RO469

Denis L. Brown

Shell Oil Products US
HSE – Environmental Services
20945 S. Wilmington Ave.
Carson, CA 90810-1039
Tel (707) 865 0251
Fax (707) 865 2542
Email denis.l.brown@shell.com

June 30, 2005

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

Re: Subsurface Investigation Work Plan Amendment 3
Shell-branded Service Station
6039 College Avenue
Oakland, California
SAP Code 135685
Incident No. 98995745
ACHCSA # 3719

Dear Mr. Wickham:

Attached for your review and comment is a copy of the *Subsurface Investigation Work Plan Amendment 3* 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.

If you have any questions or concerns, please call me at (707) 865-0251.

Sincerely,

Denis L. Brown
Sr. Environmental Engineer

CAMBRIA

June 30, 2005

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

Re: **Subsurface Investigation Work Plan Amendment 3**
Shell-branded Service Station
6039 College Avenue
Oakland, California
Incident # 98995745
Project # 247-0503
ACEH Case #3719

Dear Mr. Wickham:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US, Cambria Environmental Technology, Inc. (Cambria) is submitting this third amendment to our January 6, 2003 *Subsurface Investigation Work Plan*. Cambria has prepared this amendment in response to the May 13, 2005 letter from Alameda County Health Care Services Agency (ACHCSA).

As stated in the November 20, 2003 *Subsurface Investigation Work Plan Amendment 2*, the objective of this investigation is to define the extent of the methyl-tertiary-butyl ether (MTBE) plume southwest of the site. The amended work plan proposed installing three on-site (SB-1, SB-2 and SB-8) and five off-site (SB-3 through SB-7) Geoprobe® soil borings, collecting grab groundwater samples from each boring, and submitting selected soil samples for chemical analysis. Selected soil borings (SB-2, SB-3, SB-6, and SB-7) were proposed to be advanced to approximately 15 feet below the current water table. Additional borings were proposed adjacent to the deep borings to collect depth-discrete groundwater samples only for investigating the vertical distribution of hydrocarbon and MTBE in groundwater. Cambria will determine the depth and number of discrete groundwater samples based on the observed lithology. In the May 13, 2005 letter, ACHCSA requested that borings SB-2, SB-3, SB-6, and SB-7 be advanced to 20 feet (instead of the proposed 15 feet) below the current water table to determine whether more permeable layers exist beneath the fine-grained material encountered when installing nearby monitoring wells MW-5 and MW-6.

In accordance with State of California Underground Storage Tank (UST) regulations (CCR Title 23, Division 3, Chapter 16, Section 2722(e)), Cambria began implementing the *Subsurface Investigation Work Plan Amendment 2* in March 2005 without ACHCSA approval because no response was received within 60 days of submitting the work plan. Implementation

Cambria Environmental Technology, Inc.

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

was halted prior to commencing field activities because of difficulties with access to 6066 Claremont Avenue which have since been rectified. Borings SB-3 and SB-7 had been moved onto this property during the pre-field portion of the project due to access issues at 6076 Claremont Avenue (SB-3) and utilities beneath the sidewalk that runs parallel to Claremont Avenue (SB-7). In addition, utilities, including fiber-optic lines, beneath Claremont Avenue made placement of borings SB-4 and SB-5 more sensitive and necessitated a delay until a private utility locator can clear the locations.

Current proposed boring locations are shown on Figure 2, and the location and rationale for each is summarized in the table below.

Boring ID	Location	Estimated Depth	Rationale
SB-1	On site, between dispenser islands, near center of site	15 fbg	To date, no soil or groundwater samples have been collected in this area.
SB-2	On site, in planter downgradient of western pump island	35 fbg	Soil and groundwater lateral delineation downgradient of pump islands, at edge of site. Additional borings to be advanced adjacent to this boring to collect depth-discrete grab-groundwater samples
SB-3	Off site, in the northern corner of the parking lot on 6066 Claremont Avenue	35 fbg	Soil and groundwater lateral delineation downgradient of former waste-oil tank and wells MW-3 and MW-4. Additional borings to be advanced adjacent to this boring to collect depth-discrete grab-groundwater samples for vertical definition of plume in groundwater.
SB-4	Off site, in Claremont Avenue, immediately west of site boundary, as close to curb as feasible	15 fbg	Data will be used to determine the current impact of hydrocarbons or oxygenates immediately downgradient of site. Soil from nearby 1993 boring BH-A was not analyzed for MTBE.
SB-5	Off site, in Claremont Avenue, immediately west of site boundary, approximately 45 feet west-southwest of SB-4	15 fbg	Data will be used to determine whether any potential exists for hydrocarbons or oxygenates from the site to impact the sanitary sewer trench that terminates downgradient of site.
SB-6	Off site, opposite side of Claremont Avenue, approximately 45 feet	35 fbg	Additional borings to be advanced adjacent to this boring to collect depth-discrete grab-groundwater samples for vertical definition of

