



Petroleum Storage Tank Division

Continuing Professional Education Program - Approved Providers and Courses

Classes & Webinars

**Consultants are responsible for obtaining proof of attendance and/or certificates from the educational provider. This may require the consultant to email the provider **

Aestus, LLC

Loveland, CO	P: 888-436-8729
	or
https://aestusllc.com/	970-278-4090
or	E: info@aestusllc.com
https://mailchi.mp/aestusllc/educationalwebinarseries	

Courses	Credits
Listen, Ask, and Learn! Successful LNAPL Remediation in Karst Geology in <2 Years via Scan First Approach	0.5
Listen, Ask, and Learn! Evaluating Habitat to Demonstrate Monitored Natural Attenuation	0.5
Listen, Ask, and Learn! Ultra-HRSC CSM Update Help Save ~\$4 Million at NAPL Sediments Site	0.5

Alpha Analytical

8 Walkup Drive Westborough, MA 01581	P: 508-898-9220
	or
	800-624-9220
https://alphalab.com/	

Courses	Credits
Vapor Intrusion: Sampling with Confidence for Mid-Atlantic States	3.00
Analytical Support for Forensic Hydrocarbon Applications	1.00

American Society for Testing and Materials

ASTM Environmental Training 100 Barr Harbor Drive West Conshohocken, PA 19428	P: 877-909-ASTM
	or
	610-832-9500
	E: service@astm.org
https://www.astm.org/TRAIN/astm-environmental-training.html	

Courses	Credits
ASTM E2600 Standard Guide for Vapor Encroachment Screening on Property	5.00
Phase I Environmental Site Assessments (includes Transaction Screen)	14.00
Phase I & Phase II Environmental Site Assessments	21.00
Phase II Environmental Site Assessments (Available on-site only)	11.00

American Society for Testing and Materials (Continued)

<u>Courses</u>	<u>Credits</u>
Estimating LNAPL Transmissivity: A Guide to Using ASTM Standard Guide E2856	14.00
Vapor Encroachment: Screening for Vapor Encroachment onto Property Involved in Real Estate Transactions (Available on-site only)	7.00
Risk-Based Corrective Action (RBCA) Applied at Petroleum Release Sites (Available on-site only)	14.00
RA and RBCA Webinar Series Bundle- Audit Track	12.50
Toxicity Assessment & Calculation of Risk (Direct Routes of Exposure) Webinar	1.25
Calculation of Risk based Exposure Point Concentrations (Direct Routes of exposure) Webinar	1.25
Fate and Transport Considerations in RA Webinar	1.25
Soil and Groundwater Target Levels for Groundwater Protection: Indirect Routes of Exposure Webinar	1.25
Estimating Representative Concentrations at Point of Exposure & Point of Demonstration Webinar	1.25

American Society for Civil Engineers

1801 Alexander Bell Drive
Reston, VA 20191

P: 800- 548-2723
or
703 295-6300

<https://www.asce.org/continuing-education/>

<u>Courses</u>	<u>Credits</u>
Geo-Chemistry: An Important Tool (AWI040912)	2.00
Upcoming Revisions ASTM E 1527 Standard Practice for Environmental sites Assessment (AWI102313)	1.00
Sediment Characteristics, Sources, and Movement (AWI091917)	2.00
Soils and Soils Mechanics – Nuances of Borehole and Sample Logging (6073IW2021)	4.00
Hydrology 101 – Understanding the Processes (AWO072915)	2.00
Hydrology 101 – Advanced Topics and Applications (AWO081215)	2.00

Associated Environmental Industries Corp

P.O. Box 5300
Norman, Oklahoma 73070

P: 405-360-1434
F: 405-360-1480
E: aei@aei-corp.com

<https://www.aei-corp.com>

<u>Courses</u>	<u>Credits</u>
New Horizons Roto-Sonic Drilling Field Day	4.00

Association of State and Territorial Solid Waste Management Officials

1101 17th Street NW, Suite 707
Washington, DC 20036

P: 202-640-1060
F: 202-331-3254

<http://astswmo.org/category/tanks/>

Courses	Credits
EPA National Database for UST and LUST – Webinar	1.00
Webinar – Sources and Causes of UST Releases	1.00
EPA's UST Finder: National UST and Releases Web Map - Webinar	1.25
UST Finder: The National Underground Storage Tanks and Release Web Map – Workshop	3.00

Cascade Drilling

22722 29th Drive SE, Ste 228
Bothell, WA 98021

P: 425-527-9700

E: communications@cascade-env.com

Consultants MUST email specifying course in order to receive certificate

<https://www.cascade-env.com/resources/webinars/>

Courses	Credits
ISS 101: What You Need to Know When Considering In Situ Stabilization	1.00
Sampling 201: When, Why and How to Use Telescoping When Sampling Aquifers	1.00
Sampling 101: Methods of Collecting Environmental Samples During Drilling	1.00
How to Achieve High Quality Samples in Challenging Lithology	1.00
Critical Discussions to Have Before You Start Drilling	1.00
In Situ Thermal Remediation Modeling: The Basis of Design	1.00
Thermal Remediation of High Mass Hydrocarbon Sites: When NAPL Capture Governs the Mass Recovery	1.00
Real-Time Solutions to Unexpected Challenges Encountered During Thermal Remedy Implementation	1.00
Drilling 104: An Introduction to Rotary Drilling	1.00
How to Design an Efficient HRSC Program Based on Objectives and Data Gaps	1.00
ISTR in Complex Geologic Settings with Highly Variable Permeabilities and High Groundwater Flux Zones	1.00
Tough Terrains: How to Overcome Common Drilling Challenges on Difficult Project Sites Before Drilling Starts	1.00
Sampling 104: An Introduction to Groundwater Sampling	1.00
In Situ Thermal Remediation and Heat Enhanced Biodegradation	1.00
How to Choose the Right Thermal Technology	1.00
Thermal Remediation Vapor Covers: Why & How	1.00
ISTR Design and Optimization Strategies	1.00
The Next Step in Innovative Distribution	1.00
Stop Fracturing Target Intervals During Liquid Injections	1.00
Drilling 101	1.00
Tired of DPT Refusal? How To Achieve Deep Site Characterization	1.00
Limited Access Projects: How to Do More With Less	1.00
Drilling for Thermal Projects	1.00
Drilling 201: Sonic Methodologies and Best Practices	1.00
Mass Removal: Why it's Important and How to Calculate it	1.00
Remediation Cost Avoidance Series Part 1	1.00
Remediation Cost Avoidance Series Part 2	1.00

Cascade Drilling (Continued)

<u>Courses</u>	<u>Credits</u>
Remediation Cost Avoidance Series Part 3	1.00
Remediation Cost Avoidance Series Part 4	1.00
Getting the Most Information from a Single Borehole Advancement	1.00
Drilling 107: An Introduction to Direct Push Technology (DPT)	1.00
Drilling 202: An Introduction to Dual Rotary Drilling	1.00
ERH vs TCH: How to Choose Your Thermal Remediation Technology (and Why)	1.00
Making AVI Work: It's More Than Just the Chemistry	1.00
Low Temperature Thermal: The Sustainable Approach	1.00
Particle Size Matters: What You Need to Know to Optimize Your ZVI Remediation Project	1.00
Thermal 101: What is Thermal Remediation and How Does It Work?	1.00
Fast, Reliable Remediation: Why Thermal Should Be On Your Short List for Redevelopment Projects	1.00
Below Building Remediation: Considerations of In Situ Delivery Methods to Safely Address COCs	1.00
Colloidal Activated Carbons for Hard-to-Treat Contaminants	1.00
How To Plan For Sustainability In Your Remediation Projects	1.00

C.E.R.E.S. Corporation

<https://www.cerescorporation.com/webinars/>

P: 714 709-3683

E:info@cerescorporation.com

<u>Courses</u>	<u>Credits</u>
Zero Valent Iron (ZVI) Applications: Nano, Powder or Aggregate? Which to use?	1.00

E Training

<https://etraintoday.com/course-catalog/>

P: 815-556-9384

E:infor@etraintoday.com

<u>Courses</u>	<u>Credits</u>
Trenching & Excavation for the Competent Person	5.00
Trenching & Excavation Safety Awareness	2.00

Environmental Protection Agency

Technology Innovation and Field Services Division / Office of Superfund Remediation and Technology Innovation / Air Pollution Training Institute

<https://clu-in.org/live/archive/default.cfm?display=all&group=tifsd>

or

<https://trainex.org/bytitle.cfm>

<u>Courses</u>	<u>Credits</u>
Groundwater/Surface Water Interactions: Developing Conceptual Site Models of Organism Exposures in Hyporheic Systems	7.00
Geophysical Method Selection: Matching Study Goals, Method Capabilities and Limitations, and Site Conditions	1.00
Borehole Geophysics Applied to Bedrock Hydrogeologic Evaluations	1.50
Environmental Geophysics Applied to Site Characterization, Plume Mapping, and Remediation Monitoring	1.50

Environmental Protection Agency (Continued)

<u>Courses</u>	<u>Credits</u>
NARPM Presents...Stress and Environmental Contamination: Tips and Tools from ATSDR	2.00
Vapor Intrusion (VI) Investigation using the Trace Atmospheric Gas Analyzer (TAGA) Mobile Laboratories	1.50
NARPM Presents...Using Bioavailability to Assess Contaminated Sediment Risk: Passive Sampling and Porewater Remedial Goals (PWRGs)	2.00
Perspectives on the Implementation of Greener Cleanups	1.50
Practical Applications of Phytotechnologies at Contaminated Sites	1.50
In Situ Activated Carbon-Based Technology for Groundwater Remediation: Overview, Best Practices, and Case Studies	1.50
Combined Remedies: Adaptive, Flexible, Attentive Use of the Right Tools	1.00
ERTP Presents...Pragmatic Approaches to Remedial Investigation, Technology Selection, and Remediation Success	2.00
Phytoremediation and PhytoForensics: Mother Nature can Detect and Mitigate Pollutants...with Elegance	2.00
ERTP Presents...Soil Sampling and Analysis for Volatile Organic Compounds (VOCs)	1.00
Green Up Your Cleanups	1.50
Screening, Testing, and Application of Residuals and Byproducts for Remediation	2.00
Implementing Greener Cleanups through ASTM's Standard Guide (E2893-13)	2.00
Nanotechnology for Site Remediation	2.00
Analytical Chemistry Data Review - Volatile Organics Data	2.00
Analytical Chemistry Data Review - High Resolution GC/MS Data	2.00
Remedial Acquisition Framework (RAF) Updated Overview	2.00
NARPM Presents...Analytical Laboratory Data - Electronic Data Assessment	2.00
Best Management and Technical Practices for Site Assessment and Remediation	1.50
NARPM Presents...The Elements of Analytical Laboratory Data Quality	2.00
NARPM Presents...Evaluating Completion of Groundwater Restoration Remedial Actions	2.00
CEC Preliminary Assessment/Site Inspection (PA/SI) Webinar Series, Module 9: SI Sampling Strategies for Soil and Air	2.00
CEC Preliminary Assessment/Site Inspection (PA/SI) Webinar Series, Module 8: SI Sampling Strategies for Groundwater and Surface Water	2.00
CEC Preliminary Assessment/Site Inspection (PA/SI) Webinar Series, Module 7: Conducting the SI, Overview of SI Strategies, and Site Sources	2.00
CEC Preliminary Assessment/Site Inspection (PA/SI) Webinar Series, Module 6: PA Scoring Exercise: Soil Exposure and Air Migration Pathways	2.00
CEC Preliminary Assessment/Site Inspection (PA/SI) Webinar Series, Module 5: PA Scoring Exercise: Surface Water Migration Pathway	2.00
CEC Preliminary Assessment/Site Inspection (PA/SI) Webinar Series, Module 4: PA Scoring Exercise: Groundwater Migration Pathway	2.00
CEC Preliminary Assessment/Site Inspection (PA/SI) Webinar Series, Module 3: Site Evaluation and Scoring Site Sources	2.00
CEC Preliminary Assessment/Site Inspection (PA/SI) Webinar Series, Module 2: Basics of Performing Site Assessments and Conducting the PA	2.00
CEC Preliminary Assessment/Site Inspection (PA/SI) Webinar Series, Module 1: Overview of the Site Assessment Process under CERCLA	2.00

