department of Health Services
2151 Berkeley Way, Annex 7
Berkeley, CA 94704
- 3) You are requested to notify this department when the treatment system is expected to be operative.
- 4) An outline of all proposed remediation activity planned for soil and water contamination at this site and a schedule for the commencement of this activity be provided to this office.
- 5) A check for a total of \$500.00, made payable to the County of Alameda, is submitted to this office before any further action is taken regarding your proposals for this site.

Blue Print Service Co.
October 15, 1990
Page 2 of 2

A review of our files indicates that the initial deposit of \$ 750.00 submitted to this office on January 29, 1988 has been exhausted. This deposit system covers the expenses incurred by County personnel in the performance of their oversight responsibilities. A record is kept of the hours which an Alameda County employee works on a project; and the deposit is reduced at a rate of \$ 60.00 per hour. Following the completion of the project, the remaining balance of the deposit will be refunded to you. This deposit/refund policy is authorized by Section 3-141.6 of the Ordinance Code of the County of Alameda.

You are requested to respond to the above issues within 30 days of the receipt of this letter. If you have any questions concerning this matter please contact Paul Smith, Hazardous Materials Specialist, at (415) 271-4320.

Sincerely,

Paul M. Smith

Paul M. Smith

cc:

Richard McCartney, Harding Lawson Associates
Gil Jensen, Alameda County District Attorney, Office of Consumer
and Environmental Affairs
Lester Feldman, SFRWQCB
Howard Hatayama, DHS
Charlene Williams, DHS
Sonya Lowe, DHS

Steven Inn 659-1970 Ala Co H2O Dist.

(2185)

Broadway
3505 ~~meadow~~

- 1 permit
- 2 variance
- 3 permit by rule

October 3, 1990
 Mr. Jeff Christoff
 East Bay Manager
 Blue Print Service Company
 1057 Shary Circle
 Concord, CA 94518

RE: **City Blue Production Facility**
 ← 1700 Jefferson Street, Oakland, CA 94612

Dear Mr. Christoff:

We have received the bioremediation treatment study and proposal for the above site. Given the level of petroleum contamination identified in the earlier reports and the presence of free floating product there is some concern by this office that the treatment system which you propose may be considered a treatment process for hazardous waste.

According to Title 22, Article 4, Section 66370 a permit for treatment is required for the treatment of hazardous waste onsite. Whether or not a hazardous waste exists at this site should be determined using the Article 11 self classification system or existing data specific to this site to compare with previously examined classification data. We recommend that you clarify the permitting issue with the Department of Health Services.

The remediation proposal concept is approved providing that:

An outline of all proposed remediation activity planned for soil and water contamination at this site and a schedule for the commencement of this activity be provided to this office.

A review of our files indicates that the deposit \$ 750.00 submitted to this office on January 29, 1988 at the beginning of the initiation of the underground ^{removals} at the above site has been exhausted. This deposit is to cover the expenses incurred by County personnel in the performance of their oversight responsibilities. A record is kept of the hours which an Alameda County employee commits to a project to a protect and the deposit is reduced at a rate of \$ 60.00 per hour. This policy is authorized by Section 3-141.6 of the Ordinance Code of the County of Alameda.

A check for a total of \$500.00, made payable to the County of Alameda, must be submitted to this office before any further action can be takes regarding your proposals for this site. Following the completion of the project, the remaining balance of the deposit will be refunded to you.

1 state costs permit we worked out w them
 notify when treatment will be .

or manifest documents disposal to this office. You are requested to respond to this letter within 10 days; or by August 7, 1990

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

Sincerely,

Paul M. Smith
Hazardous Materials Specialist

cc:

Gil Jensen, Alameda County District Attorney, Office of Consumer
and Environmental Protection

Mr. Bruce Riches, Goodyear

Nancy Busch, D.R. Stephens & Co.

Harding Lawson Associates

4/13/89
ALAMEDA COUNTY
DEPT. OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS



April 12, 1989

18106,004.04

Alameda County Environmental Health Service
80 Swan Way, Suite 200
Oakland, California 94621

Attention: Mr. Lowell Miller

Gentlemen:

**Off-Site Hydrogeologic Investigation Report
City Blue Production Facility Site
17th and Jefferson Streets
Oakland, California**

Enclosed is a copy of a technical report discussing the results of an off-site soil and ground-water characterization investigation performed at the City Blue Production facility site in Oakland, California. We apologize for the delay in forwarding a copy of this report to you.

