November 2 & 3, 2006 Westford Regency, Westford, MA

NEIWPCC and **API** in association with **ITRC** have designed this two-day training course to enhance your professional awareness of technical issues related to fuel oxygenate characterization and remediation. An outstanding group of instructors composed of state and federal regulators, researchers, and private-sector practioners will present you with a balanced program offering both theoretical and field-based information covering site characteristics, remedial technology selection, design and implementation.

NEIWPCC is applying to the MA LSP Board for LSP continuing education credits for this course. When finalized, NEIWPCC will send an email notifying all registrants and potential registrants of the number of credits assigned.

American Petroleum Institute

ITRC

MtBE and Other Fuel Oxygenates: **Considerations for Assessments and Remediation**

New England Interstate Water Pollution Control Commission 116 John Street Lowell, MA 01852-1124 NEIWPCC

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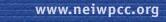
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New England Interstate Water Pollution Control Commission





MtBE and Other Fuel Oxygenates:

Considerations for Assessments and Remediation

A classroom training session sponsored by **NEIWPCC** and **API** in association with the Interstate Technology & Regulatory Council (ITRC)

November 2 & 3, 2006

Westford Regency Westford, MA







Day 1 Thursday, November 2, 2006

9:00 A.M.	Registration and Information Desk Open Refreshments Available
9:30 A.M.	Welcome and Introductions Susan Sullivan, Deputy Director, NEIWPCC Fred McGarry, P.E., DEE, ITRC MtBE Team Leader and Moderator
9:45 A.M.	Key Issues and Solutions Related to Oxygenates and State Regulatory Programs, Kara Sergeant, NEIWPCC
10:15 A.M.	 A Brief History of Gasoline Multiple Oxygenate Usage – Same Sites Emerging Issues Ongoing API Research Bruce Bauman, American Petroleum Institute
10:45 A.M.	Break
11:00 A.M.	Recent Gasoline Composition Studies, James Weaver, Ph.D., U.S. Environmental Protection Agency's Office of Research and Development
11:15 A.M.	Instruction Session #1 Properties of Gasoline Components Sources and Releases Site Conceptual Model and Site Characterization Eric Nichols, P.E., LFR, Inc.
12:15 P.M.	Luncheon
1:30 P.M.	Formation, Transport & Plume Modeling Computer Modeling James Weaver, Ph.D., U.S. Environmental Protection Agency's Office of Research and Development
2:30 P.M.	Practical Application #1 Computer Modeling , James Weaver, Ph.D., U.S. Environmental Protection Agency's Office of Research and Development
3:45 P.M.	Break
4:00 P.M.	Assessing Oxygenates in Bedrock Environments, Nancy Kinner, University of New Hampshire
5:00 P.M.	Selecting Appropriate Technologies – Site Considerations Fred McGarry, P.E., DEE
5:20 P.M.	Questions and Answers, Fred McGarry, P.E., DEE
5:30 P.M.	Adjourn Day 1

Day 2 Friday, November 3, 2006

Agenda

Conference

7:30 A.M. 8:00 A.M.	Refreshments Biodegradation - Monitored Natural Attenuation (MNA) for Oxygenates, How it evolved, why it occurs and stable carbon isotopes <i>John Wilson, U.S. Environmental Protection Agency</i>	
	Biodegradation – What Do We See in the Field? James Landmeyer, USGS	
10:00 A.M.	Break	
10:15 A.M.	Oxygenate Treatment Technologies, Fred McGarry, P.E., DEE	
10:30 A.M.	Instruction Session #2 Ex Situ Technologies a. Pump and Treat b. Pump and Treat Case Studies c. Aeration/Sorption/Carbon d. AS/BioGAC case studies e. Advanced Oxidation f. Ex Situ Bioremediation <i>Fred McGarry, P.E., DEE</i> and <i>Eric Nichols, P.E., LFR, Inc.</i>	
12:30 P.M.	Luncheon New Hampshire MtBE Drinking Water Study Joe Ayotte, New Hampshire USGS	
1:30 P.M.	Instruction Session #3 In Situ Technologies a. In Situ Bioremediation: USGS Case Studies, Jim Landmeyer, USGS b. In Situ Chemical Oxidation (ISCO), Eric Nichols, P.E., LFR, Inc. c. SVE/Air Sparging, Eric Nichols, P.E., LFR, Inc. d. Thermal Remediation, Jeff Kuhn, Montana DEQ Petroleum Release Section	Registration
3:00 P.M.	Remediation Performance Monitoring – How Do We Measure Success? Jeff Kuhn, Montana DEQ Petroleum Release Section	istr
3:30 P.M.	Treatment Technologies – Cost Comparison, Fred McGarry, P.E., DEE	e G
4:00 P.M.	The Future is Now! Ethanol Considerations, Curt Stanley, API/Shell	Ř
4:30 P.M.	Challenges of Fuel Oxygenates, Fred McGarry, P.E., DEE	e G
4:45 P.M.	Distribute Course Certificates and Collect Evaluations Kara Sergeant, NEIWPCC	ren
5:00 P.M.	Adjourn	onfere

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Registration

Fees/Hotel Information

MtBE and Other Fuel Oxygenates: **Considerations for Assessments and Remediation**

Fees: \$250 Government Attendees; \$600 Private Sector MA LSP Credits: Pending



The Westford Regency Inn & Conference Center 219 Littleton Road, Westford, MA 01886 Tel: 978-692-8200; www.westfordregency.com

Individuals should call The Westford Regency to make reservations: **978-692-8200**. In making reservations, please reference the group name: NEIWPCC NORTHEAST OXYGENATE TRAINING PROGRAM to receive the group rate of \$110. Government attendees must identify themselves as such to receive a rate of **\$99**.

Deadline for hotel reservations: October 11, 2006.

The meeting will take place in the Westford Regency's Concord Amphitheater.

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Please return this form and payment to:

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