



Modeling Human Health Risks

Practical Approaches to Estimating Risk & Developing Site-Specific Cleanup Levels

Course I.D.: REM-402

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Practical Approaches to Estimating Risk and Developing Site-Specific Cleanup Levels

Course ID: REM-402 (2 days)

January 28-29, 2010, 8:30 A.M. to 5 P.M.

Executrain

9841 Airport Blvd., Suite 524

Los Angeles, CA 90045

Instructor: Lynn Spence, PE,
Spence Environmental Engineering

Description: Risk assessments are now being performed at almost all sites, whether part of a Risk-Based Correction Action (RBCA) analysis, to determine remediation strategies, or for litigation support and prevention. This class is hands-on, covering all the steps in a risk assessment. Emphasis will be placed on fate and transport modeling to estimate exposure point concentrations. RISC software will be used for classroom exercises, and may be purchased at a discount in conjunction with the class, however the principles learned are readily applicable to other risk assessment software. Each participant will have their own computer workstation throughout the class.

Course Topics:

- Overview of the risk assessment process
- Exposure assessment
- Principles of contaminant fate and transport modeling
- Assessment of vapor intrusion to indoor air with the Johnson and Ettinger Model
- Vadose zone and groundwater models
- Risk-Based Corrective Action (RBCA)
- Calculation of site-specific cleanup levels
- Using the RISC software for both fate and transport analysis and risk assessment
- Sensitivity analysis
- Risk issues with total petroleum hydrocarbons (TPH)

After completing this course, participants will be able to:

- Understand the fundamentals of risk assessment protocols;
- Understand key fate and transport principles;
- Use and apply the RISC software;
- Complete technically defensible risk assessments;
- Provide peer reviews of risk assessments developed by others;
- Understand the RBCA process and how risk assessment fits in; and
- Distinguish between key input parameters and less important inputs for fate and transport models and risk assessment.

About the Instructor: Lynn Spence has 22 years experience in environmental engineering, risk assessments, contaminant transport modeling and remedial investigations. Lynn has developed several commercially available software programs including RISC, the API Decision Support System for risk assessments, and the API's TPH RBCA software. Lynn has taught many risk assessment short courses for both the private sector and for regulatory agencies.

Intended Audience: This course is designed for environmental professionals who need to perform risk assessments or apply RBCA protocols, environmental managers who need to understand key principles around risk assessment, and regulators reviewing risk assessment and RBCA submittals.

Prerequisites: A working knowledge of RBCA and knowledge of site characterization skills such as evaluating site analytical data and delineating a source.

Software: All software required for the class will be provided. The concepts in the class may be applied afterwards using publicly available tools or the RISC software, which attendees may purchase for \$450 (a \$200 discount off the retail price).

Education Level: Intermediate

Course Materials: Participants will receive course proceedings and reference materials.

Continuing Education Units: 1.3

What to Bring: Calculator, pen or pencil, coffee mug, and a water bottle (to reduce waste). Also, please bring questions about current projects relating to risk assessment or fate and transport modeling. Please wear comfortable clothes appropriate for the prevailing weather. Lunch will be on your own. There are numerous restaurants within walking distance. Drinks and snacks will be provided each day.

Registration: \$895 (*\$795 reduced tuition is available for Native American tribes; government employees; nonprofits; students; and NAEP, NEBC, NWAEP 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 3 business days prior to the event. No refunds are issued for cancellations occurring less than 3 business days before the start day. Course registration fees and cancellation policy are subject to change without notice.

Disability Accommodations: To request disability accommodations, please contact us at info@nwetc.org or (206) 762-1976 at least 30 days prior to the event.

