Detterman, Mark, Env. Health

From: Detterman, Mark, Env. Health
Sent: Friday, September 19, 2014 3:23 PM
To: 'Daniel Villanueva'; rewmb@aol.com
Cc: Roe, Dilan, Env. Health
Subject: Swiss Valley Cleaners Reoccupancy of Dry Cleaning Suite

Daniel,
I wanted to followup on our conversation yesterday afternoon in regards to Mr. Brooks' question relative to leasing the dry cleaning suite to a new dry cleaning operation while site investigation and cleanup operations are still underway. This request was based on the results of the *Risk Characterization and Uncertainty Analysis Report* (dated August 5, 14, 2014) that indicated a 8.4×10^{-6} increased cancer risk rate and a hazard index of 0.015 based on the results of the indoor air sampling of PCE at the subject dry cleaner suite. Both the increased cancer rate and hazard index are within normally acceptable rates.

At this time ACEH is not in agreement with this scenario for a number of reasons:

1) ACEH considers the risk characterization and calculated cancer risk and hazard index to be preliminary as the calculations were based on two indoor air sampling events that have not been tied on the same day and time to subslab vapor concentrations. Roughly similar concentrations were detected in both indoor air sampling events at concentrations above preliminary screening levels that require additional investigation and risk determination. At present ACEH or AGE cannot state if the indoor air sample results are representative of high PCE flux rates from the subsurface, or from low, or average flux rates. If from low flux rates, potentially significantly higher indoor air concentrations may be present that would result in higher cancer and hazard index risk rates. Tying the indoor air and sub-slab concentrations will also enable a site specific attenuation factor to be determined, which will be useful in determining site specific health risks. Until indoor air and subslab concentrations can be tied together over at least several events, ACEH does not consider it appropriate to reoccupy the dry cleaner suite. Once synchronous indoor air and subslab concentrations are measured, a better understanding of the appropriateness of reoccupying the dry cleaner suite may be possible. Please note that the mitigation measures (intake and exhaust fans) currently being installed are intended to help address the flux rate uncertainty in the adjacent suites. It is also highly likely that the mitigation fans in the dry cleaning suite will be turned on and off during site investigations based on the specific need of the particular investigation.
2) While the initial risk calculations in the referenced report did not indicate an imminent health risk (a 10^{-4} cancer risk rate) is present at the site that requires the immediate evacuation of neighboring suites, the appropriateness of exposing additional workers to contamination that fluxes in undefined ways is not appropriate.
3) Should a dry cleaner reoccupy the subject suite the tenant will need to install machinery that is bolted to the floor. This will result in additional slab penetrations of an unknown number and extent (through going?) and would likely lead to changes in contaminant flux from the subsurface, and thus likely changes in the cancer risk rate.
4) At present additional subsurface investigation and remediation is planned for the subject suite, and potentially adjacent suites. While not prohibitive, the introduction of additional work constraints (noise, dust, access, and ventilation considerations) within the suite(s) would be disruptive, and is problematic at best.

ACEH understands Mr. Brooks' interest in leasing the suite, and consequently has been attempting to move this site through a standard process as quickly and expeditiously as possible while collecting adequate data to protect public health. At this time ACEH is not in agreement that reoccupying the suite is appropriate.
I hope this will sufficiently address Mr. Brooks' question.
Should you have questions, please let me know.

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