Message

From: MacNicholl, Peter@DTSC [Peter.MacNicholl@dtsc.ca.gov]
Sent: 7/13/2017 6:23:50 PM
To: Fennessy, Christopher (christopher.fennessy@Rocket.com) (christopher.fennessy@Rocket.com) [christopher.fennessy@Rocket.com]
CC: MacDonald, Alex@Waterboards [Alex.MacDonald@waterboards.ca.gov]; Keller, Lynn [Keller.Lynn@epa.gov]; Rohrer, Jim@DTSC [Jim.Rohrer@dtsc.ca.gov]
Subject: Soil Vapor Continuous Sampling Presentation and Relevant Implications to Aerojet Site
Attachments: DTSC_07-13-17_VaporSafe.pptx

Hi All,

I participated in a online training course today (saw Alex attended as well) discussing the benefits of continuous monitoring vs. the typical passive techniques. Attached is the presentation put on by Blaine Hartman and Mark Kram.

The main points that I took away that do apply to the Aerojet Site and in particular Area 40 are the following:

- Vapor impacts are very sensitive and can vary significantly not just due to temporal or barometric but also pressure gradients measured at the Site (Slides 38 & 39);

- Continuous monitoring detects and tracks elevated/dynamic levels that passive systems would have shown as False positive or benign and not of an elevated health risk (Slide 13 & 53);

- Sub-slab depressurization systems actually are not truly protective and can actually exhauster bate impacts to indoor air contamination & conditions especially when external sources are still present such as Area 40 (Slides 24, 25, 26, 27 & 28);

- Continuous monitoring is applicable for both indoor and subsurface monitoring and is actually more cost effective when 5 or more sample locations are utilized (Slide 49);

I believe this along with other literature illustrates the facts that vapor contamination is dynamic and susceptible to many variables. Just because you've taken one or even several samples provides no assurance or degree of confidence that conditions will not worsen or change over the course of time. Moreover, engineering controls such as vapor barriers and active systems are not necessarily protective as originally perceived. Perhaps the group should consider employing this technology where applicable to help further refine and define the actual Site conditions due to the intrinsic variability of this contaminant and its impacts.

Sincerely,

Peter MacNicholl, P.E.
Department of Toxic Substances Control
Project Manager
Cleanup Program – Sacramento Office
8800 Cal Center Drive
Sacramento, California 95826
Ph: 916-255-3713
Peter.MacNicholl@dtsc.ca.gov