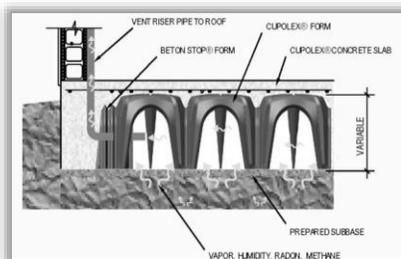


Fast-Track Vapor Intrusion Assessment and Mitigation at Former Dry Cleaners Site

Palo Alto, CA



EKI assisted a developer with fast-track vapor intrusion (VI) assessment and mitigation, and environmental remediation, for redevelopment of a property located in Palo Alto, California. A new commercial building was planned and subsequently constructed at the Site.

Prior to redevelopment, a commercial laundering and dry cleaning facility occupied the building on the Site from the 1950s to 2010. During the demolition in 2011, total petroleum hydrocarbons as Stoddard solvent and tetrachloroethene were found in the soil and soil vapor at the location of a former 550-gallon underground storage tank. Groundwater beneath the Site also contained chemicals of concern (COCs) including trichloroethene and other volatile organic compounds (VOCs) that originated from historical releases from an upgradient Superfund site.

EKI prepared a Remedial Action Plan (RAP) to evaluate remedial alternatives and recommended final remedial actions consistent with the planned land use. Components of the selected remedial alternative included:

- Excavating COC-impacted soil;
- Designing a sub-slab ventilation system into the new building for vapor intrusion mitigation using an innovative “aerated floor” (Cupolex) design to maximize sub-slab ventilation and eliminate need for a liner;
- Constructing cut-off walls within utility trenches to mitigate off-Site vapor migration;
- Implementing land use restrictions; and
- Indoor air monitoring was performed to demonstrate VOC concentrations were below goals for protection of human health once the building was constructed.

The Regional Water Quality Control Board served as the lead agency for approval and implementation of the RAP. The time period from initial evaluation of the Site to approval of the final RAP was less than 6 months.