

CASE STUDY: Geo-Seal® Approved by California DTSC for Vapor Mitigation

Shinsei Gardens – Alameda, CA

A senior housing facility was constructed over an existing benzene plume creating a concern over high levels of benzene vapors. Northgate Environmental, with the approval of the California Department of Toxic Substances Control (DTSC), selected Geo-Seal® vapor intrusion barrier to mitigate the vapor intrusion risk associated with the property. Geo-Seal provides triple-layer protection and high puncture resistance by using two chemically resistant high density polyethylene (HDPE) layers encapsulating a spray-applied asphalt/latex membrane. This exceptional chemical resistance limits the transmission of volatile organic vapors through the membrane. 22,000 square feet was successfully installed. Overseeing the installation was representatives from the DTSC and Commercial Roof Management, a certified inspector of the Geo-Seal System.

Project Highlights:

- Resists contaminant permeation breakthrough for a period 18X longer than simple asphalt/latex membranes
- Installation of 22,000 ft²
- California DTSC Approved



Sealing Penetration Cluster

About the Geo-Seal® Gas Vapor Barrier

Geo-Seal is the ideal blend of chemically resistant HDPE sheet and spray applied membrane technologies, resulting, in the most appropriate gas vapor barrier technology used to eliminate vapor intrusion on Brownfields or environmentally impaired sites. Geo-Seal is a chemically resistant material placed between the subgrade and building foundation to seal off exposure pathways and stop vapor intrusion into buildings. By selecting Geo-Seal, developers can ensure a healthy indoor environment while reducing the cost of site remediation and expediting site construction.



Completed Geo-Seal Installation