



Seminar on Characterizing and Remediating Dense Nonaqueous Phase Liquids at Hazardous Sites

Chicago, IL—June 2, 1993

Kansas City, MO—June 3, 1993

Bellevue, WA—June 15, 1993

San Francisco, CA—June 16, 1993

Dallas, TX—June 29, 1993

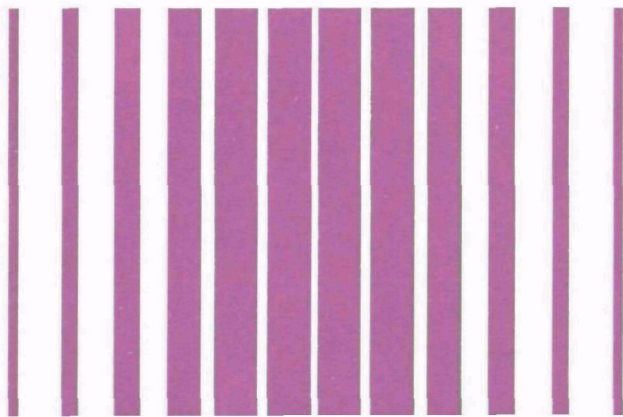
Denver, CO—June 30, 1993

Philadelphia, PA—July 13, 1993

Atlanta, GA—July 14, 1993

New York, NY—July 27, 1993

Boston, MA—July 28, 1993



SEMINAR ON CHARACTERIZING AND REMEDIATING DENSE NONAQUEOUS PHASE LIQUIDS AT HAZARDOUS SITES

This U.S. Environmental Protection Agency (EPA) technology transfer seminar series is co-sponsored by the Office of Research and Development's (ORD's) Center for Environmental Research Information (CERI), Cincinnati, OH, and by the Office of Emergency and Remedial Response (OERR), Washington, DC.

BACKGROUND AND PURPOSE

Ground water is contaminated with nonaqueous phase liquids at many hazardous waste sites throughout the United States. Dense nonaqueous phase liquids (DNAPLs) can be found at most hazardous sites. DNAPLs can contaminate the aquifer, soil, and atmosphere near the site, and can remain in the subsurface for many years. The contamination also can spread via complex modes of release.

This one-day program will address how to evaluate sites, characterize site problems, and select viable remediation options. The seminar also will cover types of DNAPLs and how they move in porous and in fractured subsurfaces. *Dense Nonaqueous Phase Liquids—Workshop Summary* (EPA\600\R-92\030), produced by Robert S. Kerr Environmental Research Laboratory, Ada, OK, will be the basis of the seminar series. This document will be available to all attendees on site.

AUDIENCE

This seminar is intended for people who oversee and manage site assessment, characterization, and remediation of DNAPLs. The audience will include federal, regional, and state staff, as well as consultants working at sites that may be contaminated.

REGISTRATION

There is no fee to register for the seminar. To register, complete the attached form and mail it to the address printed on the back or fax it to Eastern Research Group, Inc. (ERG) at 617-674-2906. Within two weeks, you will receive a confirmation package, including a detailed agenda and information on the meeting site, hotel accommodations, and ground transportation. If you have questions about registration, please call 617-674-7374 between 9:00AM and 5:00PM, Eastern Standard

Time (EST). For general questions about the seminar series, please call Deborah Kanter at 617-674-7320. You also may write or fax information requests to Deborah at Eastern Research Group, Inc., 110 Hartwell Avenue, Lexington, MA 02173-3198.
Fax: 617-674-2906.

