

# White Lead Works Redevelopment

This former gasoline service station and 19th-century “white lead” works is located in an urban neighborhood of Pittsburgh, Pennsylvania. Following Kleinfelder’s previous experience with litigation involving the property’s contaminated groundwater, the client retained us to perform a contaminant hydrogeology investigation on the site’s alluvial aquifer and groundwater flow.

## PROJECT RESULTS

*Kleinfelder’s thorough investigation enabled the client to complete remedial action with full approval from the state environmental agency. The property has since been sold at original asking price—preserving the land’s value and protecting this vibrant urban community from years of contamination.*



## CONTAMINATED COMMUNITY

The site’s long-standing state of contamination, dating back to the early 1800s, required Kleinfelder would need to assess the lateral and vertical extent of lead-contaminated soils, characterize contaminated areas, and then demonstrate that the underlying aquifer was not—and would not be—impacted by lead through infiltration and leaching of the soil column. Located in a densely populated area, Kleinfelder had to work carefully to demonstrate that the groundwater use pathway was incomplete.

## ELIMINATING EXPOSURE

After a comprehensive subsurface investigation—including fate and transport modeling to demonstrate the extent of gasoline constituents—the team demonstrated that the groundwater use pathway and vapor intrusion pathway were protective of human health. Using the investigation results, Kleinfelder’s team then developed an engineering control remediation process to eliminate human exposure to lead-impacted soils, while inhibiting precipitation infiltration and lead leaching into the groundwater table.

### Location:

Pittsburgh, Pennsylvania

### Owner:

Aligned Partners Trust  
Company

