Shell Oil Products US

June 22, 2006

Mr. Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Shell-branded Service Station
3420 San Pablo Avenue
Oakland, California

Dear Mr. Wickham:

Attached for your review and comment is a copy of the *Site Investigation Work Plan* 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 (707) 865-0251 with any questions or concerns.

Sincerely,

Shell Oil Products US

Denis L. Brown
Project Manager

20945 S. Wilmington Ave., Carson, CA 90810 Phone (707) 865-0251 Facsimile (707) 865-2542

CAMBRIA

June 22, 2006

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

Re: **Investigation Work Plan**
Former Shell-branded/Current Operating Service Station
3420 San Pablo Avenue
Oakland, California
Incident #98995748
Cambria Project #247-0554-011
ACHCSA Case No. RO0000006 (Shell #12-9619)

Dear Mr. Wickham:

Cambria Environmental Technology, Inc. (Cambria) prepared this document on behalf Equilon Enterprises LLC dba Shell Oil Products US (Shell) in response to a request from the Alameda County Health Care Services Agency (ACHCSA) in correspondence dated April 14, 2006 (Appendix A). In that correspondence, the ACHCSA requested the submittal of a work plan to investigate residual lead concentrations near a former gasoline dispenser and soil gas concentrations around the station building. The scope of work proposed herein complies with the ACHCSA and San Francisco Bay Regional Water Quality Control Board guidelines.

LOCATION AND CURRENT USE

This operating service station is a former Shell service station located at the southeast corner of the 35th Street and San Pablo Avenue intersection in Oakland (Figures 1 and 2). Shell sold the station and property in March 2005. Property use in the site vicinity is mixed residential and commercial.

TECHNICAL RATIONALE FOR PROPOSED SCOPE OF WORK

- One soil sample from beneath a former dispenser island contained elevated lead. To investigate the vertical and lateral extent of lead impact in that area as requested by ACHCSA, three soil borings (SB-1 through SB-3) are proposed for the purpose of collecting soil samples.

Cambria Environmental Technology, Inc.

270 Perkins Street
Sonoma, CA 95476
Tel (707) 935-4850
Fax (707) 935-6649

- Due to elevated concentrations of petroleum constituents in shallow groundwater and the periodic presence of separate phase hydrocarbons in well MW-6R, three soil borings (SB-4 through SB-6) are proposed for the purpose of collecting soil-gas and soil samples near the onsite commercial building (the station building).

WORK TASKS

As mentioned above, three (3) borings are proposed near the former dispensers and three (3) borings are proposed near the station building as depicted on Figure 2.

Permits: Cambria will obtain an appropriate permit for drilling from the Alameda County Public Works Agency.

Site Safety Plan: Cambria will prepare a site safety plan for field work and a traffic control plan for high traffic areas, if warranted.

Utility Clearance: Cambria will mark the proposed drilling locations and the locations will be cleared through Underground Service Alert prior to drilling. Shell's records will be reviewed to determine the location of onsite utilities. A private utility locating service will also be used at each boring location to identify any subsurface structures or utilities.

Site Investigation: Since samples are desired at relatively shallow depths, and the presence of underground utilities in some areas is likely, the borings will be extended using a combination of hand auger and direct-push technology. A Cambria geologist will supervise the drilling and will describe encountered soils from each boring using the Unified Soil Classification System and Munsell Soil Color Charts.

Depth to water is typically shallow at this site, and the historical sample obtained from P-7 was collected from a depth of 2 feet below grade (fbg). To assess the vertical and lateral extent of lead in the vicinity of P-7, soil samples at SB-1 through SB-3 will be retained from depths of 2-2.5, 5-5.5, and 8-8.5 fbg. Because soil gas data is desired in order to determine whether constituents in the subsurface pose a potential vapor intrusion threat to the onsite commercial workers, a soil-gas sample will be collected from SB-4 through SB-6 from a depth of 3.5-4 fbg. Following collection of the soil-gas samples, a soil sample will be collected from a depth of 4.5-5 fbg to determine if the shallow soil is impacted. Soil cuttings from each boring will be screened for organic vapors using a photo-ionization detector (PID). Cambria will prepare exploratory boring logs for each boring and PID measurements will be recorded on the logs.