HOTEL INFORMATION

A block of rooms has been reserved at each of the hotels listed below. **You are to make your room reservations directly with the hotel.** These rooms will be issued on a first-come, first-served basis. The reserved rooms will be held until the cut-off date, which is approximately three weeks prior to each seminar. **Reference the "EPA Seminar" to receive the special room rates.**

SEMINAR LOCATIONS

June 2, 1993:

Holiday Inn - Mart Plaza
350 North Orleans Street
Chicago, IL 60654
312-836-5000
Single/Double: \$85 (+ 14.9% tax)

June 3, 1993:

Airport Hilton Plaza Inn
I-29 and NW 112th Street
Kansas City, MO 64195
816-891-8900
800-525-6322
Single/Double: \$60 (+ 11.975% tax)

June 15, 1993:

Hyatt Regency Bellevue
900 Bellevue Way, NE
Bellevue, WA 98004
206-462-1234
800-233-1234
Single: \$69.30; Double: \$86.80 (+ 14% tax)

June 16, 1993:

Holiday Inn - Golden Gateway
1500 Van Ness Avenue
San Francisco, CA 94109
415-441-4000
800-465-4329
Single/Double: \$82 (+ 11% tax)

June 29, 1993:

Plaza of the Americas Hotel
650 North Pearl Street
Dallas, TX 75201
214-979-9000
Single/Double: \$69 (+ 7% tax)

June 30, 1993:

Denver Marriott Hotel - City Center
1701 California Street
Denver, CO 80202
303-297-1300
Single: \$66.07; Double: \$79.50 (+ 12% tax)

July 13, 1993:

Adam's Mark Philadelphia
City Avenue and Monument Road
Philadelphia, PA 19131
215-581-5000
Single: \$79; Double: \$99 (+ 12% tax)

July 14, 1993:

Atlanta Marriott Marquis
265 Peachtree Center Avenue
Atlanta, GA 30303
404-521-0000
800-228-9290
Single: \$76; Double: \$96 (+ 13% tax)

July 27, 1993:

New York Vista Hotel
Three World Trade Center
New York, NY 10048
212-938-9100
800-258-2505
Single/Double: \$140 (+ 19.25% tax
+ \$2 occupancy tax)

July 28, 1993:

Boston Park Plaza Hotel
64 Arlington Street
Boston, MA 02116
617-426-2000
800-225-2008
Single: \$88; Double: \$108 (+ 9.7% tax)

REGISTRATION FORM

Seminar on Characterizing and Remediating Dense Nonaqueous Phase Liquids at Hazardous Sites

Please register me for the following seminar(s):

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- ☐ Bellevue, WA, June 15, 1993
- ☐ San Francisco, CA, June 16, 1993
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- ☐ New York, NY, July 27, 1993
- ☐ Boston, MA, July 28, 1993

(Please print clearly or, if mailing in an envelope,
you may attach a business card.)

Name _____

Title _____

Organization _____

Address _____

City/State/Zip Code _____

Telephone _____

Fax _____

Mail registration to Deborah Kanter, Eastern
Research Group, Inc., 110 Hartwell Avenue,
Lexington, MA 02173-3198, or fax it to Deborah
Kanter at 617-674-2906.

SPEAKERS

Basic Concepts

David K. Creamer, Director of the Water Resources Management Program, University of Nevada—Las Vegas, Las Vegas, NV

Characterization of Sites for DNAPLs

Robert M. Cohen, Principal Hydrogeologist, GeoTrans, Inc., Sterling, VA

or

James W. Mercer, President & Principal Hydrogeologist, GeoTrans, Inc., Sterling, VA

Options for DNAPLs Remediation

Charles J. Newell, Vice President & Environmental Engineer, Groundwater Services, Inc., Houston, TX

PRELIMINARY AGENDA

7:00AM	Registration/Check-in
8:00AM	Introductory Remarks/Welcome
8:15AM	Basic Concepts (Extent, Types, and Movement in Porous and Fractured Media)
9:45AM	Break
10:00AM	Basic Concepts (<i>continued</i>)
10:30AM	Questions and Answers
10:45AM	Characterization of Sites for DNAPLs
11:45AM	Lunch
1:00PM	Characterization of Sites for DNAPLs (<i>continued</i>)
1:45PM	Questions and Answers
2:00PM	Break
2:15PM	Options for DNAPLs Remediation
3:30PM	Questions and Answers
3:45PM	Final Comments
4:00PM	Adjourn



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Deborah Kanter
*Seminar on Characterizing and Remediating
Dense Nonaqueous Phase Liquids at Hazardous Sites*
Eastern Research Group, Inc.
110 Hartwell Avenue
Lexington, MA 02173-3198