



Heilshorn Environmental Engineering

ENVIRONMENTAL
PROTECTION

99 OCT 21 PM 4:18

October 15, 1999

Mr. Amir Gholami
Alameda County Health Care Services
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

STID 3030

SUBJECT: Workplan Modification and Implementation per Letter Dated October 4, 1999
REGARDING: Beck Roofing, 21123 Meekland Avenue, Hayward, CA 94541, Stid 3030

Dear Mr. Gholami:

This letter responds to your letter dated October 4, 1999 regarding the above referenced site and subject. Each of the four items in your letter will be addressed in turn. An additional item, item 5, discusses the response time frame. The October 4 letter items are shown in italic type. Responses are shown in plain type.

- 1. Soil samples are to be collected at five-foot-depth intervals and any significant changes in lithology, and not just at the deeper depth.*

Soil contamination was not observed in soil samples shallower than 20 feet below ground surface (bgs) outside of the tank pit area and MW-3. MW-3 will be evaluated semi-annually. The tank pit area was back filled with a cement-like material. Therefore, shallow soil samples cannot be collected in this area because native soils are not present. The data indicate that the plume outside the tank pit exists at depth between a minimum of 20 feet bgs to about 35 feet bgs. Attachment 1 tables list the soil data for the tank pit and soil borings. Collection of shallower samples should not help delineate the current extent of the plume observed in 1991 and 1994.

Heilshorn Environmental Engineering (HE2) will modify the Workplan dated August 23, 1999 (Workplan) to include sample collection every five feet from 20 feet to 35 feet bgs, an increase of four soil samples.

- 2. You may perform analysis of MW-3 on a semi-annual basis.*

Thank you. MW-3 will be sampled again in January 2000 and semi-annually thereafter until analytical results meet closure requirements.

- 3. You may use the present numbers in calculating the Tier II risk assessment as discussed.*

HE2 proposes that the RBCA analysis be reevaluated after collection of the new soil data. This will enable evaluation of current conditions rather than re-evaluation of past conditions. The new data will be compared to RBCA Tier I criteria. If the data exceed Tier I and county closure criteria, then HE2 may perform a Tier II evaluation.

- 4. Per Cal EPA and RWQCB guidelines, you need to test for the presence of all oxygenated contaminants such as TAME, DIPE, ETBE, TBA, EDB, and EDC at least once to ensure the absence of the indicated constituents.

Groundwater analyses performed in January 1999 included oxygenated constituents. The results were ND except for MW-3 which contained low levels of MTBE (3.3 µg/L) and EDC (11 µg/L). The Attachment 2 table presents these analytical results.

- 5. Please reply to the above items within 30 days or by November 4, 1999.

The letter is dated October 4, 1999. However, the letter was postmarked October 12 and received by HE2 on October 14. HE2 and Beck Roofing request additional time to obtain cost pre-approval from the State Underground Tank Fund and to complete the scope of work described in the work plan. Beck and HE2 will endeavor to complete the work and submit a report to Alameda County by November 19, 1999, but may require until November 30, depending on response time from the Fund. Therefore, we are requesting an extension until November 30 to complete the work and submit the final report.

What happened to these samples?

HE2 proposes to implement the Workplan dated August 23, 1999 with the following modifications:

- A. Soil samples will be collected every five feet from 20 to 35 feet bgs in each of the four geoprobe holes.
- B. HE2 will perform a Tier I RBCA analysis based on the data generated from the new soil samples. This evaluation will be part of the report described in the Workplan. A Tier II evaluation will be performed only if more than 10% of the sample analyses (2 samples) exceed the Tier I criteria for benzene.
- C. Samples will be analyzed for TPHg and BTEX/MTBE only. Samples from this site were analyzed for oxygenated compounds in January 1999.

Beck Roofing and its consultant HE2 will implement the Workplan as amended by items A, B and C above, and submit the report to Alameda County Environmental Health Services by November 30, 1999 unless we receive correspondence from you requesting further changes to the Workplan.

Please feel free to call me with any questions regarding this report. I may be reached by telephone (510-222-7968), fax (510-222-8573) or email (edheilshorn@earthlink.net).