Soil samples designated for chemical analyses will be retained in stainless steel or brass sample tubes. The tubes will be covered on both ends with Teflon sheets and plastic end caps. Soil samples will be labeled, entered onto a chain-of-custody record and placed into a cooler with ice for transport to a State of California certified laboratory for analyses.

Each vapor sample will be collected under vacuum using the GeoProbe ® sampling equipment. The vapor samples will be stored in Summa canisters. The samples will be labeled, entered onto a chain-of-custody record, and transported to a State of California certified laboratory for analysis.

Chemical Analyses: The soil samples from all borings will be analyzed for TPHg, BTEX, and MTBE by EPA Method 8260. The soil samples obtained from SB-1 through SB-3 will be analyzed for total lead. The soil-gas samples from SB-4 through SB-6 will be submitted for chemical analyses of TPHg, BTEX, and MTBE by EPA Method TO14, or similar.

Report Preparation: Following the receipt of analytical results from the laboratory, Cambria will prepare a written report, which will include field procedures, laboratory results, boring logs, conclusions, and recommendations.

Certification: Cambria will perform the scope of work described in this work plan under the supervision of a California professional geologist or engineer.

SCHEDULE

On behalf of Shell, Cambria is prepared to begin work upon receiving written approval of this work plan by ACHCSA and receipt of appropriate drilling permits.

CLOSING

If you have any questions regarding the contents of this document, please call Ana Friel at (707) 268-3812.

Sincerely,
Cambria Environmental Technology, Inc.

Ana Friel, PG
Associate Geologist

Attachments:

Figures: 1 - Vicinity/Sensitive Receptor Survey Map
2 – Site Plan/Proposed Boring Location Map

Appendix A. Agency Correspondence

cc: Denis Brown, Shell Oil Products US, 20945 S. Wilmington Avenue, Carson, CA 90810
Shahriar Almasi, Portola Valley Shell, 965 Laurel Glen Drive, Palo Alto, CA 94304
Mike Bowery, Thrifty Oil Co., 13116 Imperial Highway, Santa Fe Springs, CA 906700138