Please do not hesitate to call if you have any questions about the results of this investigation or about future work to be conducted at the City Blue Production facility.

Yours very truly,

HARDING LAWSON ASSOCIATES

Robert G. Breynaert
Hydrogeologist

RGB/msj/C2530-CT7

Engineers
and
Geoscientists

666 Howard St.
San Francisco
California 94105

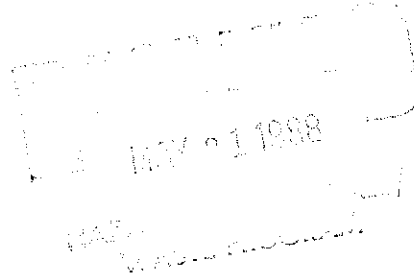
Telephone
415/543-8422

Arizona
Alaska
California

Colorado
Hawaii
Nevada

Texas
Telecopy
415/777-9706

Harding Lawson Associates



May 25, 1988

18106,004.04

Alameda County Environmental Health Service
470 27th Street, Room 324
Oakland, California 94612

Attention: Mr. Storm Goranson, P.E.

Gentlemen:

Enclosed are two (2) copies of our Work Plan dated May 25, 1988 for the City Blue Production Facility in Oakland, California.

If you have any questions, please call.

Yours very truly,

HARDING LAWSON ASSOCIATES

Daniel A. Louis

Daniel A. Louis
Civil Engineer

DAL/hh/C1134-CT

Now, mark Philippines

Engineers
and
Geoscientists

666 Howard St.
San Francisco
California 94105

Telephone
415/543-8422

Arizona
Alaska
California

Colorado
Hawaii
Nevada

Texas
Telecopy
415/777-9706

Harding Lawson Associates



Transmittal/Memorandum

To: Alameda County Environmental Health Services
470 - 27th Street, Room 324
Oakland, California 94612

Attention: Mr. Storm Goranson, P.E.

From: Daniel Louis
Date: March 30, 1988
Subject: City Blue Production Facility
Job No.: 18106,004.04

Remarks: Enclosed is a copy of the landscape plan for the parking area at the City Blue Production Facility in Oakland. I will call you later this week to discuss whether and/or what type of modifications may be necessary.

If you have any questions, please call.

APR 9 1988

cc: Blue Print Service Company - Attention: Mr. Paul Koze
Garcia/Wagner and Associates - Attention: Mr. Felix Rodriguez
HLA, Novato - Attention: Mr. Bruce Sheibach

Engineers
and
Geoscientists

666 Howard St.
San Francisco
California 94105

Telephone
415/543-8422

Alaska
California
Colorado

Hawaii
Nevada
Texas

Telecopy
415/777-9706



March 21, 1988

LCA Serial No. 10

John R. Clinch, Project Manager
BOVIS INTERNATIONAL *Rep for EBMD, Construction Manager*
1330 Broadway, Suite 1017
Oakland, California 94612

SUBJECT: EAST BAY MUD Administration Building
Oakland, CA.

RE: CONTAMINATED MATERIALS

Gentlemen:

We hereby go on record and notify you that we, as well as our subcontractors, suspect that excessive levels of contamination are being encountered during the excavation process on the subject project. We request that an evaluation be done immediately as to the level of the suspected contamination.

If, in fact, this level of contamination does pose any potential health hazard, we also request that we be notified immediately of this condition and what safety measures must be taken for any and all work being done during the excavation of the project. These safety precautions should include and not be limited to, the possible use of respirators, protective clothing and whether or not the contaminated material does in fact have cancer-causing agents or any other potential health hazard materials.

If the contaminated material does contain cancer-causing or potential health hazard materials, we must post the site accordingly and notify our subcontractors. This notification is done in accordance with Harding Lawson's Addendum to Construction Specification, Division 2 - Sitework, paragraph 3.3.

Your immediate response to this matter is requested.

