

Vapor and Groundwater Assessment at San Gabriel Valley Superfund Site



EKI conducted soil vapor and groundwater assessments and provided consulting services in support of environmental cost allocations for a manufacturing facility located in the San Gabriel Valley Superfund Site. The San Gabriel Valley Superfund Site was primarily impacted with chlorinated volatile organic compounds (VOCs).

EKI assessed the extent of and potential for migration of VOC vapors in the deep vadose zone beneath this active manufacturing facility, below which the depth to groundwater is more than 300 feet. EKI installed and sampled several multi-depth vapor monitoring wells extending as deep as 300 feet. EKI used the VLEACH model to advocate that the VOC vapor profile originated from volatilization from groundwater, rather than on-site releases. In addition, EKI planned and designed a soil vapor extraction system based in part on the results of modeling using the Air2D model for design of a deep vapor extraction well. This work was conducted with oversight by the Los Angeles Regional Water Quality Control Board.

EKI's client and other Potentially Responsible Parties (PRPs) negotiated cost allocation for a multimillion-dollar groundwater extraction and treatment remedy proposed by the United States Environmental Protection Agency. Operation and maintenance costs for the facility were estimated to be several million dollars per year. EKI participated in multi-PRP meetings and provided technical support as requested by our client.

EKI conducted extensive review and evaluation of historical records for the client's facility and offsite properties, including investigation of soil vapor concentrations off-site using both active and passive soil vapor sampling methods. EKI utilized these technical studies as a basis for developing a conceptual model of where chemical releases occurred and where they might have migrated.