



# Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker  
Governor

Karyn E. Polito  
Lieutenant Governor

Matthew A. Beaton  
Secretary

Martin Suuberg  
Commissioner

## “Managing Construction in Contaminated Areas”

### MassDEP/LSPA Online Course

#### **Course Description:**

This two-hour course will provide LSPs with a comprehensive overview of MCP regulations (310 CMR 40.0000) and other considerations to be taken into account when working at construction sites in contaminated or potentially contaminated areas. The course begins with a list of some of the situations that can occur during construction activities at contaminated sites, including exposures that could potentially impact human health, and potential liability issues related to exacerbating or moving contamination. The course then addresses where the MCP may apply during construction activities. It outlines considerations should an LSP encounter contamination, including whether such contamination must be addressed (based on Reportable Concentrations or other reporting thresholds) using one of the 5 MCP regulatory vehicles: RAM, URAM, LRA, IRA, and Phase IV/V Comprehensive Response Actions. Three case studies are provided to illustrate construction activities and relevant MCP requirements. The case studies describe findings from MassDEP audits or other investigations, and identify what went wrong, and how it was or could be corrected. Special emphasis is placed throughout the course on consideration of potential TCE contamination.

#### **Course Outline:**

The course is organized in six chapters:

1. Why Focus on Construction?
  - What is an MCP Disposal Site?
  - What if No Reportable OHM Levels?
  - Where Would the MCP Not Apply?
  - How Would Someone Know If a Property Is Contaminated?
  - Acting as a Reasonable Person
  - Deciding to Pre-Characterize or Characterize As You Go
  - Testing and Conceptual Site Models
  - What To Do If You Encounter Contamination

- Dewatering or Pumping Groundwater
  - Something in the Air
2. Regulatory Definitions
    - Remedial Action
  3. Regulatory Vehicles
    - RAMs
    - URAMs
    - LRAs
    - IRAs
    - Status Reports and Completion Statements
    - Remedial Monitoring Reports
    - Phase IV/V Comprehensive Response Actions
    - Response Action Performance Standards
  4. Case Studies
    - Construction Near a School
    - Construction of Residences at Highly Contaminated Site
    - Construction Site with Historic Fill
  5. Frequently Asked Questions (FAQs)
  6. Glossary

**Course Authors and Biographies:**

John Fitzgerald, BWSC, Northeast Regional Office, Regional Engineer

Elizabeth Callahan, BWSC, Acting Division Director, Policy and Program Development

Paul Locke, BWSC, Assistant Commissioner

*This course is based on a course offered in 2011 by Iris Davis and Patricia Donahue, BWSC, Northeast Regional Office.*

**John Fitzgerald**

Mr. Fitzgerald received a B.S. and M.S. in civil engineering from the University of Massachusetts at Lowell, and is a Registered Professional Engineer in Massachusetts. He has been employed by the Massachusetts Department of Environmental Protection (MassDEP) since 1980, where he oversees the assessment and cleanup of sites contaminated by oil and hazardous materials. Mr. Fitzgerald oversaw the development of the VPH and EPH Methods for MassDEP's Bureau of Waste Site Cleanup (BWSC)

and authored the BWSC guidance document *Characterizing Risk Posed by Petroleum Contaminated Sites: Implementation of the MADEP VPH/EPH Approach*.

**Elizabeth Callahan**

Ms. Callahan has worked for the Department of Environmental Protection since 1986. Her previous DEP experience includes working in the Northeast Region in BWSC’s site management and audit programs. Ms. Callahan is currently the Acting Director of BWSC’s Policy and Program Development Division, overseeing regulation and policy development for the Waste Site Cleanup program. Ms. Callahan has a B.A. in Biological Sciences from Wellesley College and a Master in Public Policy from Harvard University Kennedy School of Government.

**Paul Locke**

Mr. Locke has been with the MA Department of Environmental Protection since 1987 and is currently the Assistant Commissioner for the Bureau of Waste Site Cleanup, overseeing implementation of the Massachusetts Contingency Plan to assess and clean up disposal sites, the Massachusetts Oil Spill Prevention and Response Act (MOSPRA), and the Natural Resource Damage (NRD) Program. Previously as Division Director for Response & Remediation, Mr. Locke oversaw operational aspects of the state cleanup program (including audits, compliance & enforcement and data management systems), the Federal Sites section, and also coordinated with other MassDEP programs. Mr. Locke has also served as Director of Policy and Program Development.

Before joining Waste Site Cleanup in 2002, Mr. Locke was head of the Risk Analysis Group within the MassDEP Office of Research and Standards, where he participated in environmental policy development, review of site-specific reports, and provided technical assistance to DEP staff and the regulated community. He has participated in numerous revisions to the site cleanup regulations, including the changes that resulted in a semi-privatized cleanup program in 1993. Mr. Locke was the primary author of the rules that determine “how clean is clean enough?” – the regulations on human and environmental risk characterization. Current projects include the development of a comprehensive soil management strategy and the implementation of DEP’s vapor intrusion initiatives.

Mr. Locke holds a Bachelor's degree in Chemistry from Harvard College and a Master's degree in Civil Engineering from the Tufts University program in Public Health.