

**Method 3 Risk Characterization**  
**A Short Course for LSPs**  
**6.0 LSP (non-DEP) Technical credits**  
**#1494**

**COURSE DESCRIPTION**

This course will provide LSPs with the fundamentals of Method 3 Risk Characterization under the Massachusetts Contingency Plan (MCP). This course is intended for LSPs and others who have little or no experience performing Method 3 Risk Characterization. The goals of this course are as follows:

- Introduce LSPs to the Risk Assessment paradigm
- Provide a basic understanding of the Risk Characterization process
- Use the Integrated Risk Information System (IRIS) and other Dose-Response databases and information sources
- Understand how to assess cancer risks and non-cancer systemic effects risks
- Develop exposure scenarios based on site-specific conceptual models
- Calculate exposure for ingestion of soil, dermal contact with soil, and ingestion and inhalation of particulates
- Calculate exposures from potable water uses
- Calculate exposures from indoor air based on IAQ data
- Calculate risk and interpret a spreadsheet
- Use the MCP Risk Assessment Guidance to reinforce what was learned in this brief course.

This course is designed for LSPs who want to do Method 3 Risk Characterization for uncomplicated sites such as most leaking UST sites. It is also intended to help LSPs interpret the results of Method 3 Risk Characterization, particularly LSPs in small practices who have subcontractors do their Method 3's and who want to ensure that the work is consistent with MCP guidance before they submit RAOs.

This course is not intended for LSPs or others who already do Method 3; this will be a basic course that addresses fundamentals and will assume limited experience with Method 3. The course will assume that participants have some experience with Method 1 and understand selection of Contaminants of Concern and calculation of Exposure Point Concentrations.

This course will be given over six hours. It is recommended that participants bring a laptop with Excel available for practicing calculations.

**Anne Marie C. Desmarais, MSPH, LSP**  
**Six Pine Street**  
**Maynard, Massachusetts 01754**  
**(978) 897-5306**  
**annemarie.desmarais@verizon.net**

**Education:**

BS, Biochemistry, University of Maine, Orono 1972  
MSPH, Environmental Health, University of Massachusetts, Amherst 1977  
Graduate study, Toxicology, University of Michigan

**Professional Experience:**

Tufts University, Medford, Massachusetts

Lecturer, Civil and Environmental Engineering 1991-present  
Visiting Lecturer 1983-1991

Consultant and Owner, Environmental Insight 1991-present

Senior Consultant, Nobis Engineering, Inc.

Lowell, MA 2011-present

I worked in several environmental firms from 1979 through 1991

**Courses recently taught:**

- CEE 70 Introduction to Hazardous Materials Management
- CEE 167 Environmental Toxicology
- CEE 168 Exposure Assessment
- CEE 173 Health Effects and Risk Assessment
- ES 25 Environment and Technology

**Professional Registration:**

Licensed Site Professional, State of Massachusetts, No. 3676

**Other Professional Activities:**

Member of MassDEP/DPH Advisory Committee on Health Effects. The Committee reviews toxicity data and makes recommendation on standards and guidance.

Anne Marie C. Desmarais is owner and principal of ***ENVIRONMENTAL INSIGHT***, through which she provides consulting services in environmental health, human health risk assessment, environmental risk management, and hazardous waste management strategies. Ms. Desmarais provides services to municipalities and citizen groups as a third-party reviewer of risk assessments, Phase II studies, and remedial action plans

Ms. Desmarais founded ***ENVIRONMENTAL INSIGHT*** in 1991, and operates the business on a part-time basis. Ms. Desmarais is a lecturer in Civil and Environmental Engineering at Tufts University. She teaches courses in Risk Assessment, Toxicology, Environmental Technology, Risk Communication, and Hazardous Materials Management. Ms. Desmarais taught at Tufts from 1983 to 1991 as a visiting lecturer, and received has been employed under a faculty contract since September 1991.

Ms. Desmarais has extensive experience with MCP projects, including Risk Assessment and support of Phase II Comprehensive Site Characterizations, particularly development and review of sampling and analysis plans and peer review of technical documents. Ms. Desmarais has worked for several Massachusetts community groups as a Technical Advisor for MCP oversight.