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Shell Oil Products US

April 4, 2003

eva chu
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: **Shell-branded Service Station**
1285 Bancroft Avenue
San Leandro, California

Dear Ms. chu:

Attached for your review and comment is a copy of the *Subsurface Investigation Work Plan Amendment* for the above referenced site. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

As always, please feel free to contact me directly at (559) 645-9306 with any questions or concerns.

Sincerely,

Shell Oil Products US

Karen Petryna

Karen Petryna
Sr. Environmental Engineer

P.O. Box 7869 Burbank, CA 91510-7869 Phone (559) 645-9306 Facsimile (559) 645-5643

CAMBRIA

April 4, 2003

eva chu
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Subsurface Investigation Work Plan Amendment**
Shell-branded Service Station
1285 Bancroft Avenue
San Leandro, California
Incident #98996067
Cambria Project #245-0504

Dear Ms. chu:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US, Cambria Environmental Technology, Inc. (Cambria) is submitting this amendment to our October 15, 2002 *Subsurface Investigation Work Plan* as requested in a February 6, 2003 letter from Alameda County Health Care Services Agency (ACHCSA).

As stated in Cambria's September 20, 2002 *Third Quarter 2002 Monitoring Report* and the October 15, 2002 work plan, this investigation's objective is to define the downgradient extent of methyl tertiary butyl ether (MTBE) in groundwater and to provide for ongoing groundwater monitoring downgradient of the site (Figure 1). In the original work plan, Cambria proposed to install two downgradient monitoring wells to achieve this objective. This amended work plan provides for collecting depth-discrete grab-groundwater samples prior to installing monitoring wells. Cambria will also advance one onsite soil boring to obtain current soil data in the tank pit vicinity. Cambria will use the data collected to determine optimum locations, and depth and screen intervals for the planned monitoring wells.

PROPOSED SCOPE OF WORK

Cambria will install two offsite soil borings and one onsite boring at the locations shown in Figure 2. Cambria will follow our standard field procedures for soil borings and monitoring wells (Attachment A) to complete the work.

Cambria Environmental Technology, Inc.

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

Upon ACHCSA approval of this work plan, Cambria will complete the following tasks:

Utility Location: Cambria will notify Underground Service Alert (USA) of our proposed drilling activities. USA will have the utilities in the vicinity identified.

Site Health and Safety Plan: Pursuant to OSHA requirements, Cambria will prepare a comprehensive site safety plan to protect site workers. The plan will be kept onsite during field activities and will be reviewed and signed by each site worker.

Permits: Cambria will obtain from the Alameda County Public Works Agency, CWP property owner, and the City of San Leandro all permits, access agreements and encroachment permits required for advancing the soil borings.

Onsite Soil Boring and Sampling Activities: Using a hollow-stem auger drill rig, Cambria will install one onsite soil boring to the depth of groundwater (approximately 35 feet below grade (fbg). During drilling activities, Cambria will collect soil samples for lithologic description at 5-foot intervals and submit undisturbed soil samples for chemical analysis.

Offsite Soil Boring and Sampling Activities: Using a hollow-stem auger drill rig, Cambria will install two offsite soil borings to approximately 15 feet below the depth of groundwater. The approximate total depth of each boring will be 50 fbg. During drilling activities, Cambria will collect soil samples for lithologic description at 5-foot intervals to the depth of groundwater and will submit undisturbed soil samples for chemical analysis. Cambria will collect grab-groundwater samples at 5-foot intervals to approximately 15 feet below the depth of first-encountered groundwater and submit them for chemical analysis.