Northwest Environmental Training Center

A 501(c)(3) non-profit program of EOS Alliance
650 S. Orcas Street, Suite 220, Seattle, Washington 98108
Phone: (206)762-1976, Fax: (206)762-1979
www.nwetc.org



Los Angeles
California

Los Angeles , California | ACCOMMODATIONS near The ExecuTrain-Los Angeles

Sheraton Gateway Los Angeles Airport 6101 W. Century Blvd. Los Angeles, CA	(310) 642-1111	Radisson <u>Hotels</u> & Resorts 6225 W Century Blvd. Los Angeles, CA	(310) 670-9000
Courtyard by Marriott 6161 W Century Blvd. Los Angeles, CA	(310) 649-1400	Embassy Suites Hotel: North 9801 Airport Blvd. Inglewood, CA	(310) 215-1000
Crowne Plaza La International Airport 5985 W Century Blvd. Los Angeles, CA	(310) 642-7500	Los Angeles Airport Marriott 5855 W Century Blvd. Los Angeles, CA	(310) 641-5700

To find out more about NWETC's programs send us [email](#).

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Directions to:

ExecuTrain Los Angeles

9841 Airport Blvd., Suite 524

Los Angeles, CA 90045

Los Angeles County Metropolitan Transportation Authority: www.metro.net

Adjacent bus stops are served by routes 117, 439 & 626 (connecting to the Green Line) and the LAX Transit Center is a 10-minute walk away

From Los Angeles International Airport (LAX):

Start out going EAST on WORLD WAY / CENTER WAY 2.
Turn LEFT to take the CENTURY BLVD / CA-1 N / SEPULVEDA BLVD NORTH ramp
Take the CENTURY BLVD ramp
Merge onto W CENTURY BLVD
Turn LEFT onto AIRPORT BLVD
End at 9841 Airport Blvd, Suite 524, Los Angeles, CA 90045

From Santa Ana / Orange County:

Take I-405 N toward SANTA MONICA / I-605 FREEWAY N
Take the CENTURY BLVD exit- EXIT 46- toward LAX AIRPORT
Turn LEFT onto W CENTURY BLVD
Turn RIGHT onto AIRPORT BLVD
End at 9841 Airport Blvd, Suite 524, Los Angeles, CA 90045

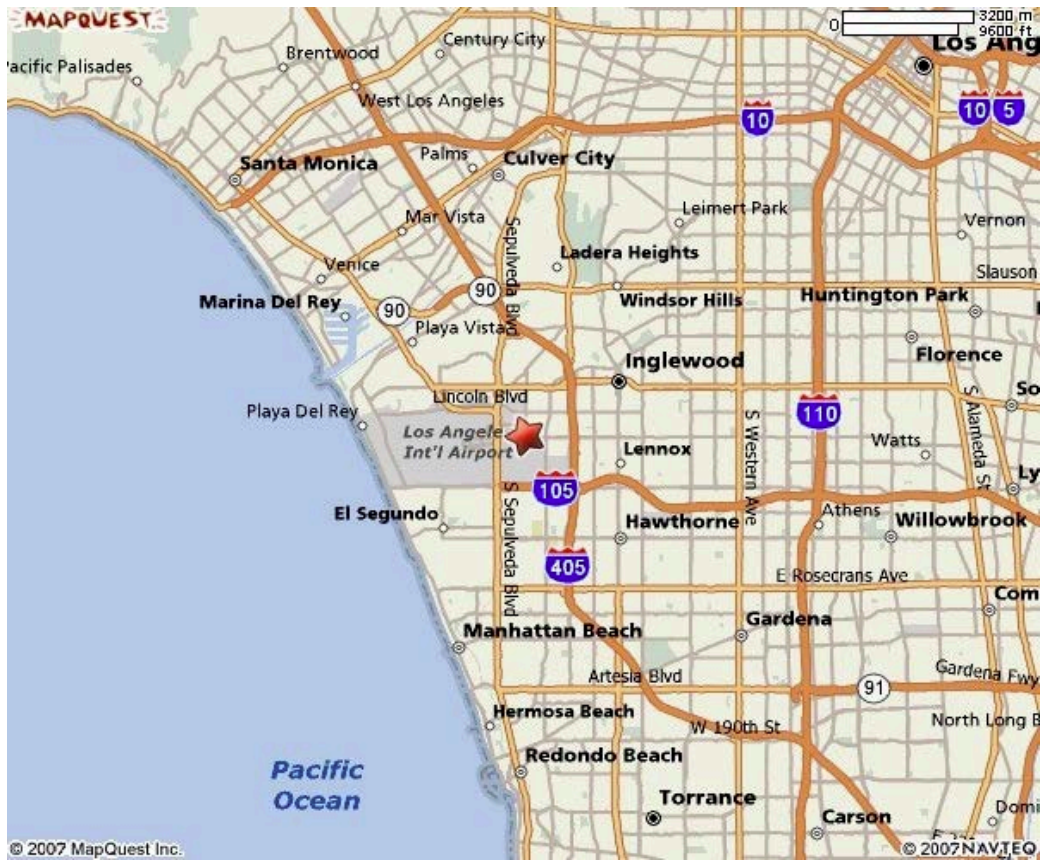
From Los Angeles International Airport (LAX):