Environmental Protection Agency (Continued)

<u>Courses</u>	<u>Credits</u>
Sustainable Remediation	1.00
NARPM Presents...RECs, Renewables and Remediation	2.00
Practical Models to Support Remediation Strategy Decision-Making - Part 1	2.00
Practical Models to Support Remediation Strategy Decision-Making - Part 2	2.00
Practical Models to Support Remediation Strategy Decision-Making - Part 3	2.00
Practical Models to Support Remediation Strategy Decision-Making - Part 4	2.00
Practical Models to Support Remediation Strategy Decision-Making - Part 5	2.00
US and EU Perspectives on Green and Sustainable Remediation, Part 5	2.00
In-Situ Microcosm Array, A New Tool for In Situ Remediation Tests	2.00
Close Out Procedures for NPL Sites Training	2.00
Greener Cleanups - EPA's Methodology for Understanding and Reducing a Project's Environmental Footprint (Final)	2.00
US and EU Perspectives on Green and Sustainable Remediation, Part 4	2.00
Incremental-Composite Sampling Designs for Surface Soil Analyses, Module 1 of 4	2.00
Incremental-Composite Sampling Designs for Surface Soil Analyses, Module 2 of 4	2.00
Incremental-Composite Sampling Designs for Surface Soil Analyses, Module 3 of 4	2.00
Incremental-Composite Sampling Designs for Surface Soil Analyses, Module 4 of 4	2.00
US and EU Perspectives on Green and Sustainable Remediation, Part 3	2.00
US and EU Perspectives on Green and Sustainable Remediation Part 2	2.00
Field scale Remediation Experience using Iron Nanoparticles and Evolving Risk-Benefit Understanding	2.25
Stable Isotope Analyses to Understand the Degradation of Organic Contaminants in Ground Water (Part 2)	1.50
Stable Isotope Analyses to Understand the Degradation of Organic Contaminants in Ground Water (Part 1)	1.50
Stable Isotope Analyses to Understand the Degradation of Organic Contaminants in Ground Water	2.00
Best Practices for Site Characterization Throughout the Remediation Process	22.5
Chain-of-Custody Procedures for Samples and Data	0.75
Incremental Sampling	16.00

EnviroClass

Division of EnviroWorkshops
P.O. Box 1239
Davidson NC 28036

P: 800-704-1261

<https://www.enviroclass.com/>

<u>Courses</u>	<u>Credits</u>
Full Life Cycle of Remediation Sites	2.00
Remediation Tools that Save Money	2.00
Optimized InSitu Injection Strategies	2.00

EnviroClass (Continued)

<u>Courses</u>	<u>Credits</u>
New Tools for Low Concentration Plumes	2.00
VI Installation Methods	2.00
Preparing for an Injection	2.00
VI – The Laboratory Analysis	2.00
Selecting the Right VI Equipment	2.00
New Remediation Tools & Technologies	2.00
VI Monitoring & Mitigation	1.50
VI – Soil Gas Sampling	1.50
Remediation in Fractured Bedrock	1.50
Remediation: The ISCO/ISCR 411	1.50
Hydrocarbons: All You Need to Know	1.50
VI Investigation & Risk Assessment	1.50
Actionable Data	2.00
NAPL Degradation 101	2.00
Site Investigation Tools & Technologies	2.00
Advanced Scientific Solutions	2.00
Cutting Edge InSitu Technologies	2.00
Advanced InSitu Technologies	2.00
Unbiased Data and Interpretation	2.00
How High Resolution Data Supports Your Targeted Remedial Design	2.00
The 411 on Abiotic Biotic In Situ Remediation	2.00
Vapor Intrusion Mitigation for New Construction Using Reliable Laboratory Data	2.00
Fractured Bedrock Challenges – Part 1: Characterization & Access	2.00
Fractured Bedrock Challenges – Part 2: Injection & Reagent Options	2.00
Challenging Bioremediation Sites	2.00
Finding the Contaminants the Right Way While Destroying them Holistically, the way Nature Intended	2.00
Best Practices For Field Screening and Sample Collection	2.00
A Remediation story – Site Evaluation, Technology Selection, remedy Design, Implementation, and Results	2.00
Effective Cool-Ox® Remediation and Analytical Support for Commingled Plumes	2.00
Understanding the Long-Term Liability and Legal Concerns of Vapor Intrusion	2.00
Hydrocarbon Options: InSitu, ExSitu, & Absorption	2.00
BTEX & LNAPL Treatment	2.00
In Situ Product Transportation	2.00
Quantitative Site Investigation	2.00
PART 1 – Mythbusters: Myths and Misconceptions	2.00
PART 2 – Mythbusters: Myths and Misconceptions	2.00
Anaerobic Degradation 101	2.00

Ethical Chem

177 Governors Highway
South Windsor, CT 06074

P: 860-640-0074

<https://www.ethicalchem.com/webinars>

Courses	Credits
EthicalChem Surfactant-Oxidant Technologies for Subsurface Contaminant Remediation	1.00

Federal Remediation Technologies Roundtable (FRTR)

<https://frtr.gov/>

or

<https://clu-in.org/live/archive/default.cfm?display=all&group=tifsd>

Courses	Credits
An Introduction to Green and Sustainable Remediation: What, Who, Why, and How	2.00
FRTR Presents...Evolution of Subsurface Remediation: Lessons Learned from Technical Challenges to Achieving Cleanup Goals - Part 1	2.00
FRTR Presents...Evolution of Subsurface Remediation: Lessons Learned from Technical Challenges to Achieving Cleanup Goals - Part 2	2.00
FRTR Presents...Modeling in Support of Site Remediation, Session 1	2.00
FRTR Presents...Modeling in Support of Site Remediation, Session 2	2.00
FRTR Presents...Synthesizing Evolving Conceptual Site Models (CSMs) with Applicable Remediation Technologies	2.00
FRTR Spring 2020 Meeting, Session 1: Bioremediation Advances - New Strategies, Optimization, and Performance Monitoring	2.50

GeoSearch

<https://geo-search.com/training-videos/webinar-videos/>

P: 1-888-396-0042

Courses	Credits
Vapor intrusion litigation lessons	1.25
Vapor intrusion –impact on due diligence	1.75
Vapor intrusion and vapor encroachment emerging requirements	1.50
Challenges with the Phase I ESA Process	1.50

Hartman Environmental Geosciences

717 Seabright Lane
Solana Beach, CA 92075-1270

P: 858 204-6170

E: blayne@hartmaneg.com

<http://hartmaneg.com/recent-training/>

Courses	Credits
VI & Soil Gas Training - 1 day	8.00
VI & Soil Gas Training - 2 days	16.00

International School of Well Drilling<https://www.welldrillingschool.com/online-courses/>

P: 863 648 1565

E: director@welldrillingschool.com

Courses	Credits
Oklahoma Statutes and Rules	1.00
Well Abandonment	1.00
Well Development	1.00
Well Rehabilitation 1	1.00
Well Rehabilitation 2	1.00
Drilling Methods 1	1.00
Drilling Methods 2	1.00
Drilling Methods 3	1.00

Interstate Technology and Regulatory Council1250 H Street, NW Suite 850
Washington, DC 20005

P: 202-266-4932

E: itrc@itrcweb.org<https://www.itrcweb.org/Training> or<https://clu-in.org/live/archive/default.cfm?display=all&group=itrc#>

Courses	Credits
Incremental Sampling Methodology (ISM-2) Update – Session 1: Introduction to ISM, Heterogeneity, and Statistical Applications to ISM Planning & Evaluation	2.25
Incremental Sampling Methodology (ISM-2) Update – Session 2: Field Sample Collection, Incremental Sample Processing & Analysis, and ISM for Risk Assessment	2.25
Vapor Intrusion Mitigation Session 1: Conceptual Site Model for Vapor Intrusion Mitigation, Public Outreach, Rapid Response, Remediation & Institutional Control	2.25
Vapor Intrusion Mitigation Session 2: Active Mitigation, Passive Mitigation, Installation/OM&M/Exit Strategy	2.25
Connecting the Science to Managing LNAPL Sites Part 1: Understanding LNAPL Behavior in the Subsurface	2.25
Connecting the Science to Managing LNAPL Sites Part 2: LNAPL Conceptual Site Models and the LNAPL Decision Process	2.25
Connecting the Science to Managing LNAPL Sites Part 3: Using LNAPL Science, the LCSM, and LNAPL Goals to Select an LNAPL Remedial Technology	2.25
Bioavailability of Contaminants in Soil: Considerations for Human Health Risk Assessment	2.25
Remediation Management of Complex Sites	2.25
Characterization and Remediation in Fractured Rock	2.25
Petroleum Vapor Intrusion: Fundamentals of Screening, Investigation, and Management	2.25
Issues and Options in Human Health Risk Assessment – A Resource When Alternatives to Default Parameters and Scenarios are Proposed	2.25
Groundwater Statistics for Environmental Project Managers	2.25
Long-term Contaminant Management Using Institutional Controls	2.25
Geospatial Analysis for Optimization at Environmental Sites	2.25
TPH Risk Evaluation at Petroleum-Contaminated Sites	2.25
Optimizing Injection Strategies and In Situ Remediation Performance	2.25
Remedy Selection for Contaminated Sediments	2.25
Use and Measurement of Mass Flux and Mass Discharge	2.25

Interstate Technology and Regulatory Council (Continued)

Courses	Credits
An Improved Understanding of LNAPL Behavior in the Subsurface - State of Science vs. State of Practice - Part 1	2.25
LNAPL Characterization and Recoverability - Improved Analysis - Part 2	2.25
Evaluating LNAPL Remedial Technologies for Achieving Project Goals - Part 3	2.25
Soil Sampling and Decision Making Using Incremental Sampling Methodology - Part 1	2.25
Soil Sampling and Decision Making Using Incremental Sampling Methodology - Part 2	2.25
Environmental Molecular Diagnostics: New Tools for Better Decisions	2.25
Project Risk Management for Site Remediation	2.25
Biofuels: Release Prevention, Environmental Behavior, and Remediation	2.25
Green & Sustainable Remediation	2.25
Development of Performance Specifications for Solidification/Stabilization	2.25
Incorporating Bioavailability Considerations into the Evaluation of Contaminated Sediment Sites	2.25
Permeable Reactive Barrier: Technology Update	2.25
Use of Risk Assessment in Management of Contaminated Site	2.25
Phytotechnologies	2.25
Protocol for Use of Five Passive Samplers	2.25
Risk Assessment and Risk Management: Determination and Application of Risk-Based Values	2.25
Performance-based Environmental Management	2.25
An Overview of Direct-push Well Technology for Long-term Groundwater Monitoring	2.25

