

**U.S. Environmental Protection Agency (EPA)**  
**Streamlined Investigations and Cleanups Using the Triad Approach**  
**U.S. EPA Region 9 RCRA Deliveries**

**February 9-10, 2006**  
**Nevada Army National Guard**  
**2460 Fairview Drive**  
**Carson City, Nevada**

**AGENDA**

***DESCRIPTION: EPA's Streamlined Investigation and Cleanups Using the Triad Approach training course provides participants an introduction to a wide array of innovative technologies and approaches that can be used to characterize hazardous waste sites. The class stresses the importance of the planning process and the use of field-based measurement technologies and on-site data assessment techniques. Participants will be introduced to the Triad Approach and methods for better understanding, planning, and implementing monitoring strategies to improve cleanups at lower costs. In addition, participants will be provided an overview of several of the field analytical and rapid sampling technologies that can support streamlined measurement approaches.***

***More information about the training can be found at [trainex.org](http://trainex.org) or [fate.clu-in.org](http://fate.clu-in.org).***

**Day 1**

- 8:00 – 8:30 (30 min)    Introductory remarks from Arlene Kabei, U.S. EPA Region 9 Waste Division Associate Director
- 8:30 – 10:00 (90 min)    Overview
- What is the Triad and why use it?
  - How do regulators fit in?
  - Why are RCRA projects not getting to completion, what drives RCRA closure decisions?
  - Environmental indicators...how does this process relate to Triad work strategy concepts?
  - How would Triad assist with streamlining the traditional RFA/RFI process?
  - How do we get out of the WP/Comment cycle?
- 10:00 – 10:15 (15 min) Questions/Break**
- 10:15 – 11:15 (60 min)    Systematic Planning
- Systematic planning and the RCRA process. What is Triad systematic planning and why is it important? The differences and similarities between the DQO approach and the Triad
  - Project management challenges and the critical role of CSMs in the characterization, cleanup, and reuse/closure process
  - Constraining the use of field-based measurement technologies before or during early stages of an investigation using a Demonstration of Methods Applicability (DMA)
  - How does the use of field based methods fit into the RCRA

- program?
- The new data quality model, what it is and why use it?
- What are decision units and how are they determined in the RCRA program?
- Data management and assessment for collaborative data sets in dynamic work strategies for Triad projects.
- Web-based management tools for dynamic investigations.
- Procurement practices for Triad projects.

**11:15 – 12:15 (60 min) Lunch**

**12:15 – 12:30 (15 min) Questions and Discussion of morning presentations**

- 12:30 – 1:30 (60 min) Fort Lewis Range Case Study
- Planning and the use of an evolving CSM are demonstrated in this case study to characterize and remediate a small arms firing range
  - Real-time data methods: X-ray fluorescence (XRF)
  - Highlights reuse of RCRA site

1:30 – 2:00 (30 min) State Regulatory Perspective

**2:00 – 2:15 (15 min) Questions/Break**

2:15 – 3:00 (45 min) Hartford Case Study

- 3:00 – 4:00 (60 min) RCRA-Specific Case Study
- Dealing with operating facility
    - Sampling within and outside operating facilities
    - Partnering with regulators
    - What was the role of the regulator?
    - How was QC protocol established?

- 4:00 – 4:15 (15 min) Boeing sediment case study
- Highlight how field measurement tools can be used to reduce uncertainty associated with defining site boundaries.

**4:15 – 4:30 (15 min) Triad Trivia/Wrap up**

**Day 2**

- 8:00 – 8:45 (45 min) Dynamic Work Strategies
- What are they?
  - How are they used?
  - Implementation a dynamic work strategy RD/RA case study

- 8:45 – 9:45 (60 min) Sampling Design
- What are the different sampling options?
  - How to measure and evaluate uncertainties
  - Why select one sampling scheme over another to manage decision uncertainty?
  - How many samples are enough?

**9:45 – 10:00 (15 min) Q&A and Break**

10:00 – 11:00 (60 min)      Decision Support Tools/Case Study

- What are decision support tools?
- What can they do and why should they be used for dynamic investigations, remedy evaluation and selection?

11:00 – 11:15 (15 min) Resources

11:15 – 11:30 (15 min) Questions

**End of Day Two Adjourn**