ENVIRONMENTAL MANAGEMENT, INC.

KHM

October 29, 2001
Project No. C80-000500C1

NOV 0 2 2001

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

Re: **Former Texaco/Former Exxon Service Station**
500 Grand Avenue
Oakland, California

Dear Ms. Chu:

KHM Environmental Management, Inc. (KHM), on behalf on Equiva Services LLC (Equiva), has prepared this letter to address the issue of petroleum hydrocarbon impacted soils potentially remaining at the former Texaco/former Exxon service station at 500 Grand Avenue, Oakland. It is KHM's opinion that any small quantity of petroleum hydrocarbon impacted soil remaining along Grand Avenue should not impede granting of case closure by the Alameda County Health Care Services Agency (ACHCSA).

BACKGROUND

In February 2001, KHM submitted a document titled *Underground Storage Tank Case Closure Request, Former Texaco/Former Exxon Service Station, 500 Grand Avenue, Oakland, California* to the ACHCSA. In a recent telephone call, you indicated that the only outstanding issue related to case closure was the possible presence of petroleum hydrocarbon impact soils along the southern edge of the site. Three soil samples from the southern wall of a May 1992 contained total petroleum hydrocarbon as gasoline (TPH-g) concentrations of 72 milligrams per kilogram (mg/kg), 1,000 mg/kg, and 480 mg/kg. The three samples were taken near the top of the zone of saturation at a depth of 5 feet below grade. Converse Environmental West in their March 1993 report state "The excavation pit could not be extended south of the limits shown without undermining Grand Avenue (page 2, paragraph 4)."

In a Harding-Lawson Associates drawing dated September 12, 1992, the edge of the May 1992 soil excavation is shown to be within five feet of the sidewalk along Grand Avenue (Attachment A). The excavation configuration as shown on the drawing is believed to be

accurate as it was Harding-Lawson Associates who collected the soil samples shown on the drawing.

RISK EVALUATION

It is anticipated that the concentrations of petroleum hydrocarbons in soil along the edge of the site have naturally decreased since they were sampled in May 1992. KHM has reviewed potential environmental and health risks associated with the potential thin strip of petroleum hydrocarbon impacted soils remaining along the southern edge of the site. — what are ending of Risk due to BTEX in soil at ~5 feet bgs for soil volatilization to indoor air

Groundwater

Any remaining petroleum hydrocarbon soils are not impacting downgradient groundwater quality. Wells MW-8H and MW-8I are located approximately 30 feet downgradient of the edge of the May 1992 excavation. Total purgeable petroleum hydrocarbons (TPPH) have remained below detection in Well MW-8H since December 1996 and in Well MW-8I since May 1997. It appears that Well MW-8K was installed in a backfilled area near the southern edge of the May 1992 excavation. TPPH has not been detected in Well MW-8K since the original sampling event in May 1993.

Dermal Contact

It is unlikely that anyone will come in contact with impacted soils under the southern edge of the site and beneath the adjacent sidewalk. This area will continue to be used for a sidewalk, landscaping, or parking pavement. What about future construction. Request RAP for construction workers.

Inhalation

Inhalation of petroleum hydrocarbon vapors is considered unlikely due to the fine-grained nature of surface soils, natural capping, and low potential for any building to be placed over the impacted area. The boring logs for Boring B-3 and Wells MW-8A and MW-8E (see map in Attachment A) all indicate that the upper five feet of the soil column consists of clay. It is anticipated that any future site development would use the southern edge of the site for landscaping, parking pavement, or construction of a sound barrier wall along busy Grand Avenue. Based on the Harding-Lawson drawing, it appears that all impacted soils were removed to within approximately 5-feet of the edge of the property. No enclosed buildings would be allowed to be constructed this close to the edge of the property.

do site visit to see how often other buildings are constructed, setbacks, etc.

Is this true? No, took photos. Adjacent bldgs are to edge of property line

In summary, it is KHM opinion that leaving a small quantity of impacted soil along the edge of the property poses a low risk to the environment or public health. KHM, on behalf of Equiva, again requests that the site be granted case closure by the ACHCSA.

Please call me at (408) 224-4724 if you have any questions regarding this letter.

Sincerely,
KHM Environmental Management, Inc.