Microbial Insights

10515 Research Drive
Knoxville, TN 37922

P: 865-573-8188

<https://microbe.com/webinars/>

Courses	Credits
Leveraging High-Resolution Site Characterization and Microbiology to Optimize Remediation	1.00
Compound Specific Isotope Analysis for Environmental Forensics	1.00
Optimizing Phytoremediation Applications Using Molecular Biological Tools	1.00
High Resolution Site Characterization and Sophisticated Bio-analytical Tools Provide the Basis for Successful Site Remediation using ERD	1.00
Methods for Detecting Monooxygenases Involved in Emerging Contaminant Biodegradation	1.00
Optimizing Injection Strategies and In Situ Remediation Performance	1.00
Minor Pathways: Major Potential for Natural Attenuation	1.00
Transitioning from Active Remedies to Monitored Natural Attenuation	1.00
Using Stable Isotopes to Document Contaminant Degradation and Distinguish Sources	1.00
Navigating Molecular Testing—From Assay Selection and Sampling Strategy to Results Interpretation”	1.00
Multiple Substrates and Monooxygenases – Recent Progress Towards “Precision”	1.00
Aerobic Cometabolism of Contaminants	1.00
CLU-IN Bioremediation-Expanding the Toolbox Session III-Emerging Opportunities	1.00

Microbial Insights (Continued)

<u>Courses</u>	<u>Credits</u>
Incorporating CSIA in Vapor Intrusion Investigations	1.00
In Well Bioreactors for Treatment and Propagation of Indigenous Degraders in Contaminated Groundwater	1.00
Confirming in situ Benzene Biodegradation Under Anaerobic Conditions Using Stable Isotope Probing	1.00
Min-Trap™: A New Monitoring Well-Based Sampling Tool for Documenting In Situ Reactive Mineral Formation	1.00
Performance of a New Activated Carbon Amendment for Bio-Remediating Petroleum-Impacted Site	1.00
Something Old, Something New: Applications of 14C Assays to Document Natural Attenuation	1.00
4 Tips to Save Money at Your Site with MNA	1.00
Putting Microbes to Work (and Documenting it)	1.00
The Era of Advanced Omics- Proteomic Analysis of Microbial Communities	1.00
How to Select and Use Molecular Biological Tools	1.00
Making Sense of CSIA	1.00
A Primer on Compound Specific Isotope Analysis (CSIA) to Evaluate Degradation of Organic Contaminants in Groundwater	1.00
Successful Advanced ISCO Analytical Practices	1.00
In-Situ Thermal Remediation and Heat Enhanced Biodegradation: Monitoring and Augmenting a Thermal Project using MBTs	1.00
Applications of Bio-Traps for Environmental Site Diagnostics	1.00
Evaluating Vapor Intrusion with Compound Specific Isotope Analysis (CSIA): Considerations for Sample Collection, Analysis and Interpretation	1.00
Persulfate ISCO and the Potential for Sulfate 'Anaerobic' Oxidation	1.00
Use of Microbiological Tools in the Successful Management of In Situ Remediation Systems	1.00
Introduction to Molecular Biology for Groundwater Scientists: Part 1	1.00
Introduction to Molecular Biology for Groundwater Scientists: Part 2	1.00
Introduction to Molecular Biology for Groundwater Scientists: Part 3	1.00
CSIA vs. SIP: What is the difference and how do I use them?	1.00
Molecular Biological Tools: Insider Information and the Questions You Should Be Asking	1.00
Mythbusters – Misconceptions in Environmental Remediation	1.00
Mythbusters Part II – Misconceptions in Environmental Remediation	1.00
The Microbial Insights Database	1.00
Applications of Bio-Traps for Site Diagnostics	1.00

Midwest Geosciences Group

1950 Greyhound Pass, Suite 18-200
Carmel, IN 46033-7630 USA

P: 763-607-0092
E: service@midwestgeo.com

<https://www.midwestgeo.com/>

<u>Courses</u>	<u>Credits</u>
Aquifer testing techniques for improved hydrogeologic site characterization: featuring aqtesolv and the in situ troll	24.00
Advances in borehole flow meters: for determining water yielding fractures and ground water flow in bedrock	1.50

Midwest Geosciences Group (Continued)

Courses	Credits
Successful slug testing: formations of low hydraulic conductivity, high, and everything in between	1.50
Creating meaningful soil boring logs: learning to analyze and correlate sedimentary relationships	2.00
The use and misuse of the unified soil classification system: improving field procedures, techniques and characterization	2.00
Rock core logging for hydrogeologic projects: assessing recovery, RQD, fractures and stratigraphy	1.50
Taking the mystery out of complex glacial sequences at environmental and geotechnical sites: part 1: deciphering stratigraphy and depositional environments	1.50
Taking the mystery out of complex glacial sequences at environmental and geotechnical sites: part 2: understanding the effects of post-depositional weathering: development of weathering zones and secondary jointing	1.50
Managing unanticipated subsurface conditions in the field: achieving efficiency and project objectives when budgets matter most	2.00
The meaning of soil and sediment color: part 1: effects from geologic material, ground water and chemistry	1.50
The meaning of soil and sediment color: part 2: using soil and sediment color to guide field investigations	1.50
Introduction to lithofacies codes: with application to 3d mapping	1.00
Introduction to sedimentary architecture: of glacial deposits	1.00
Boring logs basics: fundamentals of preparing soil boring logs	1.50
Multi aquifer response to pumping	1.50
Unconfined aquifer response to pumping	1.50
Slug testing for site characterization: the six key steps	1.50
Slug testing for site characterization: practical guidelines to improve efficiency and accuracy	1.50
Slug testing for site characterization: practical guidelines for processing and analysis of your slug test data	1.50
Aquifer pumping test techniques: part 1: practical guidelines to get more from your test data	1.50
Aquifer pumping test techniques: part 2: step drawdown testing	1.50
Aquifer pumping test techniques: part 3: constant rate pumping tests	1.50
Aquifer pumping test techniques: part 4: recovery testing	1.50
Aquifer pumping test techniques: part 5: from measuring water levels to exporting data	1.50
Aquifer pumping test techniques: part 6: response from pumping in unconfined aquifers	1.50
Step-by-step packer testing: measuring hydraulic conductivity and aquifer properties for hydrogeologic projects	1.50
High resolution packer testing: for reliable estimates of transmissivity in fractured rock boreholes	1.50
Interpreting aquifer tests in fractured rock	1.50
Analysis of single-hole hydraulic testing in fractured rock and its implications: emerging techniques in hydraulic testing for fractured rock	1.50
Analysis of pumping tests in fractured rock with traditional interpretation methods: emerging techniques in hydraulic testing for fractured rock	1.50
Novel analysis of pumping tests using hydraulic tomography: emerging techniques in hydraulic testing for fractured rock	1.50
Transducer technologies from measuring water levels to exporting data: emerging techniques in hydraulic testing for fractured rock	1.50

Midwest Geosciences Group (Continued)

Courses	Credits
Borehole flow meters for assessing bedrock stratigraphy and fractured hydraulics: emerging techniques in hydraulic testing for fractured rock	1.50
Advances in the fate, transport, and remediation of groundwater contaminants in fractured rock: evaluating the significance of matrix diffusion	1.50
Hydrogeology of aquitards and low-permeability materials: part 1: analysis of aquitard integrity	1.50
Hydrogeology of aquitards and low-permeability materials: part 2: head distributions, vertical gradients and solute transport	1.50
Interpretation of water-level changes in wells: signal or noise?	1.50
Designing and optimizing ground water monitoring systems in sedimentary sequences: part 1: deciphering sedimentary sequences and targeting meaningful monitoring units	1.50
Designing and optimizing ground water monitoring systems in sedimentary sequences: part 2: well placement, hydraulic properties and hydrogeologic factors for monitoring	1.50
Designing and optimizing ground water monitoring systems in sedimentary sequences: part 3: case studies illustrating efficiencies and failures	1.50
Well design and construction: selecting appropriate filter pack and screen slot size	1.00
Effective use of MODFLOW-USG for ground water modeling: part 1: fundamentals of MODFLOW-USG	1.00
Effective use of MODFLOW-USG for ground water modeling: part 2: modeling with MODFLOW-USG	1.00
Horizontal well hydraulics, part 1: predicting production rates of horizontal wells and radial collector wells	1.50
Horizontal well hydraulics, part 2: planning, construction, and constraints of horizontal remediation wells	1.50
Principles of dewatering: techniques, construction, and hydrogeologic effects	1.50
Vapor intrusion in litigation: a synopsis of court decisions with legal strategies	1.50
The vapor intrusion risk pathway: overview and regulatory updates	1.00
Vapor intrusion mitigation: methods and strategies	1.00
Vapor intrusion challenges, technologies and risk management solutions: addressing impacts of new policies and revelations	1.50
Aquifer and aquitard heterogeneities: understanding environmental sequence stratigraphy for glacial deposits	1.50
Hydrogeologic application of glacial depositional environments, part 1: subglacial and ice-marginal	2.00
Hydrogeologic application of glacial depositional environments, part 2: glaciofluvial and glaciolacustrine	2.00
Post-depositional weathering of glacial deposits: understanding the development and effects of weathering zones and secondary jointing	2.00
Permeability mapping of glacial deposits: demystifying the conventional overreliance on grain size and understanding ground water flow	1.50
Borehole flow meters: part 1: for assessing bedrock stratigraphy and fractured hydraulics	1.50
Borehole flow meters: part 2: assessing bedrock stratigraphy and fracture hydraulics - interactive exercises and practice	1.50
No-purge ground water sampling: with technical and regulatory updates for ground water sampling trends	1.50
Ground water and environmental media sampling: part 1: general sampling procedures, critical elements and quality control	1.00
Ground water and environmental media sampling: part 2: ground water sampling procedures	1.00

Midwest Geosciences Group (Continued)

Courses	Credits
Ground water and environmental media sampling: part 3: surface water and stormwater sampling, and soil sampling	1.00
Hydrogeology of karst conditions: part 1: applied methods of karst hydrology	1.50
Hydrogeology of karst conditions: part 2: ground water dye tracing: applications and methods	1.50
Karst characterization using geophysics: part 1: effective geophysical methods for karst	1.50
Karst characterization using geophysics: part 2: case histories and example	1.50
Alternative endpoints in addressing remedial actions: at sites of ground water contamination	1.50
LNAPL in fine grained soil: convention, misconceptions and new advances	1.50
LNAPL transmissivity as a metric: the future in tracking LNAPL recovery progress	1.50
Anaerobic attenuation of petroleum contamination: advances and new trends in measuring natural attenuation	1.50
Environmental isotopes for contaminant source identification: advances in tools, technologies and applications	1.50
Environmental forensics and chemical fingerprinting: assessing analytical methods and understanding hydrocarbon chemistry	1.50
Emerging contaminants overview: occurrence, fate, transport and remediation	1.50
MTBE and TBA: part 1: update and review of these two gasoline additive co-contaminants	1.50
MTBE and TBA: part 2: update and review of these two gasoline additive co-contaminants	1.50
Accounting for nondetects and difficult results in environmental data: part 1: using common statistical models and applying non-detect strategies and guidance	1.00
Accounting for nondetects and difficult results in environmental data: part 2: managing non-detects and difficult data in summary statistics, plots and trend data	1.00
Statistical issues in ground water monitoring applications	1.50
Analytical detects: why subbing one-half of the detection limit is trouble and what you can do instead	1.50
Handling nondetect data correctly	1.50
Environmental forensic techniques: principals & applications, part 1: contaminant source tracking and age-dating	1.50
Environmental forensic techniques: principals & applications, part 2: applications for classic and emerging contaminants in litigation support and efficient site remediation	1.50

