PROJECT SNAPSHOT

Remediation of Coal Tar in a Manufactured Gas Plant Gasholder

High Temp TCH

Location: North Adams, MA

Client: National Grid

Contamination: Coal tar, naphthalene, benzene, and TPH
Volume: 2,200 cy

Goal: Reduce concentrations of VOC, SVOCs, and TPH below MCP UCL limits
Number of Heaters: 25

Duration: 6 months of operation

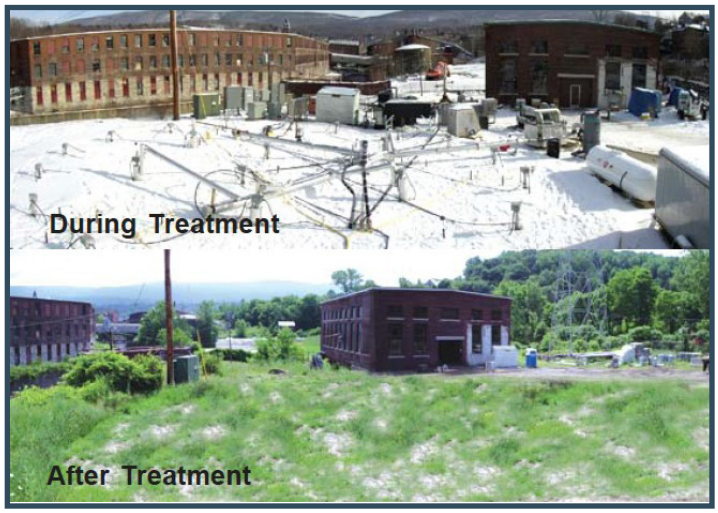
Mass Removed: 139,877 lbs.

WHAT MAKES THIS PROJECT UNIQUE?

On Site, an abandoned gasholder contained approximately 2,200 cy of soil and debris contaminated with coal tar. The 62 ft diameter by 18 ft deep gasholder had brick walls and a bottom believed to be constructed of concrete. TerraTherm used our high temperature TCH approach to perform a multi-level in situ heating approach.

Important Project Details

- **Approach:** Prior to the site being heated, coal tar DNAPL had resisted recovery. After dewatering, TCH was applied in a step-wise fashion, without excavation. To our knowledge, this is the first site where a multi-level in situ heating approach was ever applied. We utilized three levels of heating (Levels 1, 2, and 3) sequentially, achieving low (80°C), moderate (100°C), and higher (325°C) soil temperatures, respectively.
- **Challenges:** A total of approximately 140,000 lbs of mass was removed from the relatively small gasholder, and as a result of the material removal, the soil in the holder subsided. The subsidence damaged the insulated vapor cover constructed over the treatment zone.
- **Results:** Guaranteed performance contract was signed to achieve a permanent solution in accordance with the Massachusetts Contingency Plan (MCP), by eliminating DNAPL within the holder and reducing concentrations of VOCs, SVOCs, and TPH below MCP upper concentration limits so that residual risk is minimized. All remedial goals were met.



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