



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

May 2014

Mountain View, CA 94043

**Re: Indoor Air Sampling Results for Residential Building #XX
Mountain View, California
Teledyne Semiconductor/Spectra-Physics Superfund Sites**

Dear Resident:

Thank you for your cooperation and participation in EPA's and the San Francisco Bay Regional Water Quality Control Board's ongoing indoor air investigations in Mountain View. As a follow-up to our telephone call, this letter confirms in writing the results of EPA's indoor air sampling for trichloroethene (TCE), conducted at your home in October 2010 and February 2014.

As we discussed over the phone, **very low levels of TCE** were detected in the air inside your home and in the crawlspace beneath your building. Our laboratory equipment is very sensitive and capable of detecting these low levels. The concentrations **are below EPA's most protective and extremely low health screening levels and meet our guidelines for protecting against TCE vapor intrusion.**

Background: Two rounds of indoor air sampling were performed at your home in connection with the former Teledyne Semiconductor and former Spectra-Physics Lasers facilities located at 1300 Terra Bella Avenue and 1250 Middlefield Road in Mountain View, with the goal of evaluating whether there is a potential for TCE vapors from the groundwater to come up through the soil and accumulate indoors (a process called "vapor intrusion"). Please be aware that your drinking water is not affected by the contamination. Your water comes from the Hetch Hetchy Reservoir in the Sierra Nevada.

How EPA Evaluates Indoor Air: EPA evaluates indoor air quality by comparing the concentrations of chemicals detected to levels determined by EPA to be protective of human health for long-term and short-term exposure. Within this study area, for cancer causing chemicals, EPA considers levels to be protective if they fall within the *range* of a 1 to 100 in a million increased lifetime cancer risk. The level that falls into the most protective end of the increased lifetime cancer risk range – 1 in a million increased lifetime risk – is what is used as the *screening level* for any particular chemical. For example, EPA's indoor air *long-term screening level* for TCE – the main chemical we are concerned about in this investigation – is 0.43 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), corresponding to an increased lifetime cancer risk of 1 in one million. EPA's *short-term* or *non-cancer screening level* for TCE is 2.0 $\mu\text{g}/\text{m}^3$, which is the concentration corresponding to an increased risk of non-cancer health effects, such as liver and kidney effects or organ and immune system problems in babies whose mothers were exposed during pregnancy.

Health Protection Goals: EPA's goal for indoor air exposures to Superfund site-related chemicals is to keep exposures as low as reasonably possible within the protective risk values. The most protective risk values (screening levels) are then used to help determine whether further action such as additional sampling or remediation is necessary.

Your Indoor Air Test Results: Very low levels of TCE were detected in the air in your home and in the crawlspace beneath your home during the February 2014 sampling event (please see the following chart for the results – Table 1). These results appear to indicate that some vapor intrusion may be occurring. However, the highest level of TCE detected – 0.29 µg/m³ – is below both EPA's long-term and short-term screening levels. The results from the sampling event conducted in October 2010 were also below the screening levels and below the laboratory detection limit. **EPA interprets these results to mean that, based on the results from two separate sampling events, there is no evidence of an exposure from the site that could impact your health or the health of your family.**

Additionally, the Responsible Parties (RPs) for the site have been conducting an aggressive bioremediation as part of the groundwater cleanup, and levels of TCE are declining significantly in the groundwater in your neighborhood. Thus we expect that the potential for vapor intrusion will decrease as the groundwater quality continues to improve.

TABLE 1 - SUMMARY OF TCE AIR TESTING RESULTS AT YOUR HOME

RB-XX – Mountain View, California

February 2014

All concentrations are presented in micrograms per cubic meter (µg/m³)

Sample Location	Highest TCE Concentration
Crawlspace Sample	0.088
Indoor Air Sample	0.29
Outdoor Air Sample	Not detected
Screening Levels	
Short-term Screening Level	2
Long-term Screening Level	0.43

Based on these results, no further testing of your home is believed to be necessary at this time. If you have any questions, please contact me at (415) 972-3050 or by e-mail to morash.melanie@epa.gov. Thank you again for your cooperation and participation in this air sampling investigation.

Sincerely,

Melanie Morash, EPA Remedial Project Manager

cc: Roger Papler, SF Bay Regional Water Quality Control Board [roger.papler@waterboards.ca.gov]
Erica Kalve, ARCADIS [erica.kalve@arcadis-us.com]