

Vapor Intrusion Assessment for Planned Residential Development

Sacramento, CA



The Property



Planned Development



Temporary Soil Gas Probe

EKI was retained by a residential property owner to evaluate the potential for vapor intrusion within a 50-acre parcel of former agricultural land planned for residential development (Site). EKI conducted a focused soil gas investigation to screen the Property for subsurface impacts of volatile organic chemicals (VOCs) and methane gas potentially migrating onto the Site from a nearby landfill.

EKI performed the following:

- Worked with a local direct-push drilling contractor to install 24 temporary soil gas sampling probes over a two-day period. The temporary probe implants were selected to avoid samples compromised by short-circuiting due to leakage, a problem often produced by the commonly-used driven probe post-run tubing (PRT) technique.
- Negotiated with a local laboratory for expedited soil gas analysis using low-detection limit analytical methods suitable for meeting current California residential soil gas screening criteria. The expedited turnaround strategy was designed to emulate on-site the speed of analyses possible with a mobile lab, but using a more accurate fixed laboratory method with better detection limits.
- Used expedited soil gas analysis to determine when to re-sample locations where porous soil conditions caused significant intrusion of leak-checking compound into the soil gas sample and to gather additional data in areas of interest.

The property owner recently received approvals for redevelopment.