CAMBRIA

August 21, 2001

Ms. Eva Chu
Alameda County Health Care Services
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

AUG 23 2001

Re: **Risk Management Plan**
Former Shell-branded Service Station
7194 Amador Valley Boulevard
Dublin, California
Incident No. 97093380

Dear Ms. Chu:

This Risk Management Plan (RMP) was developed by Cambria Environmental Technology, Inc. (Cambria) on behalf of Equiva Services LLC (Equiva) for the above-referenced site, in response to a request from Alameda County Health Care Services (ACHCS). This RMP was developed primarily to address soil beneath the sidewalk and adjacent to MW-3, in the event that it is disturbed in the future. The former Shell service station site is located on the southern corner of Amador Valley Boulevard and Village Parkway in Dublin (Figure 1), and is currently occupied by Oil Changers.

In Enviros, Inc.'s (Enviros) *Case Closure Summary* dated May 22, 1996, they presented data indicating that petroleum hydrocarbon sources which could pose a threat to groundwater have been removed to the fullest extent possible from the site through tank removals and excavation of impacted soil. Natural attenuation processes will continue to mitigate residual hydrocarbons. Enviros requested that case closure be granted.

ACHCS agreed to grant site closure provided that a RMP be developed as a guideline for the management of soil beneath the sidewalks of the site, that potentially contain residual concentrations of petroleum hydrocarbons that may pose a health threat to individuals if disturbed. This RMP describes the site history and provides guidelines for managing potentially impacted soil beneath the sidewalk in the event it is disturbed in the future.

Oakland, CA
San Ramon, CA

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Site Background

In August 1987 four underground storage tanks (USTs) were removed from the site, including a 280-gallon waste oil tank and three 10,000-gallon fuel tanks. The fuel tanks were constructed of

fiberglass and appeared to be in good condition upon their removal. The waste oil tank was constructed of steel and no holes were observed in this tank. A series of ten soil excavation events were subsequently performed at the site between August 1987 and February 1988. Approximately 4,600 cubic yards of petroleum hydrocarbon-impacted soil were removed as a result of soil excavation activities. These excavations extended to the depth at which groundwater occurred.

Fourteen groundwater monitoring wells were installed at the site and site vicinity from 1988 through 1991 (MW-1 through MW-13, and RW-1). Groundwater sampling data, and data analysis for excavation activities and related soil sampling from the adjoining Dutch Pride Dairy property (southwest of the site) indicate that petroleum hydrocarbons released from two former USTs on the adjacent Dutch Pride Dairy site have migrated onto the Shell site. Groundwater monitoring was performed at the subject site until 1995. Groundwater data indicate that source removal through excavation and natural attenuation processes have limited the extent of petroleum hydrocarbons beneath the site.

Depth to groundwater ranged from 5.16 to 12.65 feet below grade (fbg) at this site. Groundwater flow direction historically ranged from northeasterly to southeasterly. The hydraulic gradient ranged between 0.003 and 0.01.

A total of six soil borings (B-1 through B-6) were drilled offsite, around the northwest, north, and northeast property lines (Figure 1). Soil samples from these borings contained total petroleum hydrocarbons as gasoline (TPHg) at concentrations as high as 540 parts per million (ppm) and benzene concentrations as high as 9.8 ppm. Soil samples from borings B-2, B-3 and B-4 did not contain TPH-g and benzene, toluene, ethylbenzene, and xylenes (BTEX). The highest concentrations of petroleum hydrocarbons in the borings were identified in soils less than 10 fbg. Below a depth of 10 feet, concentrations decreased or were below laboratory detection limits.

Soil samples from monitoring well borings indicate that MW-3 contained 270,000 ppm TPHg and 5,700 ppm benzene at 10 fbg. This well is located adjacent to the sidewalk of Amador Valley Boulevard (Figure 1). It is possible that residual petroleum hydrocarbons are present northward of this boring, beneath the sidewalk. The northward extent of potential soil contamination is defined by borings B-2, B-3, and B-4 (Figure 1), which did not contain detectable concentrations of TPHg. Onsite soil excavations extended northerly to within 30 to 50 feet of MW-3.

Health and Safety Issues

Soil beneath the sidewalk near MW-3 may contain elevated concentrations of petroleum hydrocarbons that may pose potential health and safety concerns if disturbed in the future. We recommend that proper health and safety procedures be implemented during any future activities.

Prior to future activities that would disturb soil in this area, a Health and Safety Plan should be generated describing the health and safety training requirements, personal protective equipment, specific personal hygiene, and monitoring equipment that will be used during activities to protect and verify the health and safety of the construction workers and the general public from exposure to constituents in the soil.

If there appears to be potential health and safety risks associated with the soil encountered at the site, there may be the potential for these compounds in the soil to affect construction workers at the site who would handle such material. Potential routes of exposure include: (1) dermal (skin) contact with the soil, (2) inhalation of dusts and/or vapors, and (3) ingestion of the soil.

