

Vapor Intrusion Assessment and Mitigation for Former Dry Cleaner Site

Pleasant Hill, CA





EKI assisted the owner of a shopping mall that includes a former drycleaning operation with the development of a conceptual site model, ongoing groundwater and soil vapor monitoring, and vapor intrusion (VI) assessment. The assessment was conducted at the locations of a former dry cleaning business and several other commercial businesses in the shopping mall and at several off-site residential properties. Groundwater and shallow soil vapor concentrations of chlorinated volatile organic compounds exceed screening criteria in this area.

EKI performed the following tasks as part of this project:

- Developed a conceptual site model for both the on-site and off-site areas of the project;
- Installed and sampled multi-depth soil vapor probes in on-site and off-site areas to determine soil vapor concentrations in three dimensions at key locations;
- Collected soil vapor samples and sub-slab vapor samples on private residential and commercial properties;
- Collected indoor air samples in residential buildings where soil and/or sub-slab vapor samples were above applicable screening criteria;
- Performed a pilot test of a sub-slab depressurization (SSD) system at a commercial building to develop design parameters for fullscale SSD and for permitting;
- Designed and oversaw the installation of SSD systems for both the commercial and residential buildings;
- Prepared air permit applications for the SSD systems; and
- Assisted the owner with construction, startup, performance verification, monitoring, and communications with residents.

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