Laboratory Analyses: Selected soil and groundwater samples will be analyzed by a State-certified laboratory for:

- Total petroleum hydrocarbons as gasoline by EPA Method 8260, and
- Benzene, toluene, ethylbenzene, xylenes and MTBE by EPA Method 8260

Subsurface Investigation Report: After the analytical results are received, Cambria will prepare a report that, at a minimum, will contain:

- A summary of the site background and history;
- Descriptions of drilling and sampling activities;
- Soil boring and monitoring well logs;
- Tabulated analytical results for soil;
- Analytical reports and chain-of-custody forms;
- A discussion of the hydrocarbon distribution in the subsurface; and
- Conclusions and recommendations

SCHEDULE

Upon receiving written ACHCSA approval of this work plan, Cambria will proceed with permitting, re-apply for encroachment permission, confirm access agreements and finalize the drilling schedule. Cambria will provide ACHCSA with a 72-hour notice prior to field activities. We anticipate submitting our investigation report within 60 days of completing the fieldwork.

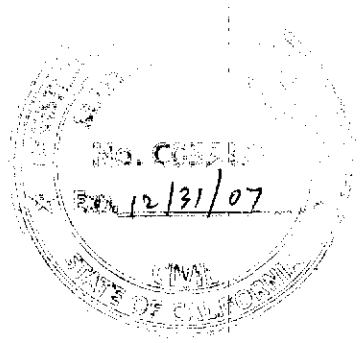
CLOSING

We appreciate the opportunity to work with you on this project. Please call Melody Munz at (510) 420-3324 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc

Melody Munz
Project Engineer

Matthew W. Derby, P.E.
Senior Project Engineer



Figures: 1 - Vicinity/Area Well Survey Map
2 - Proposed Soil Boring Location Map

Attachment: A - Standard Field Procedures for Soil Borings and Monitoring Wells

cc: Karen Petryna, Shell Oil Products US, P.O. Box 7869, Burbank, CA 91510-7869
Victor Lemon, City of San Leandro, 835 East 14th Street, San Leandro, CA 94577

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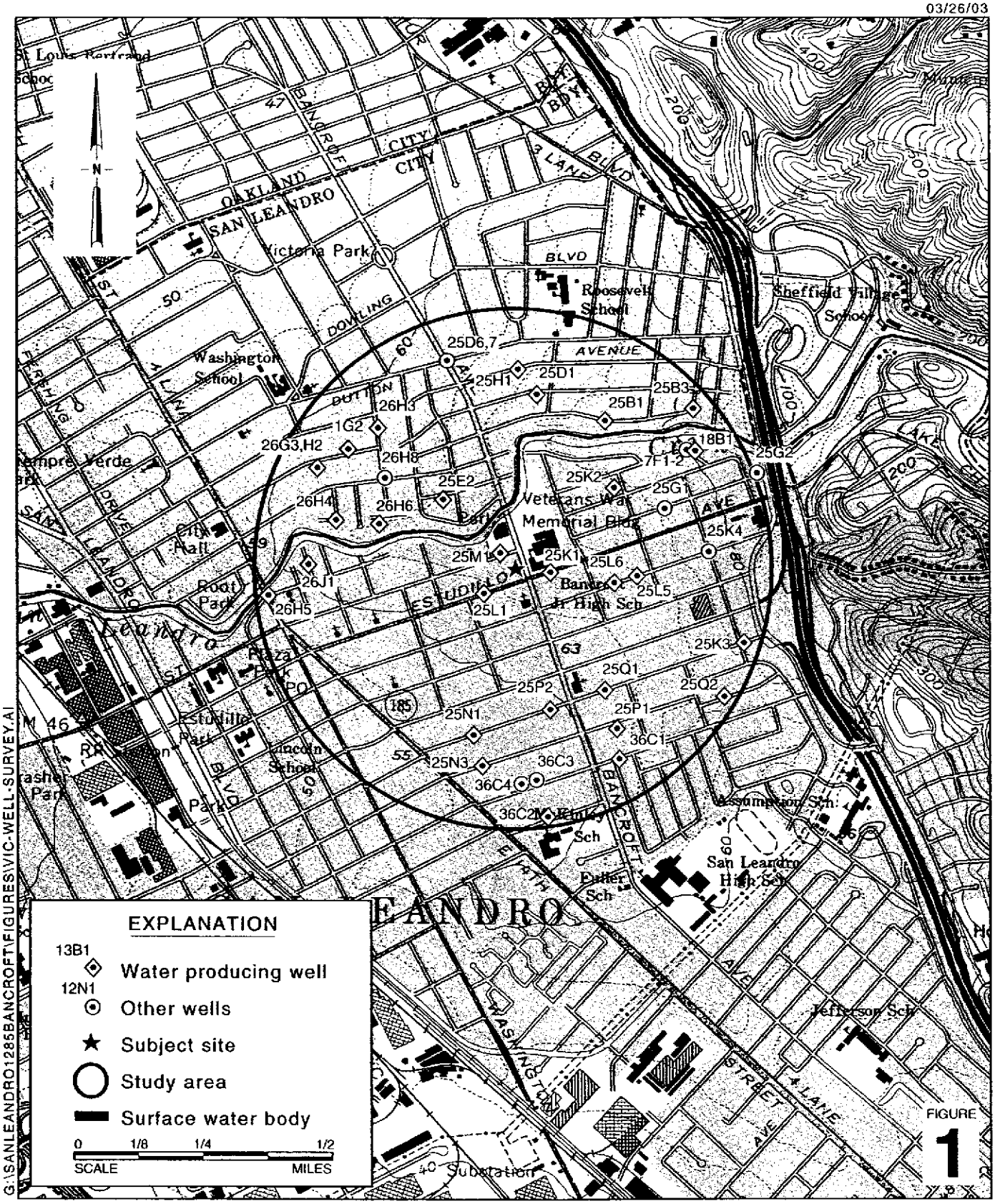
03/26/03