National Ground Water Association

601 Dempsey Rd.
Westerville, OH 43081

P: 800-551-7379

or

614-898-7791

F: (614) 898-7786

E: customerservice@ngwa.org

<https://www.ngwa.org/events-and-education/ngwa-approved-continuing-education>

or

<https://www.ngwa.org/events-and-education/ngwa's-event-calendar>

Courses	Credits
Applications of Groundwater Geochemistry short course	14.00
Groundwater/Surface Water Interactions: Field and Mathematical Approaches to Evaluating Groundwater Seepage and Attenuation short course	15.00
Drilling Fundamentals for Hydrogeologists short course	7.00
NGWA's Crafting Scientific Documents and Creating Effective Presentations - GWP core competency hours - Scientific writing and presentation	3.50

National Ground Water Association (Continued)

Courses	Credits
NGWA's Safe Practice in the Groundwater Industry: An NGWA Certificate Program	3.00
NGWA's Introduction to Groundwater Resources - CGWP core competency hours- Groundwater hydrogeology and hydraulics	1.50
NGWA's Grouting Methods for Water Supply Wells (introductory/layman's level)	0.50
NGWA's Selection and Operation of Meters for Safe and Successful Electrical Troubleshooting for Water Well Pump Systems (introductory)	0.50
Drilling Chemicals and Rehabilitation Activities	1.00
Tannins and Natural Organic Matter (NOM): What Contractors Need to Know	1.00
Pump Curves: What They Tell You and How to Use Them	1.00
Geothermal Operations: Applying Groundwater Expertise	1.00
Hydrogeology and Aquifers Webinar	1.00
Operational Stages of a Well Webinar	1.00
Well Design Basics Webinar	1.00
Water Well Video Logging Webinar	1.00
Well Disinfection Webinar	1.00
Borehole Logging Webinar	1.00
Chemicals and Techniques Used for Well Development Webinar	1.00
Field Methods: Groundwater Sampling and Analysis (short course #226)	22.50
Aquifer Test and Interpretation and Analysis (short course #192)	15.00
Drilling Fundamentals for Hydrogeologists and Engineers (short course #373)	7.00
Introduction to Groundwater Geochemistry Reaction Modeling (short course #292)	7.25
Grouting Methods for Water Supply Wells (#7132-2)	0.50
Introduction to Groundwater Resources (#1012)	1.50
Safe Practice in the Groundwater Industry: An NGWA Certificate Program (#1014)	3.00
Mud Rotary Drilling	1.00
Air Rotary Drilling (#833)	1.00
Hard Hat Microbiology: Our Interactions with Microbes in Groundwater and Wells Webinar Series, Part 1 of 3 — Geo- and Aquatic Micro Primer (#813)	1.00
Hard Hat Microbiology: Our Interactions with Microbes in Groundwater and Wells Webinar Series, Part 2 of 3 — Groundwater and Well Microbiology (#814)	1.00
Hard Hat Microbiology: Our Interactions with Microbes in Groundwater and Wells Webinar Series, Part 3 of 3 — Prevention in Construction and Design, and Remediation (#815)	1.00
Water Quality: Public Health vs. Well Health (#875)	1.00
Legally Structuring Your Business Activities to Comply with New Electronic Logging Device Laws (#807)	1.00
Advances in Remediation Solutions Webinar Series: Big Data and Environmental Remediation — Gaining Predictive Insights (#885)	1.00
Advances in Remediation Solutions Webinar Series: Cleaning Up a Three-Mile-Long Groundwater Plume — It Can Be Done (#884)	1.00
Advances in Remediation Solutions Webinar Series: The New ROI — Return on Investigations by Utilizing Smart Characterization Methods (#883)	1.00
Drilling Fluid Mixing (#869)	1.00
The Oxidation Reaction — Friend or Foe to the Groundwater Industry (#871)	1.00
Tools and Techniques to Measure the Performance of a Well (#870)	1.00
Introduction to Borehole Flowlogging (#855)	1.00
Environmental Isotopes in Groundwater Studies: Isotope Tools to Date Groundwater (#851)	1.00

National Ground Water Association (Continued)

Courses	Credits
Environmental Isotopes in Groundwater Studies: Nitrogen Species and Reactions in Contaminated Groundwater (#836)	1.00
Environmental Isotopes in Groundwater Studies: Tracing Carbon Sources and Reactions with Carbon-13 and Carbon-14 (#835)	1.00
Environmental Isotopes in Groundwater Studies: Applications of Oxygen-18 and Deuterium in Tracing Groundwater Origin and Mixing (#829)	1.00
Environmental Isotopes in Groundwater Studies: Introduction to Environmental Isotopes in the Hydrologic Cycle (#825)	1.00
Cable Tool Drilling Webinar, Module 1 (#818)	1.00
Cable Tool Drilling Webinar, Module 2 (#819)	1.00
Reverse Circulation Drilling Webinar (#830)	1.00
Serious Groundwater Game: Improving Groundwater Management Through Cooperation and Collective Action	1.00
Groundwater Quality Management and Governance at the State Level	1.00
NGWA's Best Suggested Practice for Residential — and Other Smaller Diameter — Well Cleaning	1.00
Analyzing Groundwater Quality Data and Contamination Plumes with GWSDAT	1.00
ANSI Standards Development Orientation	1.00
Well Rehabilitation or Replacement: How to Decide When to Rehab and When to Replace	1.00
Well Development and Capacity: The Drilling Rig and the Test Pump Are Vital to a Successful Well	1.00
Two Phase Extraction	1.00
LNAPL Transmissivity Measurement Methods: A Preview of Developing Guidance	1.00
NGWA's Hydrogeology of States Webinar Series : Oklahoma	1.00

New England Interstate Water Pollution Control Commission

Wannalancit Mills
 650 Suffolk Street, Suite 410
 Lowell, MA 01854
<https://neiwppcc.org/>

P: 978-323-7929
F: 978-323-7919
E: mail@neiwppcc.org

Courses	Credits
LUST Corrective Action: Resources, Case Study, and a Discussion on Remedial Design Characterization and In-Situ Remedial Methods (10/14/20 – part of the 2020 NTC Webinar Series)	2.00
Lessons Learned from Using HRSC at LUST Sites (6/24/2020)	2.00
Evaluating Remediation Workplans (6/8/2020)	2.00
Risk Based Corrective Action – Unit 2 (7/18/19)	1.00
Risk Based Corrective Action – Unit 1 (10/5/2017)	1.75
LNAPL Conceptual Site Models (5/4/2017)	2.00
Emerging Cleanup Technology (9/14/2016)	1.75
Smart Characterization – The New Era of Site Investigations (7/19/2016)	2.50
Effective Use of High Resolution Tools for LNAPL Cost Management (1/22/2015)	1.50
Methane from Biofuels (10/8/2014)	1.50
Petroleum Vapor Intrusion (6/26/2012)	2.50

Nielson Environmental Field School

9600 Achenbach Canyon Rd,
Las Cruces, NM 88011

P: 575-532-5535
E: info@envirofieldschool.com

<https://www.envirofieldschool.com/2014-06-24-17-19-15/e-school-courses/gurupcategs>

Courses	Credits
GWM-01 Ground-Water Monitoring Program and Monitoring System Design Elements; Establishing Monitoring Program and Monitoring System Objectives, Data Needs & Uses	1.00
GWM-02 Assembling and Evaluating Important Existing Information (Part 1); Types and Sources of Existing Information	1.25
GWM-03 Assembling and Evaluating Important Existing Information (Part 2); Using Existing Information to Prepare an Initial Conceptual Site Model	1.00
GWM-04 Conducting a Detailed 3-Dimensional Environmental Site Characterization Program – Approaches, Tools and Methods	1.25
GWM-05 Refining the Conceptual Site Model; Selecting Optimum Monitoring Point Locations in 3 Dimensions	0.75
GWM-06 Factors to Consider in Selecting a Drilling Method; Descriptions, Applications and Limitations of Casing Advancement Drilling Methods	1.25
GWM-07 Descriptions, Applications and Limitations of Fluid Circulation Drilling Methods and Hollow-Stem Augers	1.00
GWM-08 Planning and Preparation for Soil Sample Collection and Description; Describing Soil Samples in the Field (Part 1)	1.00
GWM-09 Describing Soil Samples in the Field (Part 2); Handling Soil Samples in the Field	1.00
GWM-10 Objectives and Purposes of Monitoring Wells; Sources of Chemical Interference in Well Construction; Selection of Well Casing and Screen Materials; Methods for Joining Well Casing and Screen	1.00
GWM-11 Optimizing Well Diameter; Types and Designs of Well Screens; Selecting Filter Pack Material Size and Well-Screen Slot Size; Optimizing Well Screen Length; Options for Monitoring Multiple Target Monitoring Zones	1.00
GWM-12 Selection and Installation of Filter-Pack Material Type; Selection and Installation of Effective Annular Seal Materials	0.75
GWM-13 Surface Protection for Monitoring Wells; Alternate Well Completions; Direct-Push Well Installation	0.75
GWM-14 Ground-Water Monitoring Well Development – Objectives, Applications, Methods and Procedures	0.75
GWM-15 Planning and Executing a Successful Ground-Water Sampling Event	1.25
GWM-16 Field Decontamination Procedures for Ground-Water Sampling Equipment	1.50
GWM-17 Field Quality Assurance/Quality Control Practices for Ground-Water Sampling Events	1.00
GWM-18 / ES-18 The Science Behind Ground-Water Sampling (Part 1): Objectives of Ground-Water Sampling; The Importance of High-Quality Data; Uses of Water-Level Data; Water-Level Measurement Methods and Procedures; Recognizing and Avoiding Sources of Bias	1.25
GWM-19 / ES-19 The Science Behind Ground-Water Sampling (Part 2): Sources of Bias and Error in Ground-Water Sampling; Conditions Under Which Ground Water Occurs; Factors Affecting the Representative Nature of Ground-Water Samples	1.25
GWM-20 Purging and Sampling Device Selection Criteria; Operational Characteristics, Applications and Limitations of Grab Samplers, Suction-Lift Pumps & Electric Centrifugal Submersible Pumps	0.75

Nielson Environmental Field School (Continued)

