



Course manual for  
*Triad Training for Practitioners*

## COURSE OUTLINE

### Triad Training for Practitioners

- I. Introduction
- II. Overview of the Triad Approach
- III. Systematic Planning for Triad Projects
- IV. Developing Triad Dynamic Work Strategy Work Plans
- V. Implementing a Triad Field Investigation
- VI. Risk Assessment and Triad
- VII. The Triad Approach to Remedy Design and Implementation
- VIII. Additional Resources and Wrap Up

## Course Description and Objectives

Triad Training for Practitioners is based on best management practices (BMP) implemented by the EPA, partnership organizations, federal and state partners and consultants with regards to remedial response action work. Participants will learn how the Triad Approach can be used to streamline projects in a legal, technically sound and cost-effective manner. By taking the course, participants achieve the following objectives:

- **Integrate Triad BMPs into traditional project activities.** This course illustrates how to use Triad sampling plan design and data collection, analysis and management strategies at various entry points in a typical project timeline.
- **Effectively collect and communicate critical project information.** The course provides examples of conceptual site models (CSM) and describes how they are used as the basis for project and sampling plan design, and as a tool for maintaining stakeholder consensus throughout the project life cycle.
- **Design dynamic work strategies (DWS).** The course describes the components of a DWS, including (1) methods for verifying performance, (2) using collaborative data sets, (3) methods for real-time decision making, (4) managing sample and small scale variability, (5) designing project and field decision logic, (6) implementing contingencies, and (7) creating streamlined work plans.
- **Recognize and overcome the challenges presented while implementing a dynamic work strategy.** The course describes methods for controlling and directing work during dynamic work efforts, which include using unitized costing, setting project ceilings and lowering project costs. Participants will examine how more focused characterization efforts can extend project funds and maximize the data collected.

## Target Audience and Registration Information

*Triad Training for Practitioners* is a 2 ½-day course for those who would like more information on topics such as analytical technologies, in-depth sampling design or system optimization and operation. The EPA can work with training sponsors to customize this training to include facilitated panel discussions, site-specific case studies, technology demonstrations or other material. The target audience includes EPA, federal, state, tribal and private industry technical project managers and stakeholders involved in the development and

implementation of BMPs at hazardous waste sites. Attendees of this course should have some exposure to the Triad process and substantial experience in the areas of cleanup and reuse at hazardous waste sites.

Visit [www.trainex.org](http://www.trainex.org) and select the CERCLA Education Center to view the current schedule of offerings and register to attend. There are no tuition costs for this training. Participants will receive reference material, including a detailed manual, to continue their education after the course ends.

## Other CERCLA Education Center Courses

- **Hazard Ranking System:** Provides a detailed review of the HRS model and how the model is applied to various site conditions. The course is designed for personnel who are required to compile, draft and review PA, SI and HRS documentation records and packages submitted for sites proposed for the NPL.
- **Preliminary Assessment/Site Inspection (PA/SI):** Provides an introduction to the Superfund site assessment process and describes the PA and SI phases of this process.
- **Groundwater High-Resolution Site Characterization:** Provides a comprehensive approach to help participants improve their subsurface investigation approaches and develop more realistic and CSMs.

## Online Resources

### TRAINEX

The Training Exchange website

provides a wide range of training information for staff involved in hazardous waste management and remediation. The site provides up-to-date course information and training schedules for classroom and internet-based courses.

[www.trainex.org](http://www.trainex.org)



### OTHER SOURCES FOR INFORMATION

#### HAZARDOUS WASTE CLEAN-UP INFORMATION (CLU-IN)

[www.clu-in.org](http://www.clu-in.org)

#### NATIONAL ASSOCIATION OF REMEDIAL PROJECT MANAGERS (NARPM) ANNUAL TRAINING PROGRAM

[www.epanarpm.org](http://www.epanarpm.org)

#### TRIAD RESOURCE CENTER

[www.triadcentral.org](http://www.triadcentral.org)

#### GREEN REMEDIATION

[www.clu-in.org/greenremediation](http://www.clu-in.org/greenremediation)

#### BROWNFIELDS AND LAND REVITALIZATION TECHNOLOGY SUPPORT CENTER (BTSC)

[www.brownfieldstsc.org](http://www.brownfieldstsc.org)

#### ENVIRONMENTAL RESPONSE TRAINING PROGRAM (ERTP)

[www.trainex.org](http://www.trainex.org) and select the E RTP

#### INTERSTATE TECHNOLOGY & REGULATORY COUNCIL

[www.itrcweb.org](http://www.itrcweb.org)

#### FEDERAL REMEDIATION TECHNOLOGIES ROUNDTABLE

[www.frtr.gov](http://www.frtr.gov)

#### TECHNOLOGY INNOVATION PROGRAM HOME PAGE ON EPA'S WEBSITE

[www.epa.gov/superfund/remedytech](http://www.epa.gov/superfund/remedytech)

#### TECHNICAL SUPPORT PROJECT

[www.epa.gov/superfund/remedytech/partner.htm](http://www.epa.gov/superfund/remedytech/partner.htm)

## ABOUT THE CERCLA EDUCATION CENTER

The CERCLA Education Center (CEC) is a unique training forum implemented by EPA's Office of Solid Waste and Emergency Response. CEC courses have been developed cooperatively by the Office of Superfund Remediation and Technology Innovation; the Office of Emergency Management; the Office of Acquisition Management; the Office of Enforcement and Compliance Assurance; and the Office of Research and Development. Site managers from EPA regions provide technical advice, comment and support. The CEC's structured curriculum, designed primarily for EPA hazardous waste site managers and responders, enables participants to attend training that is of particular interest to them and most appropriate for their projects and workloads.

### UP-TO-DATE COURSE INFORMATION

*For information about course schedules, visit EPA's Training Exchange at [www.trainex.org](http://www.trainex.org).*

