

Course Outline for...

DETech-36: Scenario-Based Chemical Hazard Prediction Training Course Using WebPuff

The DETech-36 course has 5 modules, including

1. Hazard Analyst Background Training
2. Monitoring Coordinator Background Training
3. Decision Maker Background Training
4. Site Workers/First Responders Training
5. Mini-Exercise

DETech can present some or all of the above modules on a given training trip.

The duration of each module and an outline of the content is given below. *Please note that the ideal duration of each module will depend, in part, on the number of participants, the amount of desired content, amount of previous chemical hazard prediction training, and how many other modules or sub-courses the various trainees will attend. This is especially true of the hazard analysts training.*

Hazard Analyst Background Training Module

Duration: between 1 to 2 days + participation in the Mini-Exercise.

Module Outline

- The Hazard Assessment Team
- Concept Review (as needed)
- WebPuff Review
 - Introduction (as needed)
 - The WebPuff Event Model
 - The PAR/PAD tool
 - D2-Alarm™
- Background on Shelter-in-Place and Exit Shelter (as needed)
- Hazard Assessments for PARs/PADs
- Hazard Assessments for Monitoring Support
- Hazard Assessment for Exit Shelter Analysis
- Considerations for Monitoring
- Preparing for a CSEPP Exercise
- Source Term Drills and Scenarios throughout the training

Monitoring Coordinator Background Training Module

Duration: between 1/2 to 1 day + participation in the Mini-Exercise.

Module Outline

- Introduction/Background
- The Hazard Assessment Team
- Concentrations versus AEGLs
- Introduction to WebPuff
- The Risk Envelope with Concentrations
- Release Scenarios to Consider for Monitoring Support
- Rules of Thumb for Monitoring
- Hands-on Problems Throughout

Decision Maker Background Training Module

Duration: between 1/2 to 1 day + participation in the Mini-Exercise.

Module Outline

- Introduction
- The Hazard Assessment Team
- AEGL versus Concentration plots
- Introduction to WebPuff
- WebPuff Event Mode & Related Tools
- Exit Shelter-in-Place
- Hazard Assessments for...
 - PARs/PADs (*with Exit Shelter as a special case*)
 - Monitoring
- Considerations for Monitoring

Site Workers/First Responders Training Module

Duration: between 2 to 3 hours.

Module Outline

- Introduction
- The Hazard Assessment Team
- AEGL versus Concentration plots
- Introduction to WebPuff

Mini-Exercise Module

Duration: between 2 to 3 hours.

Module Outline

- Ideally have Hazard Analysts, Monitoring Coordinators, and Decision Makers attend
 - Instructors and trainees can role-play missing personnel (e.g., Decision Makers)
- CSEPP-like scenarios
 - In the event mode
 - Source term and meteorology changes
 - “injects” by instructors to challenge trainees
- Approximately 1.5 hour in duration with a 30 minute “hot wash” per exercise
- If “extra” trainees are in attendance then can use the extras in different roles (e.g., field observations, decision makers, off-post personnel)