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ZymaX FORENSICS

Free Webinar!
Earn 2 Hours MCLE Credit*

*MCLE credit approved by the State Bar of California, Single Activity Provider #13318

Environmental Forensics Workshop

A Webinar for Environmental Law Firms
Professional Practice Development

This timely and practical presentation covers the latest developments for state-of-the-art environmental forensic practices and is designed specifically for environmental attorneys, associates and paralegals preparing for trial, depositions or discovery. Course focus will relate to recent & historical hazardous releases to soils, surface water and groundwater of both petroleum hydrocarbons and chlorinated solvents. Course participants will also learn about the latest environmental forensic laboratory techniques and procedures essential for successful cross examinations and/or redirects.

Featuring...

- **Two presentations on cutting-edge environmental forensic techniques , 1.0 MCLE hour credit each!**
- **Two commonly litigated topics covered by leading experts with extensive trial experience:**
  - ***Petroleum Products* by Alan Jeffrey, Ph.D.**
  - ***Chlorinated Solvents* by Robert Morrison, Ph.D.**
- **Course includes hand-outs of presenter slides and reference materials.**
- **Q&A direct access to the industry's leading experts.**
- **MCLE credit confirmation will be promptly mailed to registered attendees (if requested at time of scheduling).**

Course Itineraries...

Petroleum Products
One Hour - Alan Jeffrey, Ph.D.

Site Monitoring
- EPA screening analyses
- Purpose of monitoring
- Search for the source
- TPH analysis masquerading as fingerprinting
- Forensics on the cheap - pitfalls

Hydrocarbon Fingerprinting
- Basic description of analytical technique
- Gasoline, diesel, fuel oil fingerprints
- Level 1 fingerprints – GC/FID
- Level 2 fingerprints – GC/MS
- Data you can take to court
- Hydrocarbon fingerprint limitations

Age Dating
- Gasoline – age-sensitive markers
- Home heating oil – degree of weathering
- Other petroleum products
- Degree of uncertainty in dating
- Other dating limitations

Case Studies
- Service station – gasoline release
- Pipeline release
- Oil tanker spill

Chlorinated Solvents
One Hour - Robert Morrison, Ph.D.

Site Investigations
- Knowledge of equipment & activities
- Where to sample

Analytical Approach
- Soil gas / Gore Sorber® data
- Soil analysis
- Groundwater analysis
- Grout / expansion joint / wood / cement / asphalt analyses

Age Dating Chlorinated Solvent Releases
- Stabilizers / Inhibitors / Antioxidants
- Stable and compound specific analysis - Hydrogen, Carbon, & Chlorine

Equipment Usage and Historical Regulations
- Dry cleaning equipment
- Degreasers and stills
- Rule 66 in California
- Philadelphia, PA Ordinance

Expert Opinion Development / Evidence Development
- Historical information / interviews / regulatory permits
- Analytical test results
- Direct evidence

Meet Your Instructors...

Dr. Alan Jeffrey has a BS in Biochemistry, an MS in Organic Chemistry and a Ph.D. in Oceanography. Dr. Jeffrey has over 20 years of US and international experience in environmental science and geochemistry. At ZymaX Forensics, Dr. Jeffrey has focused on the use of geochemical techniques to solve environmental problems, including sources of spilled hydrocarbon fuels, nitrates, and fugitive methane seeps. Dr. Jeffrey has served as an expert witness, has been deposed and testified at trial in cases involving petroleum product spills, and is the author of fourteen publications on oceanography, petroleum geochemistry and environmental monitoring. He has conducted workshops in environmental forensics and has given numerous presentations at scientific meetings in the USA, Europe and Asia.

Dr. Robert Morrison has a BS in Geology, an MS in Environmental Studies, an MS in Environmental Engineering, and a Ph.D. in Soil Physics. He has been working for over 35 years in the environmental field on issues related to soil and groundwater contamination. Dr. Morrison specializes in the forensic review and interpretation of scientific data for the purpose of identifying the source and age of a contaminant release and manages DPRA's environmental forensic practice group. Dr. Morrison is credited for coining the term "environmental forensics" and authored the first textbooks on this subject. Dr. Morrison has offered deposition and court testimony in over 50 cases.

For Reservations, Specific Customized Course Substitutions and Registrations contact:

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