



BERNIER CONSTRUCTION, INCORPORATED PROJECT SUMMARY

Project Title: Multiple Site Underground Storage Tank (UST) Removal and Associated Activity for Philadelphia Gas Works (PGW)

Location: 9th and Diamond Streets, City of Philadelphia, PA

Scope: Provide labor, materials, equipment, and supervision to collect data and develop a site characterization report as it pertains to three former USTs

Berner has been retained by Philadelphia Gas Works (PGW) to perform a site characterization at the 9th and Diamond facility. The site characterization activities are associated with the removal of the three former USTs at the PGW 9th & Diamond Meter Repair Shop and Transportation facility.

The site encompasses approximately one-half of a city block and contains a three-story brick building located in the northeast section of the property. PGW and its predecessors have occupied the 9th & Diamond facility property for nearly 100 years. Historically, from the late 19th century to the mid 20th century, the site was used as a Manufactured Gas Plant (MGP) gas storage and distribution facility. In the early 1900's, the property contained two large MGP gas holders, two controller sheds, a maintenance area that was part of the gas storage and distribution system, and the main three-story brick building.



The Site Characterization Report (SCR) has been developed in accordance with Section 245.310 of the Storage Tank and Spill Prevention Act (Act 32 of 1989, as amended). In the development of the SCR, Berner completed an extensive document review of historical and current plans, maps, and reports to aid in the determination of historical and current conditions and processes at the facility.

The initial site activities performed by Berner included installation of nine soil borings to further identify the extent of subsurface conditions. The soil borings were installed using a truck mounted Geoprobe® unit. Soil samples were analyzed for PAPEP parameters for diesel fuel, leaded, and unleaded gasoline.

In addition to the soil sampling effort, six new monitoring wells were installed using the Geoprobe® unit and several existing monitoring wells were redeveloped for groundwater sampling. Upon completing the installation of the new wells, groundwater sampling events were performed for seven consecutive quarters using the new wells and existing monitoring wells on the property to determine the vertical and horizontal extent of groundwater contamination.

The initial SCR was submitted to PADEP on behalf of PGW summarizing the results of the on-site sampling. Berner continued groundwater sampling activities after the SCR submittal, which included the installation of two temporary off-site monitoring wells for identifying off-site impacts. Additionally, hydraulic conductivity testing was completed to determine the hydraulic conductivity of the shallow groundwater aquifer at the site. The final SCR was submitted which included the findings of the additional sampling and measurements, Fate and Transport Analysis, Sensitive Receptor Study, and conclusions based on two years' of groundwater monitoring.