

MGP Sites

Manufactured Gas Plant

Highlights

Performed investigation activities including fate and transport analysis and natural attenuation assessment

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Removed above ground and below ground gas holder

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Evaluated and implemented MGP waste recycling/reuse

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Performed DNAPL recovery

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Implemented engineering and institutional controls

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Obtained release of liability under State-specific voluntary cleanup programs

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Participated in cost recovery support and expert witness

Services



Demolition of an above ground gas holder

Based on our private sector and utility industry experience, Key Environmental, Inc. (KEY) has a complete understanding of the environmental issues associated with former Manufactured Gas Plant (MGP) sites. KEY has successfully developed a streamlined approach to remediation on more than 25 MGP sites.

KEY has performed environmental site assessments and investigation activities at MGP sites, including:

- Soil, groundwater, surface water and sediment investigations
- Fate and transport analysis and natural attenuation assessment
- Risk assessment
- Source characterization
- Site-specific remediation standard development

Gas Holder Removal

KEY personnel have been involved with the removal of both above ground and below ground gas holders, including:

- Site preparation
- Community relations
- Applicable permitting
- Gas holder access
- Liquid contents removal and disposal
- Coal tar removal and disposal
- Gas holder decontamination and demolition
- Site restoration

Coal Tar Waste Recycling/Reuse

With increased restrictions on land disposal of hazardous waste, KEY has been proactive in evaluating potential options for recycling/reuse of coal tar material. Knowing that much of the coal tar material removed from gas holders has significant fuels blending capabilities, KEY has used this option when appropriate for recycle/reuse. Fuels blending and other resource recovery technologies (e.g., on-site blending processes) are essential in reducing the amount of non-usable product ultimately recovered from these sites.

Applicable Technologies

KEY employs technologies with a focus on limiting environmental liability and overall expenditures.

Technologies include:

- Source material stabilization and/or off-site disposal

MGP Projects

- DNAPL removal with *in-situ* or *ex-situ* oil/water separation and groundwater recirculation or re-infiltration
- *In-situ* barrier walls and funnel-and-gate technologies
- Surface cover installations using cover materials such as geotextiles, membranes, and amended dredge sediments
- Sediment remediation technologies using direct excavation, portable dams and stream diversions, sediment capping, turbidity control and management, and restoration
- Wetland mitigation
- Oxidation/ozonation
- Monitored natural attenuation
- Air sparge cells
- Vapor intrusion with risk evaluation
- Laser Induced Fluorescence (LIF) delineation

Reuse of MGP Sites

With increased legislative efforts focused on recycling/redevelopment of former MGP sites, KEY has built a diverse background related to environmental reuse issues. With a practical understanding and implementation of various brownfields initiatives, many sites are good candidates for reuse. Combining source removal and natural attenuation can bring these properties back into productive use. KEY has successfully recycled MGP sites either by reintroducing the properties for industrial/commercial use or using them as “green space.” At a 150-acre former MGP site, KEY’s efforts resulted in the redevelopment of the property as a commercial warehouse facility.

Site	Regulation: Highlights
Ashland, PA	PA Act 2, IRA: Below ground gas holder remediation, Obtained a No Further Action and a Release of Liability.
BG&E Spring Gardens, MD	MDE Consent Order: KEY successfully replaced a 30,000 SF treatment system with one 30 times smaller, and reduced the client’s O&M costs by 75%. Ultimately successfully petitioned regulators to cease all active groundwater recovery operations in favor of periodic passive NAPL recovery.
BG&E Westminster, MD	MDE Agreement: Monitoring well gauging, LNAPL recovery, and reporting at former MGP Site.
Dansville, NY	NYSDEC State Superfund: Remedial design for soil removal and temporary building support.
Greenfield, MA	MADEP/MA Contingency Plan: River sediment remediation.
Jersey Shore, PA	PA Act 2: Site investigation.
Jim Thorpe, PA	PA Act 2: Site investigation and monitoring.
Leheighton, PA	PA Act 2: Site investigation and monitoring.
Lewisburg, PA	PA Act 2, Brownfield: Gas holder and groundwater - obtained release of liability.
Northwestern NY	Voluntary Action: Streamside restoration, CQA.
Pacific G&E, CA	Voluntary Action: Third party review of sediment and upland remediation plans.
Renovo, PA	PA Act 2, Brownfield: Gas holder contents removal and demolition removal. Grading and erosion control plan implementation.
Shippensburg, PA	PA Act 2, Brownfield: Below ground gas holder and tar well removal. Site capping which allowed the Brownfield reuse of the site for multiple public uses purposes.
Slatington, PA	PA Act 2: Site investigation and monitoring.
Springfield, VT	Vermont DEC: Develop corrective action feasibility investigation (CAFI) for developed former MGP Site.
Tamaqua, PA	PA Act 2: Site investigation and monitoring.
Former Tar and Asphalt Emulsion Mfg. Facility adjacent to Two MGP Sites	NYSDEC Consent Order: Implemented temporary groundwater and storm water management system. Prepared the 100% soils remedial design report.

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