Boring ID	Location	Estimated Depth	Rationale
	west of SB-5 and 10 feet southwest of MW-6		groundwater plume. Soil collected during installation of MW-6 not analyzed for MTBE.
SB-7	Off site, in the parking lot on 6066 Claremont Avenue, approximately 100 feet south-southwest of on-site well MW-4.	35 fbg	Additional borings to be advanced adjacent to this boring to collect depth-discrete grab-groundwater samples for vertical definition of plume in groundwater.
SB-8	On site, near southwest corner of exiting USTs and adjacent to approximate location of former waste oil UST.	15 fbg	Data will be used to determine whether there is any impact to soil or groundwater immediately downgradient of the existing USTs and between monitoring wells MW-3 and MW-4.

SCHEDULE

Upon receiving ACHCSA's written approval of this work plan amendment, Cambria will obtain the necessary permits and schedule drilling. We will provide you with a 72-hour notice prior to field activities. We anticipate submitting our investigation report within 60 days of completing the fieldwork.

CLOSING

Please call David Gibbs at (510) 420-33634 if you have any questions or comments. Thank you for your assistance.

Sincerely,
Cambria Environmental Technology, Inc.

David M. Gibbs, P.G.
Project Geologist

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

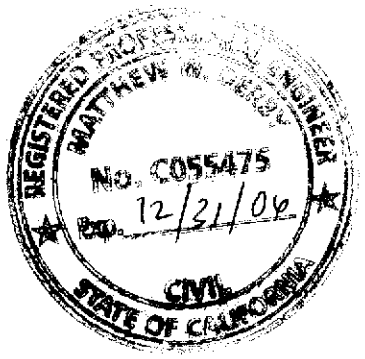

Figure: 1 - Proposed Soil Boring Locations

cc: Denis Brown, Shell Oil Products US, 20945 S. Wilmington Ave., Carson, CA 90810
Russell J. Bruzzone, Inc., 899 Hope Lane, Lafayette, CA 94549
Montrose Investment Co., 242 Rivera Circle, Greenbrae Marina, Larkspur, CA 94939, Attn: Jim Graham
Jonathan Schreiber, 6201 Florio Street, Oakland, CA 94618

G:\Oakland 6039 College\2005 Offsite Soil Borings\Investigation WP02 - Amendment 3 - 2005.doc

08/30/05

Proposed Soil Boring Locations

CLAREMONT AVENUE

FLORIO STREET

ARMANINO COURT

COLLEGE AVENUE

62nd STREET

Commercial properties

Commercial properties

Residential and Commercial properties

Location of Sensitive Receptor Relative to Site
(Domestic Well 18D1, ~0.25 miles ENE)

18D1

76 Station

Shell Station
6039 College Ave.

MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
SB-1
SB-2
SB-3
SB-4
SB-5
SB-6
SB-7
SB-8
B-1
B-2
B-3
B-4
B-5
T-1
T-2
BH-A
BH-B
BH-C
BH-D
P-1-4'
P-2-4'
D-1-5'
D-2-5'
D-3-5'
D-4-5'
P-3-4'
P-4-4'

planter
canopy
cashier
garage
USTs
building
fence
approximate dispenser and UST locations (1940)
approximate dispenser and UST locations (1957)
approximate waste oil UST locations (1940 & 1957)

EXPLANATION

- SB-1 — Proposed soil boring location
- MW-1 — Monitoring well location
- D-1-5' — Soil sample location (5/7/04)
- BH-A — Soil boring location (WA, 9/93)
- B-1 — Soil boring location (WA, 01/90)
- T-1 — Tank backfill well location
- fbg — Feet below grade
- Electrical line (E)
- Storm drain line, >12" ϕ (SD)
- Sanitary sewer line (SS)
- Water line (W), elevation not known, top of pipe ~4 fbg
- Gas line (G)
- Telephone line (T)
- Utility vault
- Flow direction
- Manhole
- Storm drain inlet

Groundwater Flow Direction
(3Q96 through 1Q05)

0 20 40 80
Scale (ft)

FIGURE
1

Shell-branded Service Station
6039 College Avenue
Oakland, California
Incident No.98995745

CAMBRIA

G:\OAKLAND 6039 COLLEGE\FIGURES\SITE PLAN 4-05.DWG