R. Lee Dooley
Senior Hydrogeologist
CHG 0183

REGISTERED GEOLOGIST
R. LEE DOOLEY
No. 0183
CERTIFIED
HYDROGEOLOGIST
EXP. 04/03
STATE OF CALIFORNIA

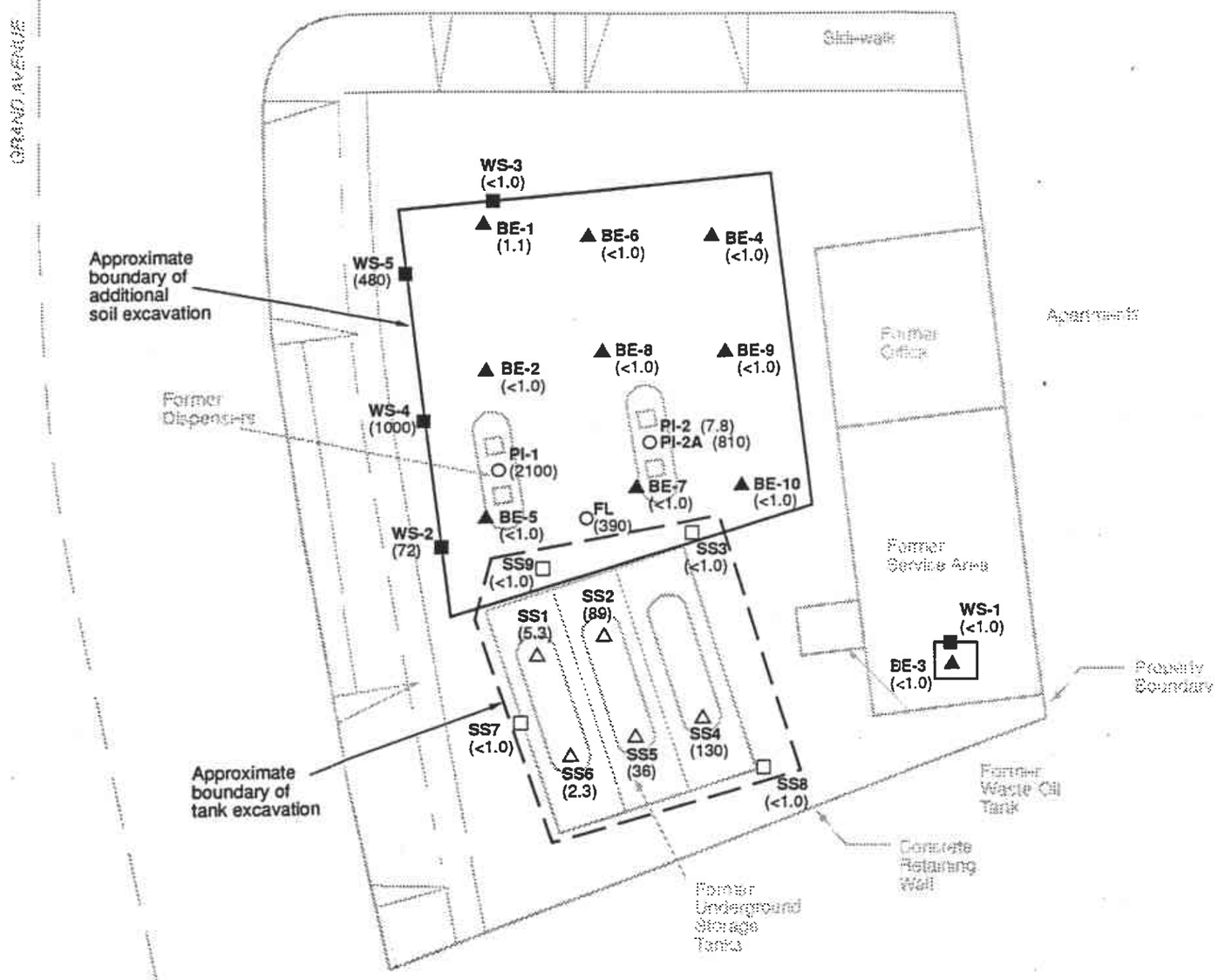
Attachment A – Harding Lawson Associates, Plate 6, Locations Sampled During Excavation Operations.

CC.

Ms. Karen Petryna, P.E., Equiva Services LLC, P.O. Box 7869, Burbank, CA 91510-7869
Mr. Richard Hiett, California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, CA 94612.

EXPLANATION

- Approximate boundary of excavation at the time of tank removal (April 14 and 15, 1992)
- △ Soil sample (SS) from bottom of tank excavation (approximately 10 feet below grade)
- □ Soil sample (SS) from wall of tank excavation (5 to 10 feet below grade)
- Approximate boundary of soil excavation (May 5 and 6, 1992)
- ○ Soil sample from pump island (PI) of fuel line (FL) prior to excavation (5 to 6 feet below grade)
- ▲ Soil sample (BE) from bottom of evcavation (4.5 to 9 feet below grade)
- ■ Soil sample (WS) from wall of excavation (5 to 7.5 feet below grade)
- (2.3) Total petroleum hydrocarbons as gasoline, in mg/kg (ppm)



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SCALE IN FEET

Harding Lawson Associates
Engineering and Environmental Services

Locations Sampled During Excavation Operations
Former Service Station
500 Grand Avenue
Oakland, California

PLATE **6**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED DATE
SRG	10262.169		09/12/92	