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December 15, 2011

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Subject: Response to UST Cleanup Fund Second Five Year Review for Fuel Leak Case No. RO0000056 and GeoTracker Global ID T0600101108, Chevron #21-1283 / Express Auto Clinic, 3810 Broadway, Oakland, CA 94611

Mr. Cullen and Mr. Trommer:

ACEH has received the second 5-Year Review Summary Report dated October 6, 2011 from the Underground Storage Tank Cleanup Fund (USTCF) for the site listed below. The Summary Report represents the second five year review of this site managed by the ACEH Local Oversight Program by the Fund. The Fund correspondence requests that ACEH respond to the Fund correspondence within 45 days of the date of the letters (November 20th). We have reviewed the contents of the correspondence in the context of the appropriateness of recommendations. However, we have not reviewed the reports for accuracy of all information presented.

ACEH Case: RO0000056
USTCF Claim: 10630
Global ID: T0600101108
Site Name: Chevron #21-1283
Site Address: 3810 Broadway, Oakland, CA

USTCF Recommendations from October 6, 2011 Review Summary:

- No regulatory or claimant activity has occurred, with the exception of groundwater monitoring, since the last review. The Fund staff recommends again that this Site should be considered for closure.

Initial ACEH Response: ACEH is not in agreement with this recommendation. However, ACEH is in general agreement with the previous UST Fund staff recommendations. Again, depending on the results of the soil vapor survey, the vapor survey may provide data regarding offsite contaminant migration in the subsurface to receptors that may require evaluation, and not just onsite vapor risk. The site is in a similar situation as Claim 5974 (RO0000427 and Global ID T0600100339) in which the previous recommendation was reiterated. ACEH requests a reiteration of recommendations associated with this site, which do include a recommendation for closure review.

Additional Comments: The USTCF has recommended the site be considered for closure based on a review of groundwater concentrations remaining in groundwater in existing wells at the site. Upon detailed review of site data and the USTCF document, ACEH is in agreement that groundwater

concentration trends in well MW-6 depict a clear downward trend. Conversely review of concentration trends in well MW-12, located within the pea gravel backfilled remedial excavation, depicts an episodic but clear increasing trend for both TPHg and benzene (attached; maximum concentrations: TPHg 13,000 µg/l, benzene 2,400 µg/l). It is uncertain if these concentrations are related to current station activities, or to residual contamination beneath the site which has been documented to be impacting groundwater beneath the site, or both.

The bore log for well MW-12 depicts pea gravel extending from near the surface pavement to a depth of 26 feet, where a one-foot thick clay layer is present. Beneath the clay is a poorly-graded medium to coarse-grained sand which extends from 27 to 29.5 feet, but which is of an undetermined depth. The well casing extends from 10 feet to 29.5 feet, extending fully through the one-foot clay layer, and into the sand unit below. While removal of this well may be of benefit, the increasing trends in well MW-12, which are not seen in perimeter wells MW-4, MW-5B, MW-6, MW-7, MW-9, MW-10, or MW-11, can imply that the backfilled excavation may be either an active bio-chamber, or may imply the contaminants are by-passing the existing well network to unevaluated offsite receptors. Neither possibility is understood. This can be important as the backfill can be argued to act as a direct conduit to groundwater beneath this active station.

The subject site is an essentially flat surface which is excavated out of a small hill to the north and east of the site. To the north, the north and eastern walls of the station building are excavated a full story into the hill, while to the south, the eastern and southern walls of the station building are excavated approximately a half story into the hill. While the station may be slab-on-grade construction, some confining of interior air space is possible due to the hill. A review of local topography indicates a westerly grade has historically been present towards the Broadway Branch of Glen Echo Creek, currently located behind a new Kaiser – Permanente (KP) garage and hospital across Broadway from the site. Those structures extend to a depth of approximately 15 feet bgs (hospital to south) to 30 feet bgs (garage to north); thus extended below groundwater (first encountered onsite at a depth of approximately 20 feet bgs).

Groundwater contour maps largely depict a radial pattern centered on the pea gravel backfill excavation, which appears to be acting somewhat like an underground reservoir; however, the pattern is generally broken toward the west, and to the east, both before and after the KP construction dewatering event. In part this may be an artifact of well placement and the lack of wells sufficiently offsite and away from the backfill excavation; however, the consistency of this break, the topographical slope to the west, and the range of mapped groundwater flow patterns that suggest this, suggest this can be ascribed to more than just well placement. Because wells on the western property perimeter are spaced approximately 65 feet apart, contaminant concentrations in well MW-12 can be reasonably argued to by-pass the well network undetected.

In regards to soil vapor and the soil vapor work plan, volatile fuel hydrocarbon concentrations in a limited number of soil and in groundwater samples, were at one time significant. Elevated residually impacted soil (3,100 mg/kg TPHg and 14 mg/kg benzene) at one time remained within approximately 30 feet of the southern portion of the station building at the southern and northern perimeter of the pea gravel filled excavation. For those reasons it appears reasonable to verify that these concentrations are not a concern to building workers, or the residential community to the east of the property.