The management and disposal of the excavated soil should be performed by licensed contractors in accordance with State and Federal regulations and the site specific health and safety requirements. Health and safety requirements should include:

- Individuals handling subsurface soil should be OSHA 40-hour trained;
- Level D personal protective equipment should be worn, with possible upgrade depending on site conditions;
- Soils should be screened in the field with an organic vapor analyzer to detect the presence of hydrocarbons;
- During activities, it may be necessary to implement dust control measures to reduce exposure. These measures may include moisture-conditioning the soil, using dust suppressants, or covering the exposed soil with plastic sheeting.

All excavated soil that exceeds the State or Federal hazardous waste criteria should be exported from the site to an appropriate landfill. If necessary, samples of the material to be exported should be analyzed for constituents required by the landfill(s) for waste acceptance.

Closing

This RMP, along with the May 22, 1996 Case Closure Summary, is intended to provide adequate justification for closure of the environmental case at this site. We request this case be reviewed for closure.

If you have questions regarding this document, please call Joe Neely at (707) 933-2361.

Sincerely,

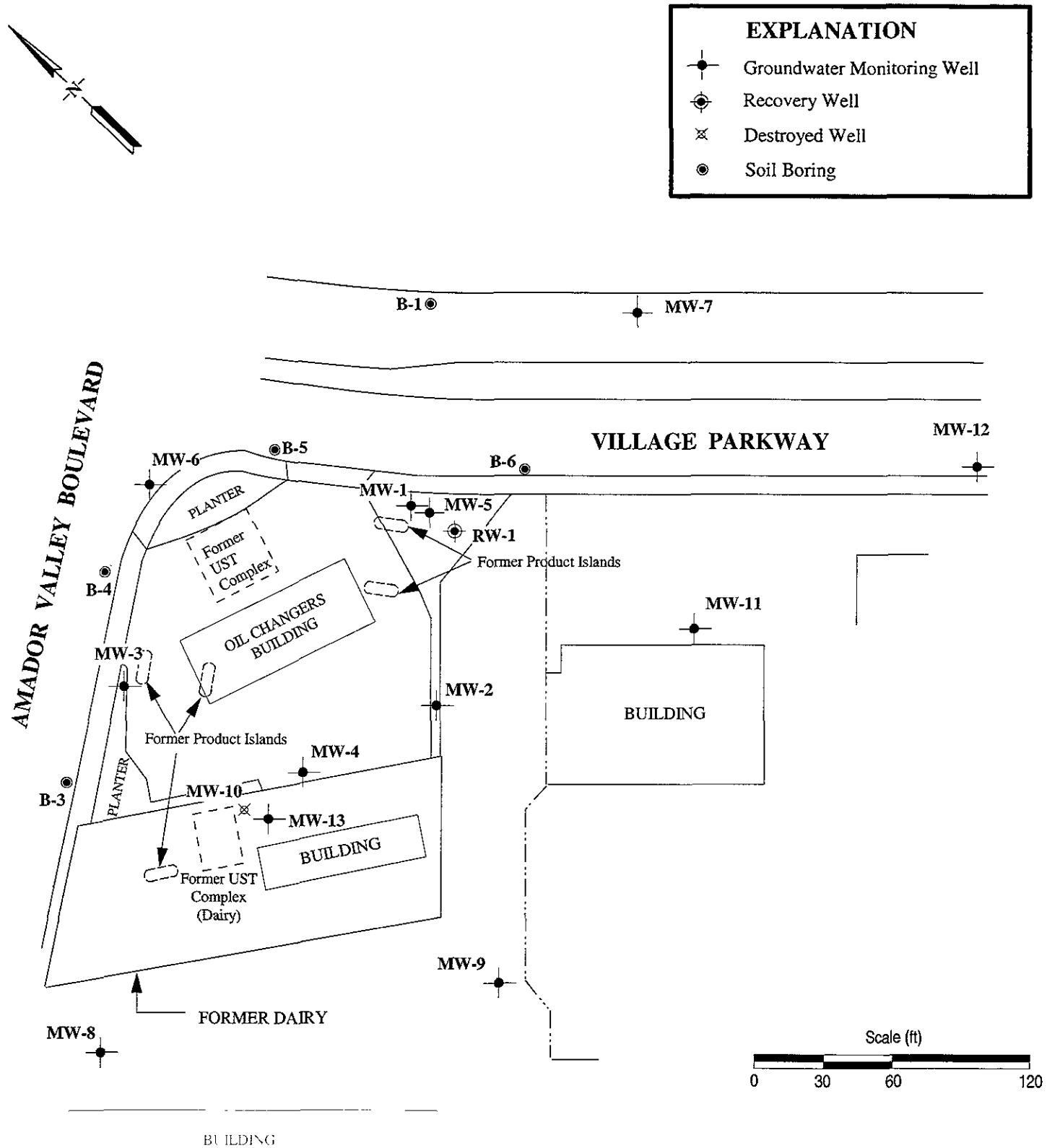
Cambria Environmental Technology, Inc.

Joe W. Neely, RG
Senior Project Geologist
RG 6927

Attachment

Figure 1. ite Plan

cc Karen Petryna, Equiva Services LLC
Paul H. Kim, Property Owner



FIGURE

1

1268

Former Shell Service Station

7194 Amador Valley Road
Dublin, California

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Site Plan