Very truly yours,

LATHROP CONSTRUCTION ASSOCIATES

Jeff Gant
Project Manager

JG/bjz

ALAMEDA COUNTY
HEALTH CARE SERVICES

DAVID J. KEARS, AGENCY
~~XXXXXXXXXXXX~~ Agency Director



470-27th Street, Third Floor
Oakland, California 94612
(415) 874-7237

February 24, 1988

Daniel Louis
Harding Lawson Associates
666 Howard St.
San Francisco, CA 94105

SUBJECT: CITY BLUE PRODUCTION FACILITY, 1700 JEFFERSON ST., OAKLAND

Dear Dan:

We have reviewed the information submitted to date concerning the leak of the underground tanks at the subject facility. This information has included some identification of the extent of the problem as well as possible mitigation schemes.

One factor that you have identified as needed for further delineation of the problem is the construction of two additional groundwater wells. One well to be constructed down current from the site, and the other to be constructed in the proposal building envelope. You are encouraged to complete these wells including groundwater monitoring as soon as possible.

Since construction of a new production facility, on the site, is underway. Time is of essence in identifying the best treatment technology to insure that the new facility incorporates those features necessary to abate the problems.

You are requested to submit immediately a proposal that addresses the following concerns before the on and off-site improvements are completed.

1. Impervious cap or covering over the proposed asphaltic parking area.
2. Roof leaders and storm drainage to be drained off-site via water tight conduits.
3. Locations of vapor extraction and ground water wells as well as treatment equipment.

City Blue Prod. Facility
1700 Jefferson St., Oakland
February 24, 1988
Page 2 of 2

And remember, this Agency is responsible for implementing the underground tank regulations while the Regional Water Quality Control Board has the final authority to oversee these efforts.

Should you have any questions concerning this matter, please contact Storm Goranson, Hazardous Materials Specialist at 415/874-7237.

Sincerely,

Rafat A. Shahid

Rafat A. Shahid, Chief
Hazardous Materials Division

RAS:SG:mam

cc: Greg Zentner, RWQCB
Paul Rose, Blue Print Service Co.

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 AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFETY CODE. SIGNED: <u>Selvan Sam</u> DATE: <u>2/22/88</u>
REPORT DATE <u>0</u> M <u>2</u> M <u>2</u> D <u>8</u> Y <u>8</u> V	CASE #	

REPORTED BY	NAME OF INDIVIDUAL FILING REPORT <u>STORM GORANSON</u>	PHONE <u>(415) 874-7237</u>	SIGNATURE <u>Selvan Sam</u>	
	REPRESENTING <input checked="" type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> OTHER	COMPANY OR AGENCY NAME <u>ALAMEDA COUNTY HEALTH DEPT</u>		
	ADDRESS <u>470 - 27th ST</u> CITY <u>OAKLAND</u> STATE <u>94612</u>			

RESPONSIBLE PARTY	NAME <u>BLUE PRINT SERVICE CO</u> <input type="checkbox"/> UNKNOWN	CONTACT PERSON <u>PAUL KOZE</u>	PHONE <u>415 495-8700</u>
	ADDRESS <u>149 Second ST</u> CITY <u>SF</u> STATE <u>94105</u> ZIP		

SITE LOCATION	FACILITY NAME (IF APPLICABLE)	OPERATOR <u>BLUE PRINT SERVICE CO</u>	PHONE <u>415 495-8700</u>	
	ADDRESS <u>1700 JEFFERSON</u> CITY <u>OAKLAND</u> COUNTY <u>94612</u>			
	CROSS STREET <u>17th ST</u>	TYPE OF AREA <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> RURAL <input checked="" type="checkbox"/> RESIDENTIAL <input type="checkbox"/> OTHER	TYPE OF BUSINESS <input type="checkbox"/> RETAIL FUEL STATION <input type="checkbox"/> FARM <input checked="" type="checkbox"/> OTHER <u>PRIV. STATION</u>	

IMPLEMENTING AGENCIES	LOCAL AGENCY AGENCY NAME <u>ALAMEDA COUNTY HD.</u>	CONTACT PERSON <u>STORM GORANSON</u>	PHONE <u>(415) 874-7237</u>
	REGIONAL BOARD <u>SFBAY RWQCB</u>	<u>GREG ZANTNER</u>	PHONE <u>(415) 464-1251</u>