Courses	Credits
GWM-21 Operational Characteristics, Applications and Limitations of Positive Displacement Pumps (Gear-Drive Electric Submersible Pumps, Double-Acting Piston Pumps, Bladder Pumps and Gas-Drive Pumps) and Inertial-Lift Pumps	0.5
GWM-22 Conventional Purging and Sampling Practices for High-Yield and Low-Yield Wells	0.75
GWM-23 / ES-23 Practices and Procedures for Low-Flow Purging and Sampling	1.00
GWM-24 / ES-24 Practices and Procedures for No-Purge Sampling	0.75
GWM-25 / ES-25 Field Water-Quality Indicator Parameter Measurement During Well Purging	1.25
GWM-26 / ES-26 Ground-Water Sample Filtration	0.75
GWM-27 / ES-27 Ground-Water Sample Preservation	0.75
GWM-28 Ground-Water Sample Handling and Shipment	1.00
GWM-29 Documentation of Ground-Water Sampling Events	1.50
The Complete Ground-Water Sampling E-Course (With Option for Professional Certification)	25.50
The Low-Flow Purging and Sampling and No-Purge Sampling E-Course	20.50
The Complete Ground-Water Monitoring E-Course (With Option for Professional Certification)	48.00
The Ground-Water Monitoring Well Design, Construction & Development E-Course (With Option for Professional Certification)	22.50
SS-01 Planning an Effective Soil Sampling Program – The Sampling & Analysis Plan	1.00
SS-02 / ES-02 Developing a Conceptual Site Model and Fine-Tuning it With Site Reconnaissance	1.00
SS-03 Strategies for Three-Dimensional Sampling of Soil	1.00
SS-04 Field Equipment Decontamination Procedures for Soil Sampling	1.00
SS-05 Field Quality Assurance/Quality Control Practices for Soil Sampling	0.75
SS-06 / ES-08 The Science Behind Soil Sampling – Part 1	1.00
SS-07 / ES-09 The Science Behind Soil Sampling – Part 2	1.00
SS-08 / ES-10 The Science Behind Soil Sampling – Part 3	0.75
SS-09 / ES-11 Selection and Use of Soil Sampling Equipment – Part 1	1.00
SS-10 / ES-12 Selection and Use of Soil Sampling Equipment – Part 2	1.50
SS-11 / ES-13 Soil Sample Handling and Processing Using U.S. EPA Method 5035B – Introduction; Use of Volumetric Sample Collection Methods	0.75
SS-12 / ES-14 Soil Sample Handling and Processing Using U.S. EPA Method 5035B – Use of Chemical Preservation/Extraction Methods	0.75
SS-13 / ES-15 Field Sample Analysis Options for Soil Samples	1.25
SS-14 / ES-16 Soil Sample Collection, Description & Handling in the Field -- Planning and Preparation for Soil Sample Collection and Description; Describing Soil Samples in the Field (Part 1)	1.00
SS-15 / ES-17 Soil Sample Collection, Description & Handling in the Field -- Describing Soil Samples in the Field (Part 2); Handling Soil Samples in the Field	1.5
SS-16 Soil Sample Handling and Shipment	1.25
SS-17 Sampling Event Documentation	1.50
The Complete Soil Sampling E-Course (With Option for Certification)	28.50
The Soil Sampling for Volatile Organic Compounds (VOCs) E-Course	22.25
The Environmental Sampling E-Course (With the Option for Certification)	52.75
ES-01: Planning an Effective Environmental Sampling Program The Sampling Analysis Plan	1.25
ES-03: Strategies for Three-Dimensional Sampling of Environmental Media	0.75

Nielson Environmental Field School (Continued)

<u>Courses</u>	<u>Credits</u>
ES-04: Field Equipment Decontamination Procedures for Multi-Media Environmental Sampling	1.50
ES-05: Field Quality Assurance/Quality Control Practices for Multi-Media Environmental Sampling	1.00
ES-06: Environmental Sample Handling and Shipment	1.25
ES-07: Documentation of Environmental Sampling Events	1.00
ES-20 Selection/Operation of GW Purging & Sample Devices (Part 1) Sampling Device Selection Criteria; Sampling Device Impacts on Sample Chemistry; Operational Characteristics & Limitations of Grab Samplers, Suction-Lift Pumps & Elect. Centrifugal Sub Pump	0.75
ES-21 Selection/Operation of GW Purge & Sample Devices Part 2, Operational Characteristics & Limitations of Positive Displacement Pumps (Gear-Drive Elec. Sub Pumps, Double-Acting Piston Pumps, Gas-Drive Pumps & Bladder & Inertial-Lift Devices	1.00
ES-22 Conventional Purging and Sampling Practices for High-Yield and Low-Yield Wells – Well-Volume Purging; Purging to Stabilization of Water-Quality Indicators; Purging to Dryness, Then Sampling	0.75
ES-28 Overview of Aquatic Systems and Sampling Strategies for Surface Water	0.75
ES-29 Overview of Surface-Water Sampling Devices	1.00
ES-30 Overview of Sampling Strategies and Sampling Devices for Sediment	1.00
ES-31 Waste Sampling Strategies and Methods -- Planning a Waste Sampling Program; Sampling Strategies and Devices for Drums, Tanks and Other Containers	1.00

Northwest Environmental Training Center

1701 Mount Baker Avenue Northeast
Renton, WA 98059

P: 425.270.3274 x105
E: info@nwetc.org

<https://nwetc.org/courses-and-subjects>

<u>Courses</u>	<u>Credits</u>
Comprehensive environmental sampling: methodology, practice, and analysis	16.00
Environmental Forensics in Water Resources	13.00
Environmental forensics-site characterization and remediation	16.00
Fundamental contaminant chemistry in soil and groundwater	16.00
Achieving water quality standards through contaminant trackdown studies	13.00
Basic hydrology	14.00
EPA's New Unified Guidance: Statistical Analysis of Groundwater Monitoring Data	16.00
Contaminant vapor migration and intrusion	16.00
Groundwater Contamination and Remediation: Principles and Practices	13.00
New approaches in remediation of contaminated sediments	16.00
Principles of quality assurance and quality control in environmental field programs	16.00

Oklahoma Groundwater Association

P.O. Box 14875
Oklahoma City, OK 73113

P: 405-258-8747
E: josh@okgroundwater.org

<https://www.okgroundwater.org/>

Courses	Credits
OGWA/OWRB Virtual Education - Well Design Basics	2.00
OGWA/OWRB Virtual Education - Operational Stages of a Well	2.00
OGWA/OWRB Virtual Education - Water Well Video Logging	2.00
OGWA/OWRB Virtual Education - Borehole Logging	2.00
OGWA/OWRB Virtual Education - Well Disinfection	2.00
OGWA/OWRB Virtual Education - Chemicals & Techniques Used for Well Development	2.00
OGWA/OWRB Virtual Education - Drilling Chemicals & Rehabilitation Activities	2.00
OGWA/OWRB Virtual Education - Oh, No...I Have to Work with an Engineer	2.00
Hands on Well Drilling Course	6.00

Oklahoma State University

OSU Engineering Extension
512 Engineering North
Stillwater, OK 74078

P: 405-744-9225

<https://ceat.okstate.edu/extension/professional-development/courses/environmental-compliance-training.html>

Courses	Credits
Environmental Audits, Inspections and Site Assessments	8.00
Environmental Chemistry for Non Chemists	8.00
Environmental Management Certificate Program – 1 week	40.00
Environmental Management Certificate Program – 2 weeks	80.00
Environmental Tank Management and Sampling	4.00
Recognizing And Managing Environmental Liability	4.00
Remediation and Treatment Technologies	4.00

PDH Express

2500 Tanglewilde, Suite 220
Houston, TX - 77063

T: 713-783-1030
E: pdhexpress@gmail.com

<https://pdhexpress.com/>

Courses	Credits
Green Remediation - Incorporating Sustainable Environmental Practices Into Remediation Of Contaminated Sites	8.00
Guidance for Remediation of Petroleum Contaminated Sites	27.00
Strategies For Characterizing Subsurface Releases Of Gasoline Containing MTBE II	12.00

PDH Online

5272 Meadow Estates Drive
Fairfax, VA 22030

P: 703-988-0088
E: info@PDHonline.com

<https://www.pdhonline.com/>

Courses	Credits
Contaminated Site Remediation Part I- Evaluation of Site Characteristics	4.00
Guidelines for Contaminated Ground Water Plume Management	3.00
Laboratory Testing of Soils	4.00
Groundwater Investigations	3.00
Drilling and Sampling of Soil and Rock	4.00
Boring Log Preparation	4.00
Procedures for Soil Sampling in Borings	3.00
Vapor Intrusion - ASTM E2600 Overview ABIH CM APPROVAL #08-1821	3.00
Risk-Based Corrective Action (RBCA) for UST Sites	1.00
An Introduction to Identification and Classification of Soil and Rock	4.00
An Introduction to Laboratory Testing of Soils	4.00
Multi-Phase Extraction	8.00
Introduction to Light Non-Aqueous Phase Liquids (LNAPL)	3.00
Vapor Barriers Under Concrete Slabs – Guidance for Selection and Location	1.00
Field Investigative Methods in Groundwater Hydrology	4.00
Hydrologic Probability and Statistics	4.00
A Hydrology Primer for Engineers & Hydrologists	4.00
Indoor Vapor Intrusion Mitigation Approaches	5.00
SVE/Bioventing	8.00

PeroxyChem

Global PeroxyChem Headquarters
One Commerce Square
2005 Market Street, Suite 200
Philadelphia, PA 19103

T: 866-860-4760
or
267-422-2400

<http://www.peroxychem.com/markets/environment/soil-and-groundwater/webinars>

Courses	Credits
Fundamentals of Combining In Situ Solidification and Stabilization with ISCO	1.00
Klozur® KP Applications Experience: Extended Release Chemical Oxidation	1.00
Introducing Klozur® One: An All-in-One Fully Soluble Activated Persulfate Reagent	0.75
Soil Mixing and In Situ Stabilization Using Klozur® Persulfate	1.00
Introducing Klozur® KP - an extended release ISCO persulfate reagent	0.75
Monitoring Programs for Klozur® Persulfate Applications: Information Needed Before, During and After an Application	0.75
Bench Testing for the Successful Implementation of Remediation Technologies	0.75
Design Considerations for Activated Klozur® Persulfate Field Applications	0.75
Successful Field Applications of Alkaline Activated Klozur® Persulfate	1.00
Strategies for Treating Highly Contaminated Sites ISCO	0.75
Design Strategies and Applications Combining ISCO and ISS	1.00

Princeton Groundwater

P.O. Box 273776
Tampa, Florida 33688

P: 813-964-0800
F: 813-925-4353
E: info@princeton-groundwater.com

<http://www.princeton-groundwater.com/>

<u>Courses</u>	<u>Credits</u>
The Groundwater Pollution And Hydrology Course	40.00
The Remediation Course	40.00

Pumps of Oklahoma

1220 NW 3rd Street
Oklahoma City, Ok 73106

P: 800-669-3574
or
405-235-2695

www.pumpsok.com

<u>Courses</u>	<u>Credits</u>
Well Drilling/Rehab	4.00

QED Environmental Systems

2355 Bishop Circle West
Dexter, MI 48130

P: 800-624-2026
or
734-995-2547

https://www.qedenv.com/Service/Webinars/Previously_Recorded_Webinars E: info@qedenv.com