From US-101 S toward LOS ANGELES
Merge onto I-405 S toward SANTA MONICA
Take the LA TIJERA BLVD exit- EXIT 48
Turn RIGHT onto LA TIJERA BLVD
Turn SLIGHT LEFT onto AIRPORT BLVD
End at 9841 Airport Blvd, Suite 524, Los Angeles, CA 90045

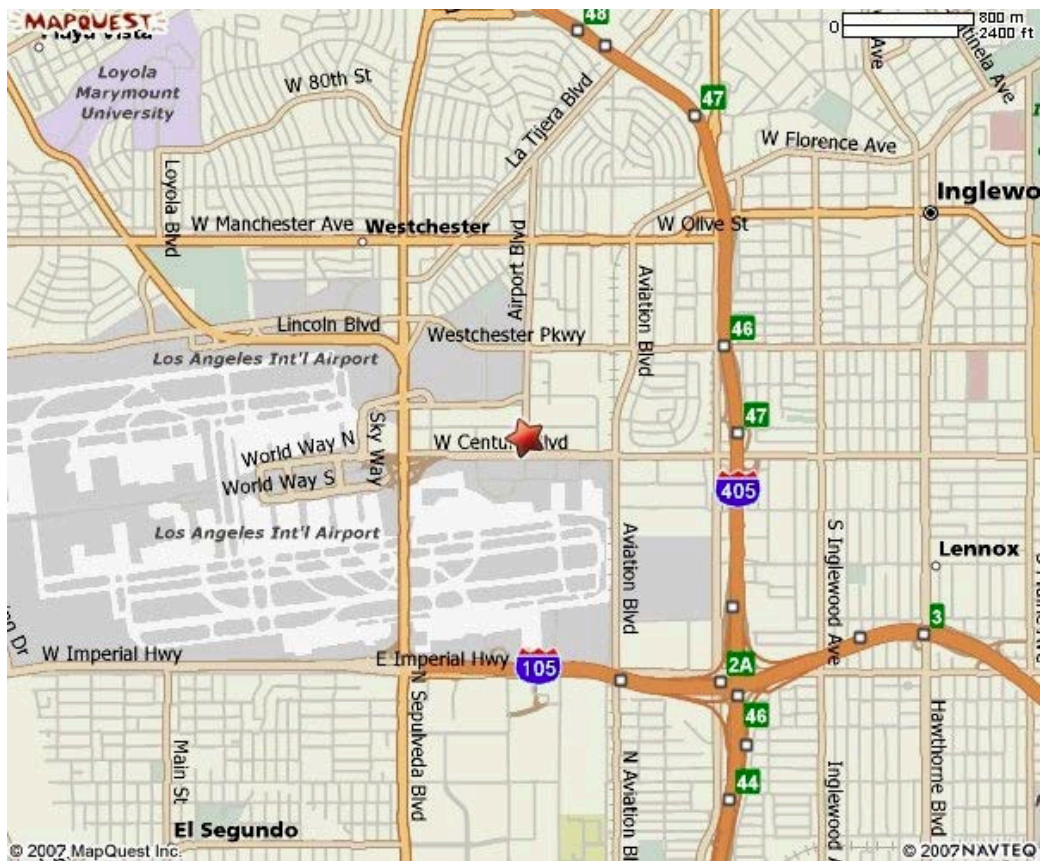
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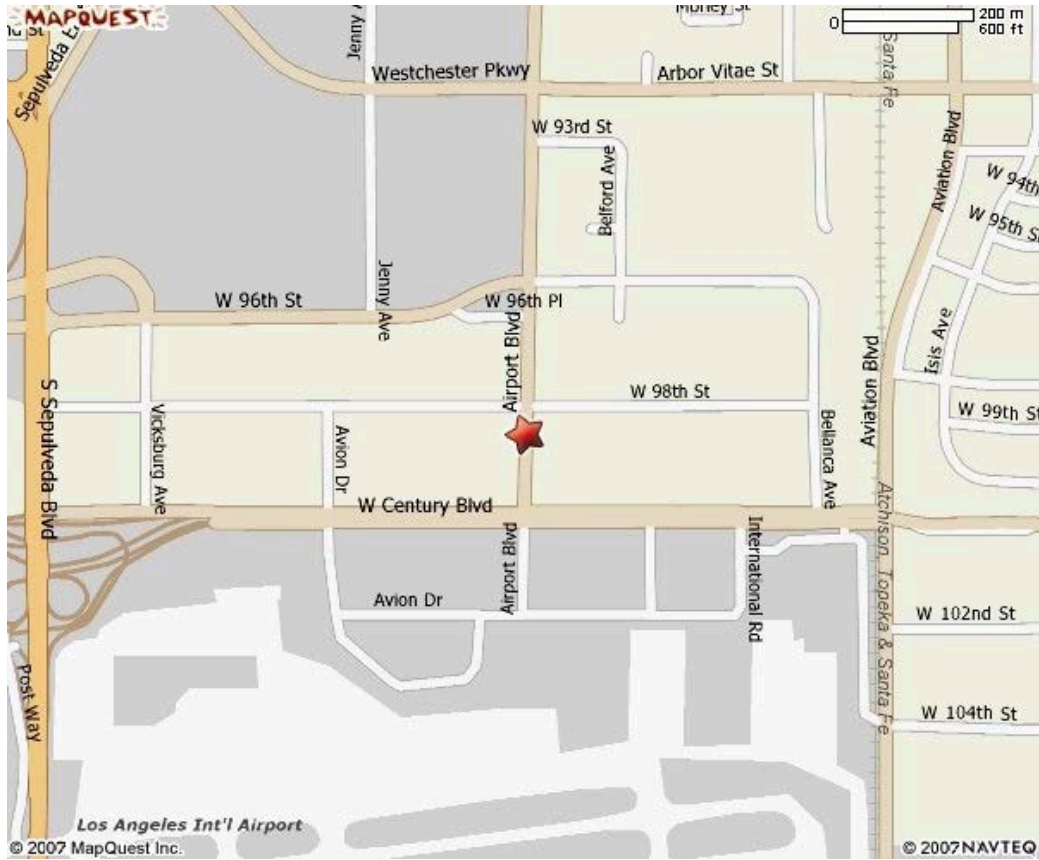
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REGISTRATION FORM

Name: _____ Today's Date: _____

Agency/Organization: _____

Street Address: _____

Street Address (cont'd): _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

Email: _____ Title: _____

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Payment Method: Check PO Credit Card (Visa Mastercard) Total: \$ _____

Credit Card or PO #: _____ Exp: _____

Notes: Please make checks payable to Northwest Environmental Training Center.

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