



The MTCA 101 Workshop

Introduction to the Model Toxics Control Act (WAC 173-340)

Course ID: WAPOL-401

The Northwest Environmental Training Center presents:

The MTCA 101 Workshop Introduction to the Model Toxics Control Act (WAC 173-340)

Course ID: WAPOL - 401
April 16, 2008, 8:30 A.M. to 5 P.M.
Heritage Hall
Thurston County Fairgrounds
3054 Carpenter Rd SE
Lacey, WA 98503

Instructors: Pete Kmet, P.E., Washington State Department of Ecology Priscilla Zieber, M.S., Integral Consulting, Inc.

Course Description: The objective of this one day workshop is to introduce environmental consultants, federal, state and local government staff, and members of the general public to Washington's Model Toxics Control Act (WAC 173-340). This workshop will provide an overview of the MTCA administrative requirements and the associated cleanup standards. Participants will also learn the MTCA remedy selection process and public involvement requirements. Both instructors have a deep and thorough understanding of MTCA and will set aside time to answer questions at the end of each topic.

*This course is immediately followed by the two-day WAPOL-402: Establishing MTCA Cleanup Levels Workshop.

About the Instructors: Pete Kmet is a senior environmental engineer in Washington State Department of Ecology's Toxics Cleanup Program—Policy and Technical Support Unit. Mr. Kmet has extensive experience with site remediation and has been a key participant in the development of numerous MTCA legislation amendments, and related rules, policies and technical guidance. He has presented at numerous MTCA workshops throughout the state. Mr. Kmet also serves on the City Council of Tumwater.

Priscilla Zieber is an expert in the fields of risk assessment, risk management, and risk communication. She has over 20 years of experience in the fields of risk assessment, toxicology, and hazardous waste. She has taught classes on the 2001 MTCA revisions and has applied the MTCA rule at numerous cleanup sites.

COURSE TOPICS

Rule Authority

Reporting Requirements

Public Involvement Requirements

Remedy Selection Process

Overview of MTCA and the 2001 Rule Amendments

Cleanup Standards, Cleanup Levels, and Remediation Levels

Overview of Method A, B, and C Cleanup Levels for Soil, Surface Water, and Groundwater

Proposed MTCA Amendments for Contaminant Mixtures

Points of Compliance

Overview of Terrestrial Ecological Evaluations (TEE)

Protection of Groundwater - Soil Leaching Models

Residual Saturation Concentrations

Vapor Pathway Evaluation

Special Requirements for Petroleum Sites

Compliance Monitoring

Intended Audience: This course is intended for environmental professionals and other professionals seeking an improved understanding of the Model Toxics Control Act.

Course Materials: Attendees will receive a binder containing the workshop proceedings and reference material.

Course Credit: 0.7 Continuing Education Units (CEU's)

Registration:

WAPOL-401: \$235, *\$195

WAPOL-402: \$450, *\$375 This course has a prerequisite: Introduction to MTCA (WAPOL-401) listed above.

WAPOL 401 & 402 with an additional \$90 discount reflected: \$595, *\$480

(*Discount for Native American Tribes; nonprofits; government; students; teachers; and NAEP, NWAEP, and NEBC members). You may register via the link below or by calling the Northwest Environmental Training Center at (206) 762-1976.

Cancellation Policy: Registration fees are fully refundable up to 30 days prior to the event and 50 percent refundable (or 100% credit) thereafter up to the day prior to the event. Registration may occur up to the day prior to the event provided that space is available.

Northwest Environmental Training Center

A nonprofit 501(c)(3) program of the Northwest Environmental Education Council 650 S. Orcas Street, Suite 220 | Seattle, Washington 98108 Phone: (206)762-1976 | Fax: (206)762-1979 www.nwetc.org



The MTCA Cleanup Levels Workshop

Establishing Soil, Groundwater, and Surface Water Cleanup Levels Under the Model Toxics Control Act

Course ID: WAPOL-402

The Northwest Environmental Training Center presents:

The MTCA Cleanup Levels Workshop Establishing Soil, Groundwater, and Surface Water Cleanup Levels Under the Model Toxics Control Act

Course ID: WAPOL - 402
April 17 - 18, 2008, 8:30 A.M. to 5 P.M.
Heritage Hall
Thurston County Fairgrounds
3054 Carpenter Rd SE
Lacey, WA 98503

Instructors: Priscilla Zieber, M.S., Integral Consulting, Inc. Pete Kmet, P.E., Washington State Department of Ecology

Course Description: This course provides attendees with an in-depth understanding of the procedures for establishing cleanup levels and points of compliance under the Model Toxics Control Act (WAC 173-340). The course covers procedures for establishing cleanup levels using Methods A, B, and C for groundwater, surface water, and soil, including a discussion of recent rule revisions related to dioxins/furans, PCBs, and carcinogenic PAHs. Included is discussion of applying the terrestrial ecological evaluation process to soils at sites. The course will also include an overview of Washington State Department of Ecology's three - and four-phase partitioning models and use of leaching test methods for determining soil concentrations that are protective of groundwater. Attendees will have an opportunity to walk through the process of establishing cleanup standards using case studies. Both instructors have a deep and thorough understanding of MTCA and will set aside time to answer questions at the end of each topic.

