

Environmental Investigation at Autumnwood Development, Wildomar, CA

Based on community concerns regarding potential exposure to volatile contaminants (VOCs) from vapor intrusion at the Autumnwood Development in Wildomar, DTSC formed a multi-agency task force with the Office of Environmental Health Hazard Assessment (OEHHA) and the California Department of Public Health (CDPH). The task force reviewed all existing environmental data. Data gaps were identified regarding shallow groundwater, and OEHHA and CDPH identified formaldehyde and 1,2-dichloroethane, at elevated levels, in indoor air. To address these data gaps, DTSC conducted a multimedia environmental investigation at the Autumnwood Development in November 2013.

Sampling Activities

In order to bracket the entire Autumnwood Development, DTSC collected the following environmental samples:

- Soil gas samples were collected from twelve sampling locations at approximately 5- and 15-feet and analyzed for volatile organic compounds (VOCs); formaldehyde samples were collected from five of the 12 soil gas locations;
- Two sub-slab soil gas samples were collected from each of three homes across the Development and analyzed for VOCs; formaldehyde was analyzed in one sub-slab sample in each home;
- Groundwater samples were collected from four locations and analyzed for VOCs and formaldehyde;
- Soil samples were collected from three locations and analyzed for metals, polychlorinated biphenyls (PCBs), organochlorine pesticides (OCPs) and semi-volatile organic compounds (SVOCs);and
- Four continuous soil cores were collected down to groundwater to characterize the lithology/sediment below the site.

Sampling Results

The sampling results showed all detected metals were within normal metal soil concentrations or background concentrations. No OCPs or PCBs were detected in the soil. Only one SVOC, bis-2 ethylhexylphthalate, was detected at one location at the analytical method reporting limit and does not pose a health risk. No VOCs or formaldehyde were detected in groundwater. Low levels of benzene, toluene, ethylbenzene, and xylene (BTEX) and other fuel-related VOCs were detected in soil gas samples. The levels of BTEX are within background or ambient levels consistent with

levels seen throughout southern California. The VOCs detected in soil gas do not pose an indoor air risk or hazard and do not represent a threat from vapor intrusion.

Summary of Results

The following are the preliminary conclusions drawn from DTSC's analysis of the investigation results:

- No evidence of soil contamination;
- VOCs detected in soil gas are consistent with background or ambient levels throughout southern California;
- Shallow groundwater is not a source of VOCs;
- VOCs detected in soil gas do not pose a significant indoor air risk or hazard;
- Per DTSC's VI Guidance, vapor intrusion is not occurring at the Autumnwood Development; and
- VOCs detected in indoor air are not originating from the subsurface.

While VOCs were previously detected in indoor air quality samples at certain homes, our recent investigation indicated that these VOCs are not a result of contaminated soil, soil gas or groundwater beneath the homes in the Autumnwood Development.

DTSC presented these preliminary findings to members of the community on Dec. 11, 2013. The department is finalizing its review of the data and will meet again with community members in mid-January. A final report is expected by the end of January.