<u>Courses</u>	<u>Credits</u>
Best Practices for Collecting Soil Samples for VOC Analysis	1.50
Trends in Groundwater Sampling: A Comparison of Groundwater Sampling Methods	1.50
Passive Ground Water Sampling and the Snap Sampler® System	1.50
Low-Flow Groundwater Sampling - Latest Research and Equipment Options	1.50
Air Stripping for VOC and Dissolved Gas Removal	1.50
Mini Webinar Part 1: The Air Stripping Process	1.50
Mini Webinar Part 2: Air Stripping System Design	1.50
Mini Webinar Part 3: Operating an Air Stripper System	1.50
Part 1: Introduction to Air Strippers for VOC Removal	1.50
Part 2: Air Stripping Advanced Topics Webinar	1.50

RAM Group

5433 Westheimer Road, Suite 725
Houston, TX 77056

T: 713-784-5151

<http://www.ramgp.com/>

<u>Courses</u>	<u>Credits</u>
Risk Assessment, RBCA & Indoor Vapor Intrusion	16.00

Red Vector

4890 West Kennedy Blvd, Suite 300
Tampa, FL 33609

T: 866-546-1212

www.redvector.com

Courses	Credits
A Hydrology Primer for Engineers and Design Professionals	2.00
Aquifer Remediation	1.00
Basics of Water Resources: Groundwater Contamination	2.00
Basics of Water Resources: Groundwater Hydrology	1.00
Excavation Safety and Shoring/OSHA	4.00
Water Well Design	2.00

Regenesis

1011 Calle Sombra
San Clemente, CA 92673

P: 949-366-8000
F: 949-366-8090

<https://regenesis.com/en/webinars/>

Courses	Credits
The Vapor Intrusion Risk Pathway: Regulatory Updates & Continuous Monitoring	1.00
Pathway to Remediation Success: A Next-Generation Approach to Complex Contaminated Sites	1.00
Case Study: Petroleum Contaminants from UST at Non-Detect within 60 Days using PetroFix	1.00
Incorporating CSIA in Vapor Intrusion Investigations	1.00
Update on The Evolving Vapor Intrusion Regulatory Landscape	1.00
The Use of Geophysics for Optimizing Environmental Site Characterization and Remediation	1.00
Introducing MonoShield: A Chemically Resistant, Preemptive Vapor Barrier That Saves Time and Money	1.00
Cutting-Edge Technology to Improve Site Performance: Case Studies Demonstrating Millions in Cost Savings	1.00
Performance of a New Activated Carbon Amendment for Bio-Remediating Petroleum Impacted Sites	1.00
Defining Cleanup Success For Groundwater Remediation	1.00
Large-Scale Vapor Intrusion Projects: Challenges And Collecting Consistent Quality Data	1.00
Cost-Effective Remediation Through Enhanced Characterization	1.00
The Vapor Intrusion Risk Pathway: Updates & Use of Continuing Monitoring Data	1.00
In-Situ Chemical Reduction (ISCR): The Core Concepts and Their Engineering Implications	1.00
How To Select And Use Molecular Biological Tools (MBTs)	1.00
Expert Remediation Consultant Panel: The Four Cornerstones of a Successful Groundwater Remediation Project	1.00
Safe and Effective In Situ Remediation: Best Practices for Amendment Selection, Design and Project Execution	1.00
Case Study: Use of PlumeStop Results in Successful Pay-for-Performance Contract with FDEP to Address Large BTEX Plume	1.00
From Laboratory to Site: The development and deployment of an innovative Liquid Activated Carbon technology	1.00
Using Geology to Follow the Groundwater: Follow the Flow to Successful Remediation	1.00

Regenesis (Continued)

Courses	Credits
Visualization and Modelling Tools for Evaluating Remediation Performance	1.00
The Vapor Intrusion Risk Pathway: Regulatory Updates & Hot Topics	1.00
Vapor Intrusion: Investigating And Understanding Risk	1.00
Multifunctional Amendments and Site Characterization Effectively Manage Back Diffusion from a Fractured Sandstone Aquifer	1.00
Vapor Intrusion: Impact On Environmental Due Diligence	1.00
Jack Sheldon: A Tale of Two ISCO Chemistries	1.00
Vapor Intrusion Webinar with Blayne Hartman: Regulatory Updates and Practical Assessment Strategies	1.00
Selecting Appropriate Molecular Biological Tools (MBTs) to Assess Remediation Solutions and Monitor Performance	1.00
A Multi-Site Performance Review of Slow Release Electron Donor and Bioaugmentation Co-Application Strategy	1.00
Environmental Liability Transfer Sites: Well-Suited to Combined Remedies by Jack Sheldon, Antea Group	1.00
Field Performance Review: Biodegradation of Groundwater Contaminants using PlumeStop® Liquid Activated Carbon™	1.00
Access Presentation Recording: Effective and Sustainable Combined Remedies using Single Application of Multi-functional Amendments	1.00
Design Verification - Lessons Learned from Pre-Application Assessments at In Situ Remediation Sites	1.00
Why Focus On The Geology? By Rick Cramer, AECOM	1.00
Combined Remedy Synergies — Quantified Performance Benefits	1.00
The Vapor Intrusion Risk Pathway: Regulatory Updates	1.00
Reduce Groundwater Contaminants In Days With PlumeStop®	1.00
New Technology for In Situ Groundwater - PlumeStop™ Liquid Activated Carbon™	1.00
Remediation Case Studies – Why using Manufacturer-Direct Services Makes a Difference	1.00
An Introduction to PersulfOx (Catalyzed Persulfate)	1.00
Optimizing Remediation at Service Station Sites through Field Application and Performance Monitoring (USA)	1.00
Contaminant Desorption and Enhanced Recovery for Bound Hydrocarbon Removal using PetroCleanze®	1.00
Vapor Intrusion Mitigation Design And Constructability Challenges: Using An Innovative New Vapor Barrier Technology	1.00
The Evolution of Vapor Barrier Technology and Best Practices for Successful Vapor Barrier Implementation	1.00
Passive Vapor Mitigation (Part 1): Evaluation & Design	1.00
Passive Vapor Mitigation (Part 2): Installation, QA/QC & Case Studies	1.00
Successful Large-Scale Vapor Intrusion Investigation: A Regulatory Perspective	1.00
Proven Methods for Saving Time and Money Using In-Situ Activated Carbon Remediation	1.00
In-Situ Remediation within Bedrock: An Exploration of the Challenges And Solutions Using Case Studies In Various Geological Settings	1.00
Retro-Coat 101: A Complete Guide to the Retro-Coat Vapor Barrier System	1.00
Subjective Standards and the Long-Term Liability of Vapor Intrusion	1.00
Effective Methods for Enhancing Permeable Reactive Barriers	1.00
Rapid Remediation of Hydrocarbon Plumes: Best Practices for the Design and Application of PetroFix	1.00

Regenesis (Continued)

Courses	Credits
Validating the Role of PetroFix® Technology for the Remediation Practitioner's Toolbox	1.00

RPI (Remediation Products Inc.)

6390 Joyce Drive, Suite 150 West
Golden, CO 80403

P: 720.639.8771

<https://www.trapandtreat.com/?s=webinar>

or

<https://www.trapandtreat.com/2020-webinar-conference-schedule/>

Courses	Credits
Webinar: Expedited Petroleum Hydrocarbon Remediation Using BOS 200 Getting Rid of LNAPL	0.75
Trap & Treat® LNAPL vs. BOS200® Webinar June 21, 2018	0.75
Leveraging the Remedial Design Characterization (RDC) Process to Develop Surgical Designs and Manage Expectations	0.75
Slurry Injection in Overburden and Challenging Geology- Best Practices, Applications, and the Pre-Drill Method	0.75
WEBINAR: DIET Strategy + Activated Carbon = Geobacter Smorgasbord at CVOC Sites	0.75
PRB Design and Installation- Reducing Mass Flux By Promoting Contact In Situ	0.75

SERDP ESTCP

Strategic Environmental Research and Development Program (SERDP)
Environmental Security Technology Certification Program (ESTCP)
4800 Mark Center Drive, Suite 16F16
Alexandria, VA 22350-3605

P: 571- 372-6565

<https://www.serdp-estcp.org/Tools-and-Training/Webinar-Series>

Courses	Credits
Approaches for Managing Contaminated Sediments	1.50
Applying Compound-Specific Isotope Analysis to Document Contaminant Degradation and Distinguish Sources	1.50
Advances in Managing Contaminated Groundwater Using High Resolution Site Characterization and Contaminant Mass Flux Reduction	1.00
Vapor Intrusion: Modeling Tools and Cost Effective Mitigation	1.50
Managing Contaminated Sediments: Passive Sampling Methods and In Situ Treatment	1.50
Advances in the Assessment and In Situ Treatment of Contaminated Sediments	1.50
Bioavailability of Contaminants of Concern in Soils at DoD-Impacted Sites	1.50
Practical Assessment and Optimization of Redox-Based Groundwater Remediation Technologies	1.50
Geophysics 101 – Realistic Expectations for Geophysics When Used for Site Characterization and Remediation Monitoring – Part 1	1.50
Geophysics 101 – Realistic Expectations for Geophysics When Used for Site Characterization and Remediation Monitoring – Part 2	1.50
Vapor Intrusion: Regulatory Update and Advances in Assessment Tools	1.50
New Tools for Improving the Management of Contaminated Sediment Sites	1.50
Key Advances in Vapor Intrusion Assessments at Contaminated Sites	1.50

SERDP ESTCP (Continued)

Courses	Credits
Development of a Decision Support Tool for Vadose Zone Remediation of Volatile Contaminants	1.25

Sun Cam

3111 Hartridge Terrace
Wellington, Florida 33414-3431

E: suncam@suncam.com

https://www.suncam.com/continuing-education/all_courses.html

Courses	Credits
016-Assessing Environmental Contamination I	4.00
269-An Introduction to Due Diligence Reports for Development Projects	4.00

Surfactant Associates, Inc.