SUBSTANCES INVOLVED	(1) NAME <u>GASOLINE</u>	QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN
	(2)	<input type="checkbox"/> UNKNOWN

DISCOVERY/ABATEMENT	DATE DISCOVERED <u>0</u> M <u>2</u> M <u>1</u> D <u>9</u> Y <u>8</u> V	HOW DISCOVERED <input type="checkbox"/> TANK TEST <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> TANK REMOVAL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS <input checked="" type="checkbox"/> OTHER <u>SOIL BORING</u>	
	DATE DISCHARGE BEGAN M M D D Y Y <input checked="" type="checkbox"/> UNKNOWN	METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input checked="" type="checkbox"/> REMOVE CONTENTS <input type="checkbox"/> REPLACE TANK <input checked="" type="checkbox"/> CLOSE TANK <input type="checkbox"/> REPAIR TANK <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> CHANGE PROCEDURE <input type="checkbox"/> OTHER	
	HAS DISCHARGE BEEN STOPPED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE M M D D Y Y		

SOURCE/CAUSE	SOURCE OF DISCHARGE <input checked="" type="checkbox"/> TANK LEAK <input type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER	TANKS ONLY/CAPACITY <u>2550</u> GAL. AGE _____ YRS <input checked="" type="checkbox"/> UNKNOWN	MATERIAL <input type="checkbox"/> FIBERGLASS <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> OTHER	CAUSE(S) <input checked="" type="checkbox"/> OVERFILL <input checked="" type="checkbox"/> RUPTURE/FAILURE <input checked="" type="checkbox"/> CORROSION <input type="checkbox"/> UNKNOWN <input type="checkbox"/> SPILL <input type="checkbox"/> OTHER
--------------	---	---	--	---

CASE TYPE	CHECK ONE ONLY <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input checked="" type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)
-----------	--

CURRENT STATUS	CHECK ONE ONLY <input checked="" type="checkbox"/> SITE INVESTIGATION IN PROGRESS (DEFINING EXTENT OF PROBLEM) <input type="checkbox"/> CLEANUP IN PROGRESS <input type="checkbox"/> SIGNED OFF (CLEANUP COMPLETED OR UNNECESSARY) <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> NO FUNDS AVAILABLE TO PROCEED <input type="checkbox"/> EVALUATING CLEANUP ALTERNATIVES
----------------	--

REMEDIAL ACTION	CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS) <input checked="" type="checkbox"/> CAP SITE (CD) <input checked="" type="checkbox"/> EXCAVATE & DISPOSE (ED) <input checked="" type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input checked="" type="checkbox"/> EXCAVATE & TREAT (ET) <input checked="" type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> OTHER (OT)
-----------------	---

COMMENTS
INVESTIGATION OF AREAL EXTENT OF PROBLEM STILL UNDERWAY.
FREE PRODUCT BEING REMOVED DAILY
BUILDING BEING CONSTRUCTED ON SITE.

INSTRUCTIONS

EMERGENCY

Indicate whether emergency response personnel and equipment were involved at any time. If so, a Hazardous Material Incident Report should be filed with the State Office of Emergency Services (OES) at 2800 Meadowview Road, Sacramento, CA 95832. Copies of the OES report form may be obtained at your local underground storage tank permitting agency. Indicate whether the OES report has been filed as of the date of this report.

LOCAL AGENCY ONLY

To avoid duplicate notification pursuant to Health and Safety Code Section 25180.7, a designated government employee should sign and date the form in this block. A signature here does not mean that the leak has been determined to pose a significant threat to human health or safety, only that notification procedures have been followed if required.

REPORTED BY

Enter your name, telephone number, and address. Indicate which party you represent and provide company or agency name.

RESPONSIBLE PARTY

Enter name, telephone number, contact person, and address of the party responsible for the leak. The responsible party would normally be the tank owner.

SITE LOCATION

Enter information regarding the tank facility and surrounding area. At a minimum, you must provide the facility name and full address.

IMPLEMENTING AGENCIES

Enter names of the Local agency and Regional Water Quality Control Board involved.