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Shell-branded Service Station
1285 Bancroft Avenue
San Leandro, California
Incident #98996067

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Vicinity / Area Well Survey Map
(1/2-Mile Radius)

03/26/03

EXPLANATION

- SB-1 — Proposed soil boring location
- MW-1 — Monitoring well location
- Irrigation well location
- B-1 — Soil vapor survey location (6/00)

BANCROFT AVENUE

CALLAN AVENUE

ESTUDILLO AVENUE

unpaved vacant lot

1247 building

dispensers

kiosk

USTs

MW-2

MW-3

SB-1

MW-5

MW-8

W/O UST

Shell Station
1285 Bancroft

MW-1

MW-4

MW-6

MW-7

B-4

B-5

B-6

B-3

driveway

parking

595 apts.

572 apts.

grass courtyard

597 apartments

566 apartments

SB-2

599 apts.

560 apts.

SB-3

Irrigation Well

B-1

B-2

0 25 50 100
SCALE 1:50 FEET

Domestic well
(25K1, 150')

Irrigation well
(25M1, 150')

Domestic well
(25L1, 200')

Nearest Sensitive Receptors
Relative to Site

City of San Leandro
Memorial Park

Groundwater Flow Direction
(4Q93 through 1Q03)

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Proposed Soil Boring Loctation Map

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FIGURE
2

Shell-branded Service Station
1285 Bancroft Avenue
San Leandro, California
Incident #98996067

ATTACHMENT A

Standard Field Procedures for Soil Borings and Monitoring Wells

CAMBRIA

STANDARD FIELD PROCEDURES FOR SOIL BORING AND MONITORING WELL INSTALLATION

This document presents standard field methods for drilling and sampling soil borings and installing, developing and sampling groundwater monitoring wells. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

SOIL BORINGS

Objectives

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor or staining, and to collect samples for analysis at a State-certified laboratory. All borings are logged using the Unified Soil Classification System by a trained geologist working under the supervision of a California Registered Geologist (RG).

