

An Overview of the Former Harrison Gas Works Site Remediation Project

Updated July 2020

Site History

Prior to the widespread availability of natural gas, gas was "manufactured" through a process of heating coal in specialized ovens. These facilities, called Manufactured Gas Plants (MGP), were common in many urban areas of the United States during the late nineteenth and early twentieth centuries. Manufactured gas was used for residential and street lighting and cooking. The manufactured gas process produced byproducts, such as coal tar and other chemicals that were also used in the chemical, dye and pharmaceutical industries. An unintended consequence of the MGP industry was the effects from coal tar and various byproducts to the environment.

The Town of Harrison in Hudson County has a former MGP Site, approximately 32 acres in size, located at 2000 Frank E. Rodgers Boulevard. Public Service Electric and Gas Company (PSE&G) and its predecessor companies acquired portions of the Site between 1884 through 1924, when construction of the MGP began.

It operated as a base load facility from 1926 until approximately 1963, when it was converted to peak shaving status. The facility was retired from service after the winter of 1986 – 1987 and decommissioned in 1992. Buildings and structures were removed to grade surface, but former MGP foundations, pipes and other remnants remain in the subsurface.

PSE&G has been investigating and remediating the site since the late 1990s, in accordance with the rules and regulations of the New Jersey Department of Environmental Protection (NJDEP). This work has been performed under the oversight of a Licensed Site Remediation Professional since 2012. Several phases of remedial work were completed between 2004 and 2018.

The Site is currently used by the following PSE&G units and operations.

- PSE&G Harrison Gas Distribution headquarters;
- PSE&G Harrison Appliance Service headquarters;
- PSE&G Gas System Modernization Program; and
- PSE&G Fleet Maintenance Center.



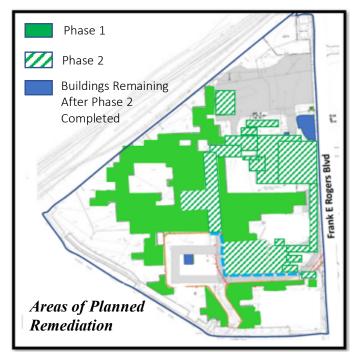
PSE&G Harrison Project Site

Focus of Current Activities

The upcoming sitewide remediation will focus on addressing the remaining impacts to soils, which may also result in positive impacts to groundwater. PSE&G is conducting this work to fulfill its obligations to the NJDEP in accordance with the rules and regulations of the state and to ensure the property's continued beneficial use. There are no plans currently in place for the property's future use.

Based on the successful results of the 2018 Pilot Study, sitewide remediation will include soil removal, treatment of deeper soils in place and containment of impacted soils along the existing Meter and Regulating Station. The upcoming work will remove and truck offsite approximately 360,000 tons of soil and debris from the top 10 feet or so of the target areas, as well as the remnants of the former plant's infrastructure found within those areas.

Deeper impacted soils will be treated in place through a process called In Situ Solidification and Stabilization (ISS), which involves mixing impacted soils in place, below ground, with stabilizing agents such as Portland cement and blast furnace slag. Impacted soils in the vicinity of the active Meter and Regulating (M&R) Station and its infrastructure will remain in place but contained through installation of below ground slurry walls.



Phase 1: July 2020 - July 2021

Work will focus on open areas outside of existing buildings and the active M&R station and infrastructure.

Phase 2: May 2021 - Dec 2022

Buildings targeted for demolition will be removed and the remaining remedial work will be completed. Several of the utilities servicing the M&R station will be cut and capped and new lines will be installed and connected within a clean utility corridor.

Hours of Activity - Work will be performed weekdays in daylight hours only, typically from 7 a.m. to 5:30 p.m.

What You Can Expect to See

Equipment & Personnel Mobilizing to the Site - The first few weeks of activity will be focused on preparing the Site. A temporary fence with screening will be established around the active work areas.

On-Site Controls for Surface Water and Groundwater -While work is in progress, PSE&G will maintain soil erosion and sediment controls to manage surface water from storm events. An onsite pumping and treatment system will be established to control groundwater and surface water accumulations during excavation and backfilling activities. Treated groundwater will be discharged in accordance with a permit issued by the Passaic Valley Sewerage Commission.

Workers in Protective Clothing - In keeping with federal and state health and safety procedures, PSE&G personnel and contractors are required to participate in social distancing and wear appropriate gloves and face coverings during all work activities. Workers performing certain activities will wear personal protective equipment, including Tyvek coveralls, which are one-piece, disposable coveralls to keep their clothes clean. These garments do not mean there is a hazard to the public. All workers will wear high visibility vests, hard hats, safety glasses and steel toe boots. Other protective gear may include gloves, over boots and respirators.

Increase in Trucks Carrying Materials – Trucks carrying ISS reagent materials, including Portland cement and blast furnace slag, clean fill and excavated soil will enter and leave the Site. Excavated soil will be trucked to facilities where it will be thermally treated and beneficially reused or disposed of at a licensed facility. Trucks will be covered and cleaned prior to leaving the Site. Trucks will access and leave the Site through the South Gate in Phase 1 and through the North Gate in Phase 2 on Frank E. Rodgers Blvd. and follow Frank E. Rodgers Blvd. across the Jackson Street Bridge to the New Jersey Turnpike.

Protecting Health and Safety

Air Monitoring Equipment and Dust Control Measures -Air monitors will be installed along the perimeter of the work area and periodic confirmatory air samples will be collected throughout the project. Control measures (such as water mist, foam spray, plastic sheeting and sand cover) will be used as needed to control potential dust and odors during excavation and non-work periods, including evenings and weekends.

Mitigating Odors Typical of MGP Materials - Odors associated with some constituents can often be detected at levels that are well below what would be considered a health concern and often below what can be detected by an air monitoring instrument. While the project team is committed to minimizing them, odors similar to fresh asphalt will at times persist.

About the MGP Constituents

The source of the MGP materials is the former MGP operations. Some by-products, including coal tar and oils, were found in the soil and groundwater at the Site. Compounds of concern in soil include benzene, toluene, ethylbenzene and xylene(s) (or BTEX), polycyclic aromatic hydrocarbons (or PAHs) and metals. Potential concerns from MGP contaminants are associated with ingestion (eating) of the affected soil or drinking the affected groundwater. The Town of Harrison water supply is not affected. Groundwater in the area is not used as a potable water source and therefore is not a concern.

Community Outreach

PSE&G is committed to open communications. Before active remediation work begins, more detailed information will be shared with Town of Harrison officials, Site neighbors and PSE&G personnel.