*This course has a prerequisite - WAPOL-401: Introduction to the Model Toxics Control Act.

About the Instructors: Pete Kmet is a senior environmental engineer in Washington State Department of Ecology's Toxics Cleanup Program—Policy and Technical Support Unit. Mr. Kmet has extensive experience with site remediation and has been a key participant in the development of numerous MTCA legislation amendments, and related rules, policies and technical guidance. He has presented at numerous MTCA workshops throughout the state. Mr. Kmet also serves on the City Council of Tumwater.

Priscilla Zieber is an expert in the fields of risk assessment, risk management, and risk communication. She has over 20 years of experience in the fields of risk assessment, toxicology, and hazardous waste. She has taught classes on the 2001 MTCA revisions and has applied the MTCA rule at numerous cleanup sites.

COURSE TOPICS

Hands-On Case Studies and Questions (integrated throughout workshop)

Process for Reaching No Further Action

Conceptual Site Model Development for MTCA

Land Use and Beneficial Uses of Groundwater and Surface Water

Applicability of Methods A, B, and C

Direct Contact Soil CULs

Modeling the Leaching Pathway (3- and 4-phase models)

Vapor Pathway and Dermal Contact (applicability, how to evaluate)

Determining Residual Saturation Concentrations

Terrestrial Ecological Evaluations (TEE) - Simplified, Site-Specific, and Exclusions Identifying Indicator Hazardous Substances (screening levels, frequency of detection, natural background concentrations)

Surface Water CULs (ARARs, Equations) and Points of Compliance (POCs)

Groundwater CULs (ARARs, Equations, Protection of Surface Water) and POCs

Determine POCs for Soil

Evaluating Compliance with CULs (direct comparison, 3 part statistical rule)

Determining Whether Institutional Controls are Required

Overview of Proposed Amendments: clarifying cleanup levels for mixtures of dioxins/furans; carcinogenic PAHs, and PCBs

Intended Audience: This course is intended for environmental professionals seeking an improved understanding of the establishment of cleanup levels under MTCA.

Course Materials: Attendees will receive a copy of the course proceedings, reference materials, and a certificate of completion.

Course Credit: 1.3 Continuing Education Units (CEU's)

Registration:

WAPOL-401: \$235, *\$195

WAPOL-402: \$450, *\$375 This course has a prerequisite: Introduction to MTCA (WAPOL-401) listed above.

WAPOL 401 & 402 with an additional \$90 discount reflected: \$595, *\$480

(*Discount for Native American Tribes; nonprofits; government; students; teachers; and NAEP, NWAEP, and NEBC members). You may register via the link below or by calling the Northwest Environmental Training Center at (206) 762-1976.

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Thurston County Fairgrounds - Lacey, Washington

Accommodations near:

Thurston County Fairgrounds Heritage Hall

3054 Carpenter Road SE Lacey, WA 98503 (360) 786-5453

Quality Inn & Suites 120 College Street SE Lacey, WA www.qualityinn.com	(360) 493- 1991	Red Lion Hotel - Olympia 2300 Evergreen Park Dr SW Olympia, WA http://redlion.rdln.com	(360) 943- 4000
Lighthouse Bungalow 1215 E Bay Dr NE Olympia, WA www.lighthousebungalow.com	(360) 754- 0389	Comfort Inn of Lacey 4700 Park Center Ave NE Lacey, WA www.comfortinn.choicehotels.com	(360) 456- 6300
Ameritel Inn - Olympia 4520 Martin Way E Olympia, WA www.ameritelinns.com	(360) 459- 8866	Quality Inn 1211 Quince Street SE Olympia, WA www.qualityinn.choicehotels.com	(360) 943- 4710
Phoenix Inn Suites - Olympia 415 Capitol Way N Olympia, WA www.phoenixinnsuites.com	(360) 570- 0555	Super 8 Motel 112 College Street SE Lacey, WA www.super8.com	(360) 459- 8888