Sincerely,
Heilshorn Environmental Engineering

ED Heilshorn
Elyse D. Heilshorn, P.E.
Consulting Engineer

Proposed to do
soil samples
5 ft interval
Beck Roofing
20-35 ft
BGS

cc: Mary Beck, Beck Roofing
Elsie Matsuno, Brown and Sullivan

AK

ATTACHMENT 1
PREVIOUS SOIL DATA

TABLE 2 SUMMARY OF SOIL DATA - TANK REMOVAL AND OVER EXCAVATION PITS

| Date | Location | Depth Ft,bgs | TPHg mg/kg | Benzene $\mu\text{g}/\text{kg}$ | Toluene $\mu\text{g}/\text{kg}$ | Ethyl-benzene $\mu\text{g}/\text{kg}$ | Xylenes $\mu\text{g}/\text{kg}$ | Lead mg/kg |
|-----------------|----------------------------|------------------|-----------------|---------------------------------|---------------------------------|---------------------------------------|---------------------------------|------------------|
| Tank | Removal | Pit | Sidewall | Samples | (Blaine per | L&W, 92) | | (Organic) |
| 5/20/91 | Tank pit fill end | 8 | 1,300 | 6400 | 7700 | 0800 | 230000 | 0.22 |
| | Tank pit opposite fill end | 7.5 | 1800 | 5800 | 75000 | 33000 | 210000 | 0.66 |
| Tank Pit | Over Excavation | Sidewal l | Samples | (L&W, 92) | | | | (Total) |
| 11/91 | North wall | 15 | 1.5 | 8 | 50 | 16 | 210 | |
| | North wall | 16 | 4200 | 6300 | 240000 | 1000000 | 550000 | 11 |
| | North wall | 17 | 2740 | 16000 | 240000 | 120000 | 650000 | ND |
| | Floor, center | 16 | 780 | 830 | 1500 | 6300 | 48000 | NT |
| | Center Floor | 17 | 5760 | 30000 | 450000 | 230000 | 1270000 | 7.25 |
| | Center floor | 18 | 6800 | 4000 | 440000 | 140000 | 770000 | 12.2 |
| | South wall | 15 | ND | 11 | 71 | 15 | 87 | 8.3 |
| | South wall | 16 | 3200 | 1800 | 100000 | 60000 | 350000 | 8.4 |
| | South wall | 17 | 720 | 400 | 13000 | 8400 | 90000 | 9.35 |
| | East wall | 14 | 170 | ND | 2700 | 1500 | 10000 | NT |
| | East Wall | 16 | 1.2 | ND | 40 | 8 | 48 | ND |
| | West Wall | 16 | 1.0 | ND | 9 | ND | 29 | 4.0 |

Notes:

BTEX units $\mu\text{g}/\text{kg}$ (original analyses in mg/kg)

TPHg and lead units, mg/kg

ND Not detected above method detection limit

NT Not tested

TABLE 2 SUMMARY OF SOIL DATA - TANK REMOVAL AND OVER EXCAVATION PITS (continued)

ppm soil

| Date | Location | Depth Ft,bgs | TPHg mg/kg | Benzene mg/kg | Toluene mg/kg | Ethyl-benzene mg/kg | Xylenes mg/kg | Lead mg/kg |
|-------|----------------|--------------|------------|---------------|---------------|---------------------|---------------|----------------|
| Tank | Overexcavation | Sidewall | Confirm'n | Samples | (Lusch-Geo | , 94) | | (Not analyzed) |
| 11/94 | SW-1 | 30.0* | 32 | 0.52 | 0.93 | 0.52 | 1.6 | |
| | SW-2 | 25.0 | 82 | 0.43 | 3.2 | 1.5 | 4.5 | |
| | SW-3 | 25.0 | 320 | 1.5 | 6.7 | 4.6 | 15 | |
| | SW-4 | 30.0* | 2.4 | 0.17 | 0.50 | 0.11 | 0.38 | |
| | SW-5 | 25.0 | 28 | 0.14 | 0.91 | 0.37 | 1.3 | |
| | SW-6 | 31.0 | 740 | 5.7 | 18 | 7.1 | 22 | |
| | SW-7 | 25.0 | 3600 | 0.26 | 160 | 72 | 220 | |
| | SW-8 | 31.0* | 30 | <0.005 | 2.8 | 0.76 | 2.2 | |
| | SW-9 | 25.0 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | |
| | B-10 | 31.0* | <1.0 | <0.005 | 0.013 | 0.006 | 0.027 | |
| | SW-11 | 18.0 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | |
| | SW-12 | 18.0 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | |
| | SW-13 | 18.0 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | |

Notes:

Results in parts per million (milligrams per kilogram)