PO Box 2705
Norman, Oklahoma 73070

P: 405-366-7677

E: samail@surfactantassociates.com

https://www.surfactantassociates.com/short_course

Courses	Credits
Applied Surfactant Science And Technology Short Course	24.00

Tersus Environmental

1116 Colonial Club Rd
Wake Forest, NC 27587

P: 919 453 5577

E: info@tersusenv.com

<https://www.gotostage.com/channel/tersusenv/>

Courses	Credits
Part 1: Optimization and Monitoring for Remediation	3.25
Part 2: Optimization and Monitoring for Remediation	3.25
If You Think PAC-GAC Amendments are like Sending Flowers to Your Site - Rethink the Romance	0.75
Remediation Performance Data Interpretation	0.75
Advances in Treatment Train Approach Using Surfactant Enhanced Aquifer Remediation Coupled with ISCO	1.00
Optimization of Remediation Systems using Our Expanding Suite of Molecular Tools	0.75
Milestones in Successful Surfactant-Enhanced Aquifer Remediation (SEAR): Case Study	1.25
Designing Field Sampling Plans and Lab Studies in Support of Bioremediation Application	0.75
SIREM Webinar – A new tool in the toolbox - Anaerobic Benzene Bioremediation	0.50
Innovative Surfactant System Formulations for LNAPL Recovery. Surfactant flushing equipment.	1.00
2015-12-17 12.59 Innovative Surfactant System Formulations for LNAPL Recovery, how surfactants work and when they work best.	1.00
Short Course : Petroleum Hydrocarbon Remediation, Site Data Management and Performance Monitoring Strategies - Part 1: Petroleum Hydrocarbon Remediation	2.25

Tersus Environmental (Continued)

Courses	Credits
Short Course : Petroleum Hydrocarbon Remediation, Site Data Management and Performance Monitoring Strategies - Part 2: Petroleum Hydrocarbon Site Data Management and Performance Monitoring Strategies	2.25
Volatile Fatty Acids: Key Markers for Electron Donor Optimization in Bioremediation Systems	1.25
Temporal Electrical Monitoring to Understand Injectate Distribution	1.00
Application of facies models and sequence stratigraphy to conceptual site model development and environmental remediation	1.00
Online Short Course Part 2: Petroleum Hydrocarbon Site Data Management & Performance Monitoring Strategies	2.00
Patented Quantitative Passive VOC Soil-Gas Monitoring with the Waterloo Membrane Sampler™	1.00

Test America

<https://www.testamericainc.com/services-we-offer/webinars/>

or

<https://www.testamericainc.com/services-we-offer/webinars/eurofins-emlab-webinars/>

P: 866- 785-5227

E: patricia.mcisaac@testamericainc.com

Courses	Credits
TPH - A Simple Concept?	1.00
Using Passive Samplers for Vapor Intrusion – A Practical Guide to Measuring VOCs	1.00
Enhancing EPA Method TO-15 Using TOF-MS to Address High Matrix Effects in Soil Gas	1.00
Vapor Intrusion - Part 1	1.00
Vapor Intrusion - Part 2	1.00
Part 1 - Overview of Environmental Testing Laboratories' Quality and Ethics Program	1.00
Part 2 - The Relationship of the Field Sampler & the Lab	1.00
Part 3 - Inside the 'Black Box' of an Environmental Testing Laboratory - Basic Analytical Procedures	1.00
Part 4 - So Many Choices in Data Delivery, So Little Time!	1.00
ISM – Growing from Specialty to an Everyday Tool, 2019 Updates	1.00
Calibration in Environmental Chemistry: Problems, Solutions, Changes and Wishes	1.00
The Importance of Air Sampling Flow Rates and Primary Calibration	1.00

University of Texas at Arlington

Division for Enterprise Development
Box 19197
140 W. Mitchell
Arlington, TX 76010

P: 866-906-9190

E: cedquestions@uta.edu

<https://webded.uta.edu/wconnect/ShowSchedule.awp1?~~GROUP~ETIALL>

Courses	Credits
Introduction to Phase I & II Environmental Site Assessments	16.00
Chemistry for the Environmental Professional	20.00
Environmental Monitoring	16.00
Environmental Monitoring Lab	8.00

University Of Wisconsin At Madison

Engineering Professional Development
432 North Lake St.
Madison, WI 53706

P: 800-462-0876
E: custserv@epd.wisc.edu

<https://epd.wisc.edu/courses/>

<u>Courses</u>	<u>Credits</u>
Soil Engineering for Non-Soils Engineers and Technicians	16.00
Understanding Water Chemistry for Practical Application	16.00

Workshops & Conferences

** 2020/2021 Approved CEUs from Workshops/Conferences. Consultant must submit proof of attendance for each class attended within the Workshop or Conference to OCC**

Enviro Workshops

P.O. Box 1239
Davidson NC 28036

P: 800-704-1261

<https://enviroworkshops.com/>

Conference / Workshop	
Global 2020 Enviro Summit	
Courses	Credits
In-situ Geochemical Stabilization (ISGS) of DNAPL”	0.50
Evolution and Advancement of Remediation Practices (Cool-Ox® Process)	0.50
Thermal Remediation Solutions – Technologies, Applications, & Design Considerations	0.50
Crossroads: Innovative Technologies for Site	0.50
Air Quality Monitoring Made Easy	0.50
Horizontal Directional Drilling for Non-Traditional Applications	0.50
Total Credits for attendance of ALL above courses	3.0
East Coast Remediation Workshop (Virtual) – April 21, 2020	
Courses	Credits
Crossroads: Innovative Technologies for Site Assessment	0.75
Field Tools for Environmental Investigation and Remediation	0.75
Total Credits	1.5
East Coast Remediation Workshop (Virtual) – April 22, 2020	
Courses	Credits
Enhancing the Microbial Ecosystem to Leverage Microbial Behavior, the New Dawn in Organic Molecular Destruction?	0.75
Advances in Engineered ZVI and Performance Quantification Tools for Remedial Applications	0.75
Total Credits	1.5
Gulf Region Remediation Workshop (Virtual) – April 28, 2020	
Courses	Credits
Telemetry Systems for InSitu Groundwater Monitoring	0.75
Total Credits	1.5
Gulf Region Remediation Workshop (Virtual) – April 29, 2020	
Courses	Credits
Enhancing the Microbial Ecosystem to Leverage Microbial Behavior, the New Dawn in Organic Molecular Destruction?	0.75
Advances in Engineered ZVI and Performance Quantification Tools for Remedial Applications	0.75
Total Credits	1.5
Gulf Region Remediation Workshop (Virtual) – April 30, 2020	
Courses	Credits
Sonic Drilling and CPT Remediation	0.75
Evolution and Advancement of Cool-Ox® Process	0.75
Total Credits	1.5

Enviro Workshops (Continued)

<u>Conference / Workshop</u>	
Mountain Region Remediation Workshop (Virtual) – May5, 2020	
<u>Courses</u>	<u>Credits</u>
High-Resolution Site Characterization – The Key to Successful Remediation	0.75
<u>Conference / Workshop</u>	
Emerging Contaminants US Remediation Workshop – Tulsa, OK –February 10, 2021	
<u>Courses</u>	<u>Credits</u>
Crossroads: Using MBT's for Site Characterization	0.80
A Single Solution for a Variety of Contaminants	0.80
Advances in Engineered ZVI and Performance Quantification Tools for Remedial Applications	0.80
Strategic Utilization of HRSC Subsurface Imaging Technologies and 3D Modeling	0.80
Sonic Drilling and CPT in Remediation	0.80
Total Credits	4.0
<u>Conference / Workshop</u>	
Emerging Contaminants US Remediation Workshop – Dallas, TX, March 24, 2021	
<u>Courses</u>	<u>Credits</u>
Crossroads: Actionable Data using MBTs	0.80
A Single Solution for a Variety of Contaminants	0.80
Using Advanced Surfactant Technologies for Remediation	0.80
Strategic Utilization of HRSC Subsurface Imaging Technologies and 3D Modeling	0.80
Horizontal Directional Drilling (HDD) for Environmental Site Characterization Remediation	0.80
Total Credits	4.0
<u>Conference / Workshop</u>	
Global EnviroSummit 2021 September 15-17, 2021	
<u>Courses</u>	<u>Credits</u>
Vapor Intrusion & the Importance of HRSC	0.33
Utilizing Environmental Sequence Stratigraphy for Conceptual Site Model	0.33
From Microbiome to Microbiome: How Environmental Microbes Impact our World	0.75
Testing a Sorption/BioAmendment Combination in an Excavation Supported by Molecular Biological Tools	0.50
Quantitative High Resolution Site Characterization to Support Petroleum Remediation in Piedmont Geology	0.50
Practical Applications of 3D Conceptual Site Models (CSMs), Built from High Resolution Data Sets	0.50
Gas-Phase Biostimulation	0.50
Cost-Effective Destruction of Petroleum Hydrocarbon Contaminants with Expedited Residual Mass	0.50
A Successful Vapor Intrusion Project Begins with a Carefully Conceived Conceptual Site Model	0.50
Successful Air & Vapor Data Collection: Best Practices for Vapor Intrusion Investigations	0.50
Quantitative Passive Sampling Methods for Vapor Intrusion Assessments	0.50
Defining Sampling Zones in Large Industrial Buildings to Select Efficient Vapor Intrusion Investigation Strategies	0.50
Using Innovative Sampling Approaches to Solving Complex Vapor Intrusion Problems	0.50
Site Conceptual Models – a Practical Approach that Works	0.33
Lessons Learned While Injecting More Than One Hundred Tons of Potassium Persulfate	0.50
Revisiting Historical Field Data to Uncover Embedded Trends That can Predict the Outcome of Current Remedial Projects	0.50
Using Telemetry Solutions for Remediation Projects	0.50

Enviro Workshops (Continued)

Conference / Workshop	
Global EnviroSummit 2021 September 15-17, 2021 (Continued)	
Courses	Credits
How to Address Low pH During in situ Bioremediation	0.50
Vapor Intrusion Mitigation Barriers – Concept, Design & Installation	0.50
Developing an Effective Vapor Intrusion Mitigation System (VIMS) Operations, Maintenance and Monitoring Plan (OM&M)	0.50
Three Technology Advancements in Vapor Mitigation	0.50
Thermal Remediation Technologies and the Benefits Offered for Contaminated Redevelopment Sites	0.50
A Legal Look at Vapor Intrusion	0.50
Vapor Intrusion: the Good, the Bad, and the Frustrating	0.50
Total Credits	11.75
Conference / Workshop	
Kansas City, KS Vapor Intrusion October 21, 2021	
Courses	Credits
Proven Active Soil Gas Sampling Techniques for Efficient Site Characterization, Vapor Intrusion Investigation and Mitigation	1.00
Crossroads: Actionable Data Using MBTs	1.00
Vapor Intrusion Efficient Mitigation Methods and Remote Management	1.00
Advanced Passive Sorbent Samplers: Collecting Time-Integrated Samples as part of an Effective Site characterization or Vapor Intrusion Investigation Strategy	1.00
Vapor Intrusion: Below-Slab Protection Methodologies	1.00
Best Practices to ensure reliable Laboratory VI Data	1.00
Equipment and Supplies in Support of your VI Application	1.00
Total Credits	4.00

Focused Remediation Seminars

Chicago, IL

P: 815-650-2230

F: 815- 650-2232

<http://focusedremediationseminars.com/>E: info@focusedremediationseminars.com

Focused Remediation Seminars offers virtual seminars once or twice a month in a combination of various courses over a three hour period. The courses below are approved for CEUs. Please provide the list of courses attended with the certificate when submitting for CEUs.