Soil Boring and Sampling

Soil borings are typically drilled using hollow-stem augers or direct-push technologies such as the Geoprobe®. Soil samples are collected at least every five ft to characterize the subsurface sediments and for possible chemical analysis. Additional soil samples are collected near the water table and at lithologic changes. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments at the bottom of the borehole.

Drilling and sampling equipment is steam-cleaned prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Analysis

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon tape and plastic end caps. Soil samples are labeled and stored at or below 4° C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

Field Screening

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable volatile vapor analyzer measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. Volatile vapor analyzer measurements are used along with the field observations, odors, stratigraphy and groundwater depth to select soil samples for analysis.

Water Sampling

Water samples, if they are collected from the boring, are either collected using a driven Hydropunch® type sampler or are collected from the open borehole using bailers. The groundwater samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

Grouting

If the borings are not completed as wells, the borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe.

MONITORING WELL INSTALLATION, DEVELOPMENT AND SAMPLING

Well Construction and Surveying

Groundwater monitoring wells are installed to monitor groundwater quality and determine the groundwater elevation, flow direction and gradient. Well depths and screen lengths are based on groundwater depth, occurrence of hydrocarbons or other compounds in the borehole, stratigraphy and State and local regulatory guidelines. Well screens typically extend 10 to 15 fee below and 5 feet above the static water level at the time of drilling. However, the well screen will generally not extend into or through a clay layer that is at least three feet thick.

Well casing and screen are flush-threaded, Schedule 40 PVC. Screen slot size varies according to the sediments screened, but slots are generally 0.010 or 0.020 inches wide. A rinsed and graded sand occupies the annular space between the boring and the well screen to about one to two feet above the well screen. A two feet thick hydrated bentonite seal separates the sand from the overlying sanitary surface seal composed of Portland type I,II cement.

Well-heads are secured by locking well-caps inside traffic-rated vaults finished flush with the ground surface. A stovepipe may be installed between the well-head and the vault cap for additional security.

The well top-of-casing elevation is surveyed with respect to mean sea level and the well is surveyed for horizontal location with respect to an onsite or nearby offsite landmark.

Well Development

Wells are generally developed using a combination of groundwater surging and extraction. Surging agitates the groundwater and dislodges fine sediments from the sand pack. After about ten minutes of surging, groundwater is extracted from the well using bailing, pumping and/or reverse air-lifting through an eductor pipe to remove the sediments from the well. Surging and extraction continue until at least ten well-casing volumes of groundwater are extracted and the sediment volume in the groundwater is negligible. This process usually occurs prior to installing the sanitary surface seal to ensure sand pack stabilization. If development occurs after surface seal installation, then development occurs 24 to 72 hours after seal installation to ensure that the Portland cement has set up correctly.

All equipment is steam-cleaned prior to use and air used for air-lifting is filtered to prevent oil entrained in the compressed air from entering the well. Wells that are developed using air-lift evacuation are not sampled until at least 24 hours after they are developed.

Groundwater Sampling

Depending on local regulatory guidelines, three to four well-casing volumes of groundwater are purged prior to sampling. Purging continues until groundwater pH, conductivity, and temperature have stabilized. Groundwater samples are collected using bailers or pumps and are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

Waste Handling and Disposal

Soil cuttings from drilling activities are usually stockpiled onsite and covered by plastic sheeting. At least three individual soil samples are collected from the stockpiles and composited at the analytic laboratory. The composite sample is analyzed for the same constituents analyzed in the borehole samples in addition to any analytes required by the receiving disposal facility. Soil cuttings are transported by licensed waste haulers and disposed in secure, licensed facilities based on the composite analytic results.

Groundwater removed during development and sampling is typically stored onsite in sealed 55-gallon drums. Each drum is labeled with the drum number, date of generation, suspected contents, generator identification and consultant contact. Upon receipt of analytic results, the water is either pumped out using a vacuum truck for transport to a licensed waste treatment/disposal facility or the individual drums are picked up and transported to the waste facility where the drum contents are removed and appropriately disposed.