



PROJECT TITLE: Former MGP Site
LOCATION: Plymouth, Massachusetts
CONTRACT VALUE: \$600,000
DURATION: 2.5 Years

LIGHTSHIP SERVICES:

- **LSP Services**
- **Assessment**
- **Remediation**
- **Yearly Groundwater Monitoring**

PROJECT SCOPE:

Lightship Engineering conducted an ASTM Phase I Site Assessment and Limited Site Investigation (“LSI”) at the Site in 2005. The Site was historically used as a MGP by the Plymouth Gas Light Company, which operated at the Site from prior to 1885 to at least 1948. The LSI included: the advancement of soil borings; the installation of groundwater monitoring wells; and the collection of soil and groundwater samples for laboratory analysis. Soil and groundwater sampling locations were selected based upon historical locations of MGP structures, such as tar wells, drip pots and gas holders. OHM, including total petroleum hydrocarbons (“TPH”), volatile organic compounds (“VOCs”), and PAHs, were detected above the MassDEP Reportable Concentrations (“RCs”) in soil (RCS-1) and groundwater (RCGW-2) at the Site. OHM encountered at the Site was consistent with coal tar residual and the suspected source of OHM appears to be the former MGP.

The detection of OHM above the applicable RCs triggered a 120-day DEP reporting obligation under the Massachusetts Contingency Plan (“MCP,” 310 CMR 40.0000). A Release Notification Form (“RNF”) was submitted to MassDEP on January 10, 2006. MassDEP subsequently issued a Notice of Responsibility (“NOR”) to the property owner and assigned RTN 4-19497.

On November 8, 2006, during a groundwater gauging and sampling event, greater than ½ -inch of LNAPL was detected in the bottom of monitoring well MW-2 at the Site. Lightship Engineering attempted to remove the LNAPL from the well using a disposable polyethylene bailer to determine whether the LNAPL was persistent. Lightship

Engineering returned to the Site on November 9, 2006, and determined that LNAPL was still present at greater than ½-inch in the well. The presence of greater than ½-inch of LNAPL in the well triggered a 72-hour MassDEP reporting obligation under the MCP.

On November 9, 2006, Lightship Engineering, on behalf of the property owner, notified the MassDEP of the release to the environment. MassDEP assigned RTN 4-20154 to the release, and granted verbal approval to conduct Immediate Response Action (“IRA”) assessment activities at the Site. An IRA Plan and a *Phase I Initial Site Investigation Report* (“Phase I Report”) were submitted to MassDEP on January 8, 2007 (within 60 days of notification). On January 10, 2007, MassDEP granted verbal approval to conduct IRA activities including excavation and off-Site disposal of up to 500 cubic yards of OHM-impacted soil and excavation dewatering as needed. On February 1, 2007, MassDEP granted verbal approval to conduct additional IRA activities including excavation and off-Site disposal of an additional 300 cubic yards of OHM-impacted soil, additional excavation dewatering as needed, removal and off-Site disposal of pure phase coal tar contained in concrete vaults, and off-Site disposal of tar-impacted debris. IRA Status Reports summarizing IRA activities conducted during each reporting period were submitted to MassDEP on March 8 and September 7, 2007. RTN 4-20154 was linked to RTN 4-19497 on November 6, 2007 within one year of notification. Ongoing assessment activities at the Site are being conducted under RTN 4-19497. An IRA Completion Report was submitted to MassDEP on January 29, 2008.

A Phase II Comprehensive Site assessment was prepared for the Site in July 2009. Lightship is currently preparing a Class A-3 Response Action Outcome (“RAO”) Statement.

