Detterman, Mark, Env. Health

From: Detterman, Mark, Env. Health
Sent: Friday, May 06, 2016 12:06 PM

To: 'Robert Kitay'

Cc: Dee

Subject: RE: Albany Hill Mini Mart Response Letter Attachments: ALBANY HILL RESPONSE LETTER.pdf

Robert,

Thanks for the letter and your thoughts on the site; they have been useful in refining the scope of work needed to move the site towards closure.

Thanks for pointing out the previously conducted utility survey. I had missed it during my recent review. ACDEH is in agreement that another utility survey is not needed.

ACDEH is also in agreement that well MW-5R should not have been included in the set of wells with an increasing trend since the system was shut down. As you point out, well MW-6 has had substantial variations in TPHg concentrations over time, with no or limited volatiles for some time (shortly after system startup in November 2007). In part this is one reason for ACDEH's request for quarterly groundwater monitoring, to determine if the trend continues, if volatiles return, or all abate and decreases are seen again (see more below). ACDEH also agrees that it can be acceptable to close a site under the LTCP with these levels of TPHg concentration. However, the request for a basement survey in the vicinity is to help ensure that basement dewatering (or other dewatering facilities) do not intercept the TPHg contamination in groundwater and lead to direct exposure to the contamination (discharge it to the curb and storm water systems, or expose occupants to it, as Direct Exposure ESLs are much lower for both; it's no longer part of the groundwater system). Because the previously completed utility survey indicates limited potential for a utility preferential pathway to extend a groundwater plume, it appears more reasonable to request a basement survey within approximately 600 feet of the site. This is partly based on the maximum plume length as defined in the groundwater technical justification paper used to support the Groundwater Media Specific Criteria of the LTCP (855 feet and modified with an unsupported, but expected, dilution / attenuation analysis).

As indicated above the request for quarterly groundwater monitoring is to determine more quickly if there is a rebound due to the shutdown of the system and rising water levels early in a year due to the increased rain this year and hopefully a transition out of the historic drought we have been in. ACDEH has found this typically leads to quicker closures once determined that there is none or is limited (with a bit of luck and appropriate timing). The request for groundwater analysis from nondetectable wells is to determine if system shut down would affect these wells as each of the wells you cite (MW-2, MW-3, MW-7, MW-8) essentially became nondetectable co-incident with the installation of the ozone system at the site (November 20, 2007 startup; with pilot testing prior to startup), and for the reasons just cited. This is expected to be less than a year, more likely a quarter or two.

Hopefully this clarifies the directive letter and communicates modifications to that letter. Please let me know if you have other thoughts or concerns.

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PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Robert Kitay [mailto:rkitay@aquascienceengineers.com]

Sent: Friday, May 06, 2016 10:03 AM To: Detterman, Mark, Env. Health

Cc: Dee

Subject: Albany Hill Mini Mart Response Letter

Hi Mark -

Please see the attached response letter to your conditional workplan approval letter. Please call me if you would like to discuss.

Robert Kitay Aqua Science Engineers (925) 413-8604



Aqua Science Engineers, Inc. 55 Oak Court, Suite 220, Danville, CA 94526 (925) 820-9391 - Fax (925) 837-4853

May 5, 2016

Mr. Mark Detterman Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

SUBJECT: RESPONSE TO APRIL 18, 2016 CONDITIONAL WORKPLAN APPROVAL

Fuel Leak Case No. RO0000262

Albany Hill Mini Mart 800 San Pablo Avenue Albany, California

Dear Mr. Detterman:

This letter is in response to your Conditional Workplan Approval letter dated April 18, 2016 for the above referenced site, in particular directive items 2 and 3.

Aqua Science Engineers, Inc. (ASE) disagrees with your analysis that TPH-G in groundwater have risen in downgradient perimeter well MW-5R since the ozone system was turned off. First of all, it now appears that the hydrocarbons detected in groundwater samples in MW-5R are not related to underground storage tanks (USTs) at the subject site at all. As we have previously reported, there was a former UST that was removed from under the sidewalk area in front of the neighboring property. This former UST is a significant distance from the site (the width of an entire address) and almost certainly is not related to either current or former operations at the 800 San Pablo Avenue property. Simply put, in the course of our assessment we identified a contamination issue not related to the subject site. Monitoring well MW-5R is located immediately adjacent to that former UST. Further, there has been little consistency as far as a groundwater flow direction at the site, however, MW-5R has never been what would be considered downgradient of the subject site.

Second, even if contamination in this well were related to the site, I certainly wouldn't consider what was seen in MW-5R as an increase or non-stability of the plume. The results from the February 16, 2016 did certainly increase from the October 7, 2015 results. However, the October 7, 2015 results could be considered anomalously low. The TPH-G results are identical to the previous sampling on June 30, 2015 and are lower than every sampling event since 2010. The BTEX concentrations were also slightly higher than the anomalous October 2015 results, but similar to the previous sampling event and indicative of a long term decreasing trend in hydrocarbon concentrations. There have been occasional anomalously low results from this well in the past.

The analytical results in groundwater samples collected from MW-6 during the previous two sampling events have admittedly been higher than the results from the previous several years. However, the concentrations are still relatively low (TPH-G at 1,100 ppb during the last sampling event with no detected BTEX or oxygenates). These concentrations are still indicative of concentrations that would be acceptable for case closure from the RWQCB. Over the course of this



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project, this well has always shown significant variations in TPH-G, but most importantly there has been no BTEX detected in this well since 2008 indicating that the risk drivers are stable.

Your April 18, 2016 letter requests a conduit study. ASE previously completed a conduit study in October 2003, and it is highly unlikely that any additional conduits have been installed since that time other than the replacement sewer line constructed in 2005 that damaged MW-5. An area well survey was conducted by AARS in June 2002. No wells were identified within 2,000-feet of the site. Since this area is served by municipal water supplies, there are no large industrial facilities that would require substantial water supplies, and since the housing in this area has very little in the way of landscaping that would require watering, it would seem exceedingly unlikely that any new water supply wells would have been installed in the site vicinity in the last 14 years.

ASE agrees that the wells should continue to be analyzed for naphthalene. However, ASE believes that the sampling schedule should be semi-annual instead of quarterly. ASE also doesn't understand the logic in resuming quarterly sampling of monitoring wells MW-2, MW-3, MW-7 and MW-8, all of which have consistently shown non-detectable concentrations for between 5 and 8 years.

Should you have any questions or comments, please feel free to call me at (925) 413-8604.

Respectfully submitted,

Aqua Science Engineers, Inc.

Robert E. Kitay Senior Geologist