Northwest Environmental Training Center

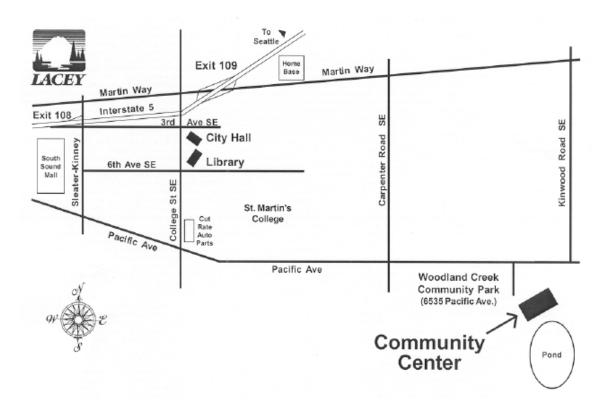
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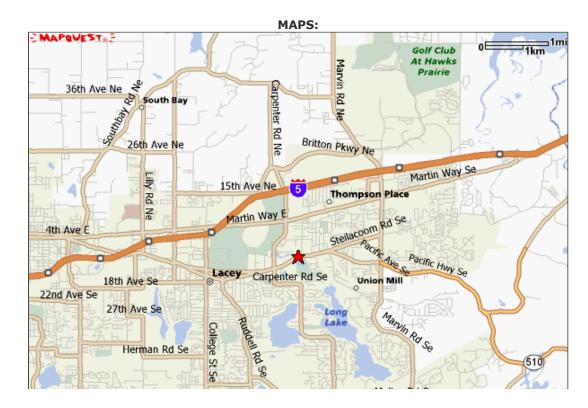
Lacey Community Center Located in the Woodland Creek Community Park

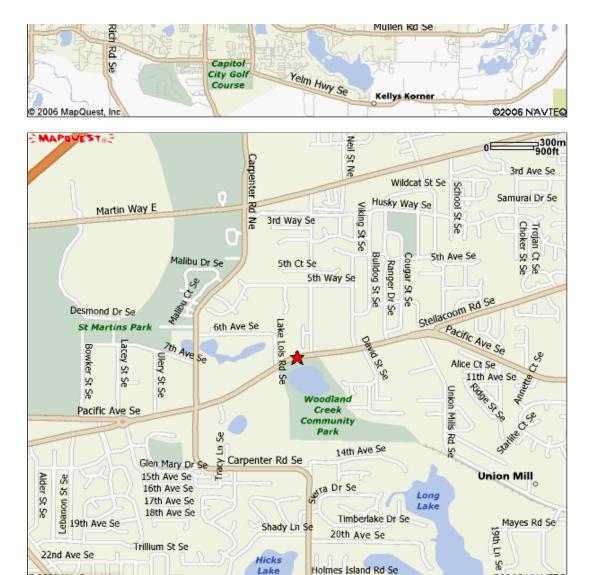
6729 Pacific Ave SE | Lacey, Washington 98503 | 360.491.0857

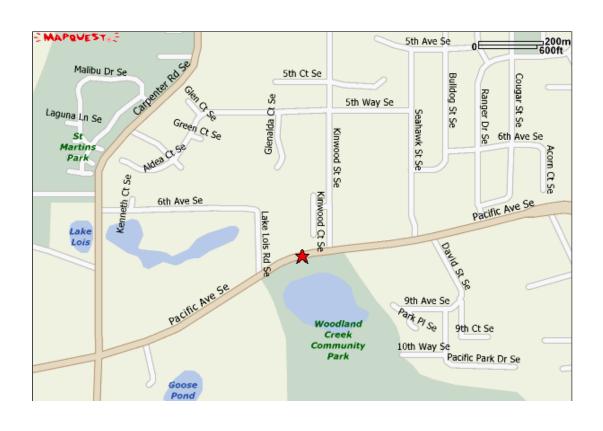
From I-5:

Take Exit 109 to Martin Way
Go east on Martin Way one mile to Carpenter Road
Turn right on Carpenter Road
Proceed one mile to Pacific Avenue
Turn left at Pacific Avenue
Proceed 0.3 mi to the Woodland Creek Community Park









Hicks Lake

Holmes Island Rd Se

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22nd Ave Se

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REGISTRATION FORM

Name:		Today's Date:	
Agency/Organization:			
Street Address:		Mail Cod	e:
Street Address (cont.):			
City:	State:	Zip:	
Phone:	Fax:		
Email:	Tit	le:	
Indicate Course(s):			
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Payment Method: Check PO Credit Ca	-		
Credit Card or PO #:		Exp:	
Notes: Please make checks payable to Northwest Encancellation Policy: Registration fees are fully refundable (or 100% credit) thereafter up to the day process.	dable up to 30	days prior to the even	•

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