Courses	Credits
Carus' Solutions: Including MLO Next Generation ISCO	0.50
Advancements in ISCO (Potassium Persulfate) and ERD/ISCR (Antimethanogenic Reagents) Remedial Technologies	0.50
Effective In-Situ LNAPL and DNAPL Site Remediation Using Innovative Surfactant Enhanced Remediation Techniques	0.50
In-Situ Access to Contaminants – Enhancing and Enabling Subsurface Remediation	0.50
How to Use Real-time Monitoring to Capture More Remediation Projects	0.50
Advancements in ISCO and ISCR Remedial Technologies	0.50
Can't travel to the Site? Have site remediation data come to you in real-time	0.25
Strategic Optimization utilizing HRSC Technologies	0.25
Provect-EBR: Next Generation ISCO Technology	0.50

Cost-Effective NAPL, Globule and Sorbed Phase Remediation Using Ivey-sol Surfactant Enhanced Remediation	0.50
Optimizing Vapor Mitigation Systems via Continuous Real-Time Monitoring	0.50
Remote Monitoring of Environmental Remediation and How It Can Work For You.	0.50
Overcoming ISCO Limitations with Ferric Iron Activated Persulfates	0.50
Surfactant Enhanced Bioremediation (SEB) of Recalcitrant Soil and Groundwater Contamination (In-Situ and Ex-Situ)	0.50
Using Induced Fractures for Penetrative ISCO Distribution in Low Permeability Formations	0.50
Strategic Optimization utilizing HRSC Technologies	0.50
Surfactant Enhanced Soil Washing (Ex-situ) of Highly Contaminated Soils Using Batch and Continuous Processes	0.50
DPT Jet Injection for Remediation of Low-Permeability Zones: Three Case Studies in Three States	0.50
Thermal Remediation: Volatile Organics, Semi-volatiles & PFAS Solutions	0.50
Provect-EBR: Quantum Advancement in ISCO Technology”	0.50
Utilizing HRSC Subsurface Imaging to Delineate Multiple Source Plumes	0.50
Combined In-situ Remediation Technologies To Achieve Enhanced Cost-Effective Site Remediation	0.50
Generating Confident Source Term NAPL CSMs with LIF	0.50
Vapor Intrusion Mitigation Barriers – Concept, Design & Installation	0.50
Remedy Distribution Characterization with LIF	0.50
Avoiding Cross-Contamination – DECON-IT Surface Decontamination Product Exceeding ASTM D088 Standard For Decontamination of Field Equipment	0.50
Rapid Single Deployment Resolution of Vapor Intrusion Challenges via Continuous Monitoring and Response	0.50
Lessons Learned While Injecting More Than One Hundred Tons of Potassium Persulfate	0.50
Carus: “From Purple to Green: A Transformative Remediation Approach”	0.50
Provectus Environmental: “ISCR & Antimethanogenic Reagents: Technical Overview with Field-Scale Applications to Address CVOCs”	0.50
Ivey International: “Sustainable Surfactant Enhanced Extraction (SEE) of NAPL, Globule and Sorbed Phase Contamination Within Soil and Groundwater Regimes”	0.50
Field Environmental Instruments (FEI): “Real-time Monitoring Applied to Residential Removal Actions: A Superfund Case Study”	0.50

National Ground Water Association

601 Dempsey Rd.
Westerville, OH 43081

P: 800-551-7379

or

614-898-7791

F: (614) 898-7786

E: customerservice@ngwa.org

<https://www.ngwa.org/events-and-education/ngwa's-event-calendar>

Conference / Workshop

2020 NGWA's Groundwater Summit (December 8-11)

Courses	Credits
Better Access to Contaminants: The Application of Targeted Injection with Slurries	0.50
There's a Method to This Madness: Dynamic Groundwater Recirculation (DGR™)	0.50
New Perspectives on Horizontal Wells for Assessment and Remediation	0.50
From Auto Salvage to Animal Care Center: MTBE Remediation Leads to Site Redevelopment	0.50
Building a Better Mousetrap: The Evolution of MODALL	0.25
A Practical Model for Contaminant Transport in Highly Heterogeneous Media and Back-Diffusion	0.25
Flux-Informed Optimization: The Next Generation of Applied Modeling	0.25
Biology and Chemistry of In Situ Activated Carbon during Remediation Applications (with Dr. Erick Bandala)	1.50
Improving the Value of Legacy Data Sets Using Modern Methods	1.50
Groundwater Remediation Technologies	1.00
Hydrogeologic Classification System for Water-Well Boreholes	1.00
Promoting Combined Biological-Chemical Reactions for In Situ Groundwater Remediation	0.25
Leveraging an Evolving LNAPL Regulatory Framework to Facilitate Closure at a Hazardous Waste Site	0.25
Total Credits for attendance of ALL above courses	8.25

Oklahoma Groundwater Association

P.O. Box 14875
 Oklahoma City, OK 73113
<https://www.okgroundwater.org/>

P: 405-258-8747
 E: josh@okgroundwater.org

Conference / Workshop

2020 OGWA Conference & Trade Show January 7-8, 2020

Courses	Credits
Introducing Drilling Fluids	1.00
Oklahoma Rules and Regulations	1.00
Contractor Insights for the OCC Corrective Action Portal Platform	1.00
Estimating Recovery of Hydrocarbons in a Bedrock Site	1.00
Molecular Biological Tools and Petroleum Hydrocarbon Remediation - Multiple lines of Evidence lead to Cost Effective Solutions	1.00
Using Electrical Hydrogeology to Characterize Hydrocarbon Sites	1.00
New Perspectives on Horizontal Wells for Assessment and Remediation	1.00
NAPL Removal by Surfactant Enhanced Aquifer Remediation	1.00
Matrix Oxygen Injection Systems for Remediation of Hydrocarbon Impacted Sites	1.00
Well Flow Dynamics During Groundwater Sampling: A Comparison of Purge and Passive Sampling Approaches	1.00
Total Credits for attendance of ALL above courses	10.00

Conference / Workshop

Hydrocarbon Site Management Virtual Workshop

- HRSC: High Resolution Site Characterization January 6, 2021

Courses	Credits
OIP and MIP: Direct Push Logging Methods for Investigation of Fuel Hydrocarbon Impacted Facilities	1.00
Electrical Hydrogeology of Hydrocarbon Impacts	1.00
Total Credits	2.00

- Alternative Sampling January 13, 2021

Courses	Credits
Natural Source Zone Depletion: An Important Tool to Manage Petroleum and LNAPL Contaminated Sites	0.66
Molecular Biological Tools: Actionable Data For Petroleum Hydrocarbon Remediation	0.67
Using Radon as a Tracer for Mapping NAPL Contamination	0.67
Total Credits	2.00

- Extracting Value from Data January 20, 2021

Courses	Credits
Groundwater Plume Stability Analysis at Petroleum Hydrocarbon Sites	1.00
Using Parsimony to Address Common Real-world Contaminant Problems Under Conditions of Uncertainty	1.00
Total Credits	2.00

- Remediation Approaches January 27, 2021

Courses	Credits
Thermal Remediation of VOCs, SVOCs and PFAS	0.50
Remediation of Inaccessible Plumes Using Horizontal Wells	0.50
Dissolved Phase Bioremediation of Petroleum Hydrocarbon Sites	0.50
SEAR Surfactant Enhanced Aquifer Remediation	0.50
Total Credits	2.00

Total Credits for attendance of ALL above courses 8.00

****Below is a list of workshops and conferences offered by approved educational providers. As topics covered change yearly, credits depend on the courses/classes attended. Consultant must submit proof of attendance to the OCC for approval and number of credits based on course/class topics. ****

Association of Environmental Health and Sciences Foundation

150 Fearing Street, Suite 21
Amherst, MA 01002

T: 413-549-5170
F: 413-549-0579

<https://www.aehsfoundation.org/>

Conference / Workshop

Annual International Conference on Soil, Water, Energy, and Air

Annual International Conference on Soils, Sediments, Water, and Energy

Enviro Workshops

P.O. Box 1239
Davidson NC 28036

P: 800-704-1261

<https://enviroworkshops.com/>

Conference / Workshop

Remediation Workshop

Vapor Intrusion Workshop

Enviro Summit

Environmental Federation of Oklahoma

4 N.E. 10th Street #443
Oklahoma City, OK 73104

P: 405-942-2334
E: efo@envirofdok.org

<http://envirofdok.org/events/>

Conference / Workshop

EFO Air Technical Seminar

EFO Regulatory Newsreel

Annual Meeting & Trade Show

Focused Remediation Seminars

Chicago, IL

P: 815-650-2230

F: 815- 650-2232

<http://focusedremediationseminars.com/>

E: info@focusedremediationseminars.com

Conference / Workshop

Annual Seminar

Focused Remediation Virtual Seminars

Geotech Field Day Schedule

Geotech Environmental Equipment, Inc.
 2650 East 40th Avenue
 Denver, CO 80205
http://www.geotechenv.com/geotech_field_days.html

P: 800-833-7958

Conference / Workshop

Geotech Annual Field Days

Institute for Tribal Environmental Professionals (ITEP)

PO Box 15004
 Flagstaff, AZ 86011-5004
http://www7.nau.edu/itep/main/Conferences/confr_tlef

P: 928-523-9555
 F: 928-523-1266
 E: itep@nau.edu

Conference / Workshop

2020 Tribal Lands & Environment Forum (TLEF)

National Ground Water Association

601 Dempsey Rd.
 Westerville, OH 43081

P: 800-551-7379

or

614-898-7791

F: (614) 898-7786

E: customerservice@ngwa.org

<https://www.ngwa.org/events-and-education/ngwa-approved-continuing-education>

or

<https://www.ngwa.org/events-and-education/ngwa's-event-calendar>

Conference / Workshop

NGWA's Groundwater Week

California Groundwater Association Annual Convention and Trade Show

California Groundwater Association Education Training Session

Illinois Association of Groundwater Professionals Continuing Education Series

Illinois Association of Groundwater Professionals Annual Meeting & Expo

Illinois Association of Groundwater Professionals Convention & Trade Show

NGWA Workshop on Groundwater in the Northwest (#5043)

NGWA's Groundwater and Oil and Gas Development: Improved Management Practices for Groundwater Protection and Water Supply

NGWA Forum on Managing Groundwater and Surface Water as a Single Resource: Merging Science and Policies

NGWA's Groundwater Solutions: Innovation to Address Emerging Issues for Groundwater Resources Conference

NGWA Conference on Fractured Rock and Groundwater

Minnesota Water Well Association Convention & Trade Show

Annual Montana Water Well Drillers Association Convention & Trade Show

Michigan Ground Water Association Annual Education Conference and Fundamentals Training

Ohio Water Well Association Annual Convention and Working Tradeshow

NGWA Groundwater Summit

New England Interstate Water Pollution Control Commission

Wannalancit Mills
 650 Suffolk Street, Suite 410
 Lowell, MA 01854
<https://neiwppcc.org/>

P: 978-323-7929
F: 978-323-7919
E:
mail@neiwppcc.org

Conference / Workshop

National Tanks Conference & Expo (NTC)

Oklahoma Excavation Safety Expo

6908 N. Robinson Ave.
 OKC, OK 73116

P: 800-522-6544
 or
 405-840-9955
E: education@okie811.org

<https://okexcavationsafety.com/>

Conference / Workshop

The Oklahoma Excavation Safety EXPO

Oklahoma Groundwater Association

P.O. Box 14875
 Oklahoma City, OK 73113
<https://www.okgroundwater.org/>

P: 405-258-8747
E: josh@okgroundwater.org

Conference / Workshop

OGWA Conference & Trade Show

Texas Commission On Environmental Quality

TCEQ
 P.O. Box 13087
 Austin, TX 78711-3087

P: 512-239-1000
E: info@tceq.texas.gov

<https://www.tceq.texas.gov/p2/events>

Conference / Workshop

Environmental Trade Fair & Conference Emergency Response

Environmental Trade Fair & Conference Interaction with the Voluntary Cleanup Program

Environmental Trade Fair & Conference Overview of the Requirements for Drinking Water Surveys and Groundwater

Environmental Trade Fair & Conference Petroleum Storage Tank Projects

Environmental Trade Fair & Conference Petroleum Storage Tank Rule