SUBSTANCES INVOLVED

Enter the name and quantity lost of the hazardous substance involved. Room is provided for information on two substances if appropriate. If more than two substances leaked, list the two of most concern for cleanup.

DISCOVERY/ABATEMENT

Provide information regarding the discovery and abatement of the leak.

SOURCE/CAUSE

Indicate source(s) of leak. Provide details on tank age; capacity and material if known. Check box(es) indicating cause of leak.

CASE TYPE

Indicate the case type category for this leak. Check one box only. Case type is based on the most sensitive resource affected. For example, if both soil and ground water have been affected, case type will be "Ground Water". Indicate "Drinking Water" only if one or more municipal or domestic water wells have actually been affected. A "Ground Water" designation does not imply that the affected water cannot be, or is not, used for drinking water, but only that water wells have not yet been affected. It is understood that case type may change upon further investigation.

CURRENT STATUS

Indicate the category which best describes the current status of the case. Check one box only. The response should be relative to the case type. For example, if case type is "Ground Water", then "Current Status" should refer to the status of the ground water investigation or cleanup, as opposed to that of soil.

IMPORTANT: THE INFORMATION PROVIDED ON THIS FORM IS INTENDED FOR GENERAL STATISTICAL PURPOSES ONLY AND IS NOT TO BE CONSTRUED AS REPRESENTING THE OFFICIAL POSITION OF ANY GOVERNMENTAL AGENCY

REMEDIAL ACTION

Indicate which actions have been used to cleanup or remediate the leak. Descriptions of options follow:

- Cap Site - install horizontal impermeable layer to reduce rainfall infiltration.
- Containment Barrier - install vertical dike to block horizontal movement of contaminant.
- Excavate and Dispose - remove contaminated soil and dispose in approved site.
- Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming).
- Remove Free Product - remove floating product from water table.
- Pump and Treat Groundwater - generally employed to remove dissolved contaminants.
- Enhanced Biodegradation - use of any available technology to promote bacterial decomposition of contaminants.
- Replace Supply - provide alternative water supply to affected parties.
- Treatment at Hookup - install water treatment devices at each dwelling or other place of use.
- No Action Required - incident is minor, requiring no remedial action.

COMMENTS - Use this space to elaborate on any aspects of the incident.

SIGNATURE - Sign the form in the space provided.

DISTRIBUTION

If the form is completed by the tank owner or his agent, retain the last copy and forward the remaining copies in tact to your local tank permitting agency for distribution.

1. Original - Local Tank Permitting Agency
2. State Water Resources Control Board, Division of Water Quality, Underground Tank Program, P. O. Box 100, Sacramento, CA 95801
3. Regional Water Quality Control Board
4. County Board of Supervisors or designee to receive Proposition 65 notifications.
5. Owner/responsible party.



January 15, 1988

18106,004.04

Alameda County Environmental Health Service
470 27th Street, Room 324
Oakland, California 94612

Attention: Mr. Storm Goranson, P. E.

Gentlemen:

Remedial Investigation Summary
City Blue Production Facility
17th and Jefferson Streets
Oakland, California

RECEIVED
JAN 19 1988
ALAMEDA COUNTY ENVIRONMENTAL HEALTH SERVICE

In accordance with telephone requests from the Alameda County Environmental Health Service (ACEHS), this letter presents a summary of Harding Lawson Associates' (HLA's) preliminary approach to soil remediation at the City Blue Production Facility site at 1700 Jefferson Street in Oakland, California. A previous memo outlining the overall approach to remediation at the site was transmitted to the ACEHS on November 16, 1987. Previous documentation regarding soil remediation by subsurface air venting was transmitted to the ACEHS in a memo dated January 12, 1988.

BACKGROUND

HLA has performed several tasks to characterize the soil and ground-water conditions at the site. These tasks include drilling soil borings and installing five monitoring wells. Our analysis of the data obtained indicates that gasoline has leaked from underground tanks that were previously at the site. Laboratory and photoionization detector (PID) data, obtained during the installation of monitoring wells and drilling of soil borings, indicate that the greatest hydrocarbon concentrations are approximately 20 to 26 feet below the ground surface, just above the water table.