To resolve these concerns and rapidly access this site, ACEH will be requesting a revised work plan to investigate existing data gaps. This includes the potential for an active biologic system beneath the site with monitored natural attention (MNA) analytical parameters, and the potential for undetected offsite contaminant migration with the installation of soil bores in the perimeter well gap, and thus an evaluation of offsite receptor risk (inclusive of risks to the sub-grade KP garage and hospital across Broadway). The request for a revised work plan will also include a request for a subslab vapor survey in addition to revisions in the soil vapor survey previously proposed, due to changes in DTSC guidelines and industry concerns since the work plan was submitted.

Thank you for providing ACEH with the opportunity to comment on the subject site. Should you have any questions regarding the responses above, please contact me at (510) 567-6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Digitally signed by Mark E. Detterman
DN: cn=Mark E. Detterman, o, ou, email, c=US
Date: 2011.12.15 15:43:41 -08'00'

Mark E. Detterman, P.G., C.E.G.
Senior Hazardous Materials Specialist

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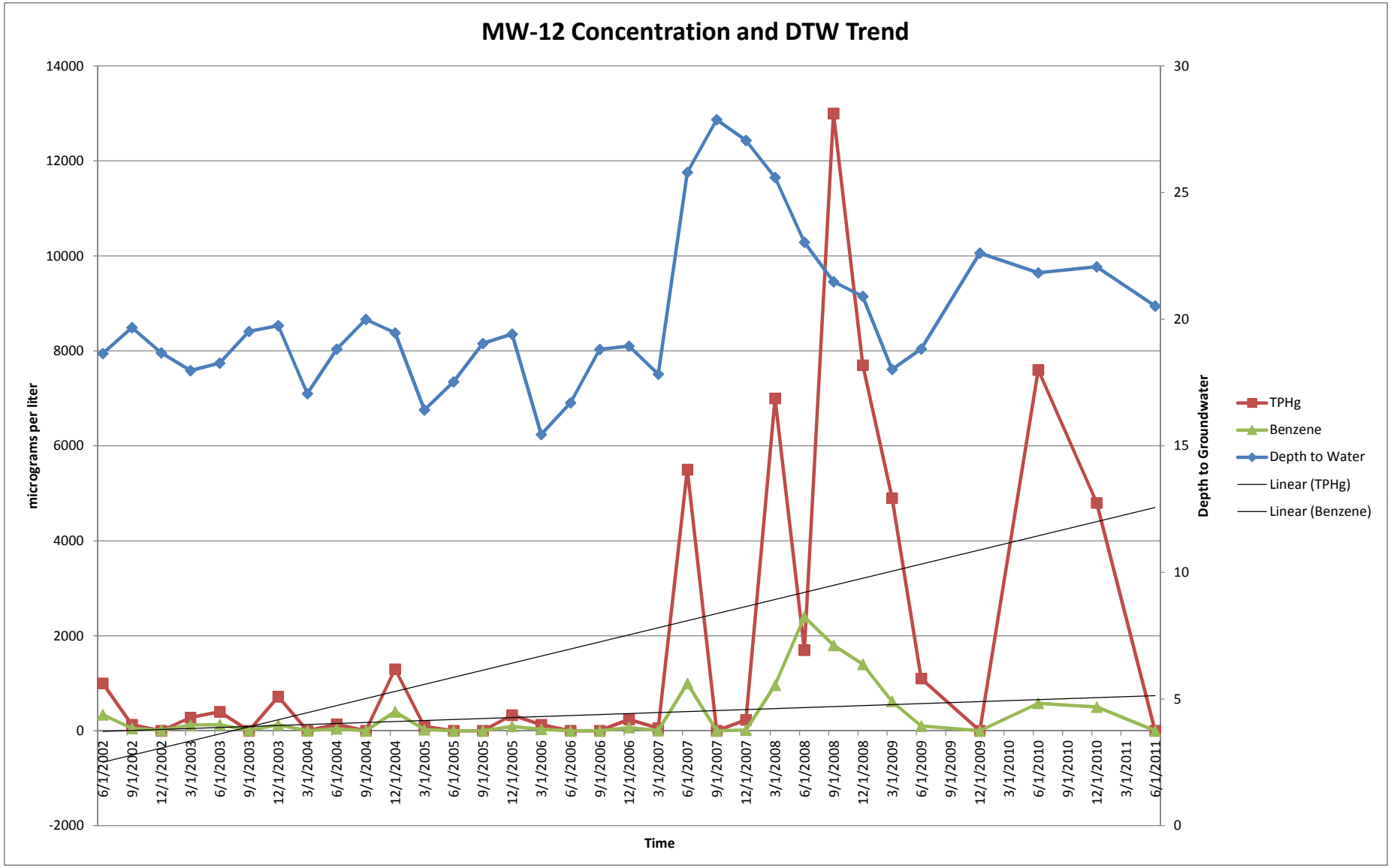
Electronic File, GeoTracker


MW-12 Concentration and DTW Trend
micrograms per liter
Depth to Groundwater
Time
14000
12000
10000
8000
6000
4000
2000
0
-2000
30
25
20
15
10
5
0
6/1/2002
9/1/2002
12/1/2002
3/1/2003
6/1/2003
9/1/2003
12/1/2003
3/1/2004
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3/1/2010
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12/1/2010
3/1/2011
6/1/2011
TPHg
Benzene
Depth to Water
Linear (TPHg)
Linear (Benzene)