I:\Oakland 3420 San Pablo\Reports\2006 June SI Work Plan\Work PlanJune06.doc

08/18/05

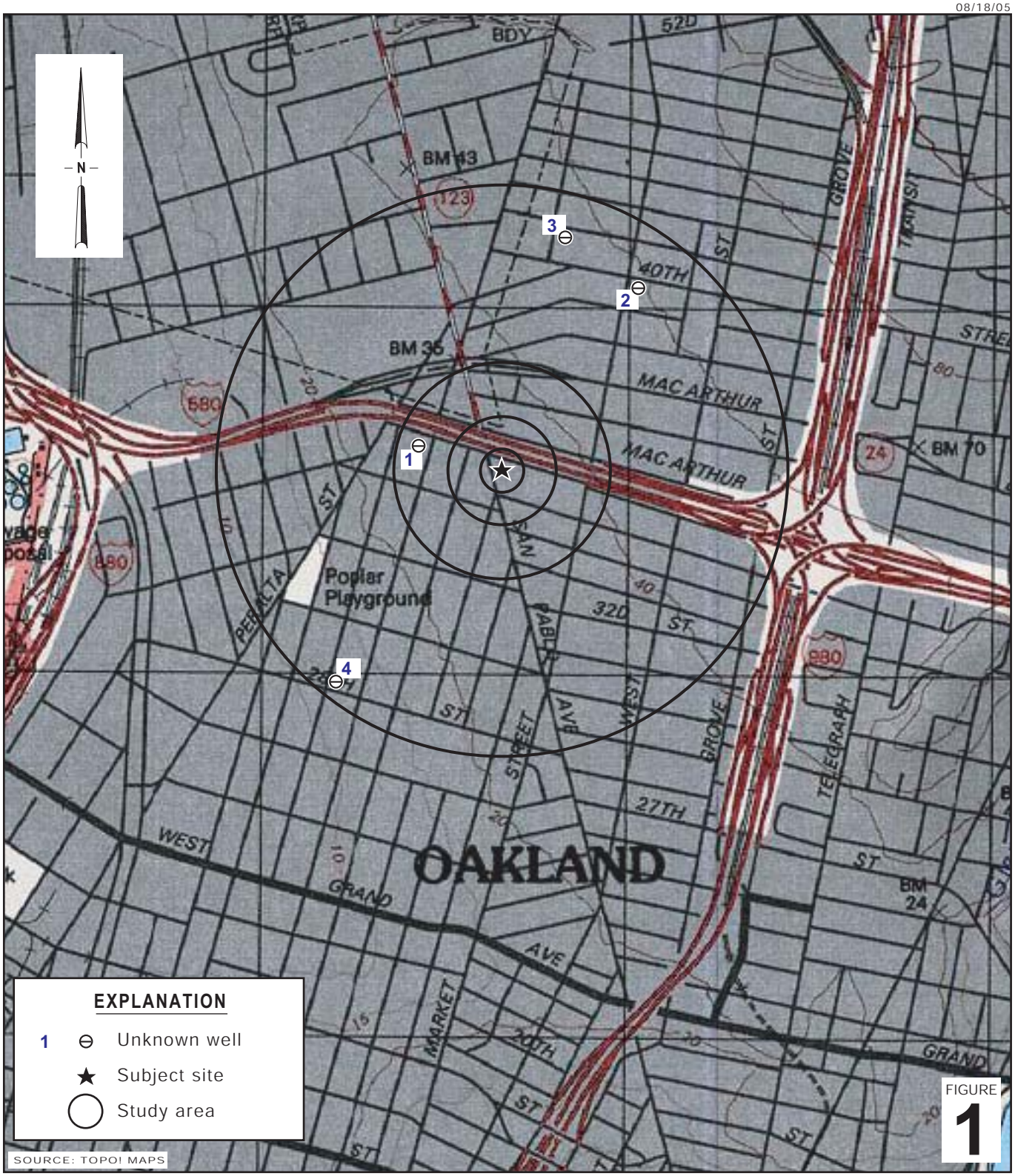

FIGURE
1

G:\OAKLAND3420SANPABLO\FIGURES\VIC-SRS-SURVEY.AI

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Shell-branded Service Station
3420 San Pablo Avenue
Oakland, California
Incident No.98995748

CAMBRIA

Vicinity/Sensitive Receptor Survey Map

(200ft., 500ft., 1,000ft., and 1/2 Mile Radii)

15-Jun-06

EXPLANATION

- MW-1 — Monitoring well location (Shell)
- MW-3 — Destroyed monitoring well location
- P-1 — Soil sample location (6/97)
- B-1 — Soil boring location (5/89)
- SB-1 — Proposed boring location
- Storm drain line (SD)
- Sanitary Sewer line (SS)
- Water line (W)
- Overhead electrical line (OHE)
- Storm drain catch basin
- Fire hydrant (FH)
- Flow direction indicator
- Miscellaneous utility vault, as labeled

INTERSTATE 580

35th STREET

34th STREET

SAN PABLO AVENUE

LINDEN STREET

Shell Station
3420 San Pablo

Former Thrifty #049
Current Arco Station
3400 San Pablo

Station building

former building

former dispenser island

former product line

former dispensers

550 gal. W/O UST (removed 6/26/97)

USTs

Existing USTs

Former USTs (rounded)

dispenser islands

RECOVERY SYSTEM CONTROLS

RECOVERY SYSTEM PIPING

OFFICE

trash

planter

median

EBMUD

PGE MH

SS lateral

MW-1 MW-2 MW-2R MW-3 MW-3R MW-4 MW-4R MW-5 MW-6 MW-6R MW-7 MW-8 MW-9 MW-10 MW-11

RW-1 RW-1R

B-1 B-2 B-3 B-4 B-5

SB1 SB2 SB3 SB-1 SB-2 SB-3 SB-4 SB-5 SB-6

P-1 P-2 P-3 P-4 P-5 P-6 P-7 P-8

Disp-1 Disp-2

TP-N TP-S

Scale (ft)
0 20 40 80

Site Plan/Proposed Boring Location Map

CAMBRIA

Former Shell/Current Operating Service Station
3420 San Pablo Ave.
Oakland, California

FIGURE
2

PATH