SOIL VENTING

The soil profile at the site consists of porous soils, principally sand and clayey sand. Soil venting therefore is a likely remediation alternative to soil removal. A soil venting system could be installed and operated without affecting the current building construction at the site. Such a system would include one or more soil venting, or vapor extraction, wells and possibly air intake wells.

Alameda County Environmental Health Service
January 15, 1988
18106,004.04
Page 2

Harding Lawson Associates

HLA's experience with soil venting at lithologically similar sites indicates that it may be possible to achieve a 50- to 75-foot-wide cylindrical zone of influence for each vapor extraction well and to achieve the mandated 500 parts per million (ppm) total hydrocarbon cleanup level, although a test program may be necessary. Because of the size of the site and the estimated extent of gasoline in the soils, two vapor extraction wells (screened at least to the water table) could be utilized. The time required to clean up the soils to concentrations below 500 ppm is difficult to estimate until a test program is undertaken.

The enclosed report provides approximate specifications of pumps for air extraction, estimates of volume removed based on pumping rate, and duration of vapor extraction.

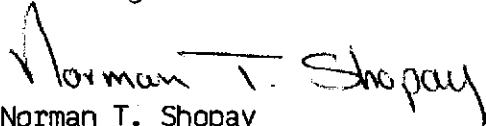
We trust that this letter provides the information you require at this time. If you have questions or further requests, please call.

Yours very truly,

HARDING LAWSON ASSOCIATES



Daniel A. Louis
Civil Engineer



Norman T. Shopay
Senior Environmental Specialist

DAL/NTS/sjp

Attachment: Copy of previous HLA Soil Venting Test Program Report

cc: Blueprint Service Company
Attention: Mr. Paul Koze

HLA Ground Water
Attention: Mr. Bruce Sheibach

HLA Remediation
Attention: Mr. Dave Hochmuth

Harding Lawson Associates

*100
P4467ANKS*

RECEIVED

APR 17 1987



Transmittal/Memorandum

ENVIRONMENTAL HEALTH
ADMINISTRATION

To: ~~Blue Print Service Co.~~
149 Second Street
San Francisco, CA 94105

Attention: Mr. Paul Koze, Jr.

From: Daniel Louis
Date: April 9, 1987
Subject: City Blue Production Facility
Job No.: 18106,001.09

Remarks:

Attached is a completed copy of the contamination report for the City Blue Production Facility in Oakland, California.

cc: Alameda Co. Environmental Health Service Toxic Substances Control Division
Garcia/Wagner and Associates
State Water Resources Control Board
Regional Water Quality Control Board

Engineers
Geologists &
Geophysicists

666 Howard St.
San Francisco
California 94105

Telephone
415/543-8422
Telex 340523

Alaska
California

Hawaii
Nevada

Texas

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	STATE TANK ID # N/A
--	---	---------------------

REPORT DATE 01/4/80	LOCAL CASE # N/A	REGIONAL BOARD CASE # N/A	US EPA ID # N/A
------------------------	---------------------	------------------------------	--------------------

REPORTED BY	NAME OF INDIVIDUAL FILING REPORT Daniel A. Louis	PHONE (415) 543-8422	SIGNATURE
	REPRESENTING <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD	COMPANY OR AGENCY NAME Harding Lawson Associates	

RESPONSIBLE PARTY	NAME BAM Properties/ Blue Print Service Co. <input type="checkbox"/> UNKNOWN	CONTACT PERSON Paul Koze, Jr.	PHONE (415) 495-8700
	ADDRESS 149 Second Street, San Francisco, California 94105		

SITE LOCATION	FACILITY NAME (IF APPLICABLE) N/A	OPERATOR Blue Print Service Co.	PHONE (415) 495-8700
	ADDRESS 1700 Jefferson Street, Oakland, Alameda California 94105		
	CROSS STREET 17th St.	TYPE OF AREA <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input checked="" type="checkbox"/> RESIDENTIAL <input type="checkbox"/> RURAL <input type="checkbox"/> OTHER	TYPE OF BUSINESS <input type="checkbox"/> RETAIL FUEL STATION <input type="checkbox"/> UNKNOWN <input checked="" type="checkbox"/> OTHER Private Fuel Station