* = Samples collected at bottom of the excavation

*up to 20 ft + no of mult
 2 now
 will be with cement.
 (AG)*

TABLE 3 SUMMARY OF SOIL DATA – SOIL AND MONITORING WELL BORINGS

| Date | Location | Depth Ft,bgs | TPHg | Benzene | Toluene | Ethyl- benzene | Xylenes | Lead |
|-------|----------------|-----------------|------|---------|---------|-------------------|---------|-------|
| Soil | Boring Samples | (L&W, | 92) | | | | | Total |
| 10/91 | MW-1 | 5 | ND | ND | 16 | ND | 14 | ND |
| | | 10 | ND | ND | 10 | ND | 7 | ND |
| | | 15 | ND | ND | 13 | ND | 7 | ND |
| | | 20 | ND | ND | 10 | ND | 6 | ND |
| | | 25 | ND | ND | 24 | ND | 7 | ND |
| | | 30 | ND | ND | 11 | ND | 6 | 5.00 |
| | | 35 | ND | ND | 10 | ND | 6 | 5.50 |
| | | 40 | ND | ND | 16 | ND | 6 | ND |
| | | 45 | ND | ND | 15 | ND | 6 | 4.3 |
| 10/91 | MW-2 | 5 | ND | ND | ND | ND | ND | ND |
| | | 10 | ND | ND | ND | ND | ND | ND |
| | | 15 | ND | ND | ND | ND | ND | ND |
| | | 20 | ND | ND | ND | ND | ND | 5.90 |
| | | 25 | 1.4 | 100 | 85 | 14 | 90 | ND |
| | | 30 | ND | 44 | 8 | ND | ND | ND |
| | | 35 | ND | 6 | ND | ND | ND | 4.20 |
| 10/91 | B-1 | 5 | ND | ND | 17 | ND | ND | ND |
| | | 10 | ND | ND | 11 | ND | ND | ND |
| | | 15 | ND | ND | 12 | ND | ND | ND |
| | | 20 | 5.7 | 250 | 600 | 100 | 570 | 5.82 |
| | | 25 | 8.8 | 140 | 600 | 126 | 760 | 4.20 |
| | B-2 | 5 | ND | ND | 18 | ND | ND | ND |
| | | 10 | ND | ND | 13 | ND | 6 | 4.00 |
| | | 15 | ND | ND | 6 | ND | ND | ND |
| | | 20 | ND | 46 | 11 | 14 | 40 | ND |
| | | 25 | 35 | 440 | 1200 | 320 | 1800 | ND |
| | | 30 | 36 | 270 | 87 | 37 | 2.1 | ND |

TABLE 3 SUMMARY OF SOIL DATA – SOIL AND MONITORING WELL BORINGS (continued)

| Date | Location | Depth Ft,bgs | TPHg | Benzene | Toluene | Ethyl- benzene | Xylenes | Lead |
|------|--------------------------------------|-----------------|------|---------|---------|-------------------|---------|-------|
| Soil | Boring Samples | (L&W, | 92) | | | | | Total |
| | MW-3 | 5 | 1 | ND | 18 | ND | ND | ND |
| | | 10 | ND | ND | ND | ND | ND | 3.60 |
| | | 15 | ND | ND | 28 | ND | ND | 3.60 |
| | | 20 | 2.9 | 21 | 17 | 6 | 25 | 5.80 |
| | | 25 | 6.2 | 48 | 22 | 12 | 56 | ND |
| | | 30 | 9.8 | 250 | 15 | 48 | 260 | 3.90 |
| | | 35 | ND | ND | 14 | ND | ND | 3.75 |
| Soil | Boring Samples | (Anderson | 94) | | | | | |
| 7/94 | SB18 (MW-4) | 25.5-35.5 | ND | ND | ND | ND | ND | NA |
| | SB19 North of MW4 | 25.5-35.5 | ND | ND | ND | ND | ND | NA |
| | SB20 South of MW-4 | 25.5-35.5 | ND | ND | ND | ND | ND | NA |
| | SB21 (within the excavation area) | 28.5 | 180 | 2200 | 8700 | 4800 | 22000 | NA |
| | SB21 (within the excavation area) | 29.0 | 430 | 11000 | 42000 | 14000 | 69000 | NA |
| | SB21 (within the excavation area) | 29.5 | 550 | 13000 | 64000 | 25000 | 120000 | NA |

Notes:

BTEX units $\mu\text{g}/\text{kg}$ (original analyses in mg/kg)

TPHg and lead units, mg/kg

ND Not detected above method detection limit

NA Not analyzed

ATTACHMENT 2
GROUNDWATER DATA INCLUDING OXYGENATE ANALYSES

TABLE 5 JANUARY 1999 GROUNDWATER ANALYTICAL REPORTS

| Constituent Analyzed | MW-1 | MW-2 | MW-3 | MW-4 | Reporting Limit, $\mu\text{g/L}$ |
|---|------|------|------|------|----------------------------------|
| TPHg | ND | ND | 230 | ND | 50 |
| Benzene | ND | ND | 6.2 | ND | 0.5 |
| Toluene | ND | ND | ND | ND | 0.5 |
| Ethylbenzene | ND | ND | 7.3 | ND | 0.5 |
| Xylenes | ND | ND | ND | ND | 0.5 |
| Di-isopropyl Ether (DIPE) | ND | ND | ND | ND | 1.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND | ND | ND | ND | 1.0 |
| Methyl tert-Butyl Ether (MTBE) | ND | ND | 3.3 | ND | 1.0 |
| tert-Amy Methyl Ether (TAME) | ND | ND | ND | ND | 1.0 |
| tert Butanol | ND | ND | ND | ND | 5.0 |
| Ethylene Dibromide (EDB) | ND | ND | ND | ND | 1.0 |
| 1,2-Dichloroethane (1,2-DCA) also called Ethylene Dichloride (EDC) | ND | ND | 11 | ND | 1.0 |

Units: $\mu\text{g/L}$

*Worst
MW-3
RT not met in it now*