IMPLEMENTING AGENCIES	LOCAL AGENCY Alameda Co. Environmental Health Service	AGENCY NAME	CONTACT PERSON Ted Gerow
	REGIONAL BOARD S.F. Bay Region, RWQCB		PHONE (415) 874-6434
	TSCD Underground Tank Program		CONTACT PERSON Peter Johnson
			PHONE (415) 464-0838
			PHONE (916) 324-1826

SUBSTANCES INVOLVED	CAS # (ATTACH EXTRA SHEET IF NEEDED) NAME	QUANTITY LOST (GALLONS)
	(1) Gasoline	<input checked="" type="checkbox"/> UNKNOWN
	(2)	<input type="checkbox"/> UNKNOWN

DISCOVERY/ADAPTMENT	DATE DISCOVERED 01/21/80	HOW DISCOVERED <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> ROUTINE MONITORING <input type="checkbox"/> TANK REMOVAL <input type="checkbox"/> NUISANCE CONDITIONS <input checked="" type="checkbox"/> OTHER: Soil Boring
	DATE DISCHARGE BEGAN MI MI DI DI YI YI <input checked="" type="checkbox"/> UNKNOWN	METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input checked="" type="checkbox"/> REMOVE CONTENTS <input checked="" type="checkbox"/> REPLACE TANK <input type="checkbox"/> CLOSE TANK
	HAS DISCHARGE BEEN STOPPED? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE MI MI DI DI YI YI	<input type="checkbox"/> REPAIR TANK <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> CHANGE PROCEDURES <input checked="" type="checkbox"/> OTHER Tanks will be emptied and removed.

SOURCE/CAUSE	SOURCE(S) OF DISCHARGE <input type="checkbox"/> TANK LEAK <input checked="" type="checkbox"/> UNKNOWN <input checked="" type="checkbox"/> PIPING LEAK (suspected)	TANKS ONLY/CAPACITY 2550 GAL AGE <input type="checkbox"/> YRS. <input checked="" type="checkbox"/> UNKNOWN MATERIAL <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> FIBERGLASS <input type="checkbox"/> OTHER
		CAUSE(S) <input checked="" type="checkbox"/> OVERFILL <input type="checkbox"/> CORROSION (suspected) <input checked="" type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> SPILL (suspected) <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> OTHER

RESOURCES AFFECTED/AT RISK	WATER SUPPLIES AFFECTED
AIR (VAPOR) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	YES NO THREAT- ENED UN- KNOWN # OF WELLS
SOIL (VAPOSE ZONE) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	PUBLIC DRINKING WATER <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> THREAT- ENED <input checked="" type="checkbox"/> UN- KNOWN
GROUNDWATER <input type="checkbox"/> YES <input type="checkbox"/> NO	PRIVATE DRINKING WATER <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> THREAT- ENED <input checked="" type="checkbox"/> UN- KNOWN
SURFACE WATER OR STORM DRAIN <input type="checkbox"/> YES <input type="checkbox"/> NO	INDUSTRIAL <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> THREAT- ENED <input checked="" type="checkbox"/> UN- KNOWN
BUILDING OR UTILITY VAULT <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	AGRICULTURAL <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> THREAT- ENED <input checked="" type="checkbox"/> UN- KNOWN
OTHER (SPECIFY) <input type="checkbox"/> YES <input type="checkbox"/> NO	OTHER (SPECIFY) <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> THREAT- ENED <input type="checkbox"/> UN- KNOWN
	GROUNDWATER BASIN NAME <input type="checkbox"/> UNKNOWN

COMMENTS:
Tanks (3) are being emptied and removed from the site. Backfill and reachable contaminated soil will be removed or aerated and replaced. Monitoring well(s) will be installed to monitor groundwater.

C.G. Blair

11/9 Discussion w/ Dan Fouji

1. HCA to Dig well ~ 50 N of Sta in start and well ~ 25' E of MW. Well look for free product & Juv Soil probe of THC

2. Found 30" of free product @ MW1. Here to mine about 100 gallon (and Juv) basin of 10 gal.

3. Looks like a migration of OT & TUA data on log profiles. Ask DL to review.

4. Suggest & Criticism of TDC of 500 ppm as indicator of Vapor Recovery system is necessary.