Air Monitoring for Risk-Based Response

Course is 50% Hands On

INSTRUCTOR LED MOBILE TRAINING

COURSE TOPICS:

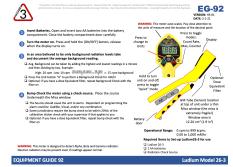
- Interpreting instruments and detection papers
- Hazard assessment
- · Establishing control zones
- · Exposure monitoring
- Turn-back values
- · Product characterization
- Using cross sensitivities
- Correction factors

COURSE DESCRIPTION

This 8-hour course is designed to enhance HazMat responders' ability to interpret readings from air monitoring instruments and make on scene tactical and safety decisions.

The training is 50% hands on. Attendees will participate in lecture and case studies followed by practical sessions with air monitoring equipment. Attendees will operate instruments and interpret readings from chemical samples and make decisions based on the readings.

The course content can be tailored to your teams equipment, mission, and local target hazards. The training focuses on instrument interpretation, participants should have previous Familiarity with air monitoring basic operating principals, or work alongside an experienced responder.



Hazard	Cold (or Support) Zone	Warm (or Contamination	Hot (or Exclusion) Zone Access limited to	Notes
	No access to the public	Reduction) Zone Access limited to authorized responders with proper PPE	authorized responders with proper PPE and back- up team in place	The transition from cold zone to a zone is often called the inner Con while the transition from warm to zone is called the Outer Cordon .
Flammable	< 1% of LEL	1 10% of LEL	≥ 10% LEL	NIOSH defines 10% of LEL as IDLH
Toxic or Corrosive (vapor forming)	< PEL	PEL – IDLH	≥ IDLH	Utilizes published respiratory exp standards, therefore errs on the s of safety for dermal exposures.
Corrosive, Acid (non- vapor forming)	pH 6 - 8	pH 4 – 6	pH ≤ 4	For furning/vapors, use toxicity endpoints. For non-wapor forming corrosive there is little threat outside the exact area of the spill. Remember to leave ample spac for "splattering" if carbonate-be neutralizers will be used.
Corrosive, Base (non- vapor forming)		pH 8 - 10	pH ≥ 10	
Oxygen (Low)	20.8 – 20.9%	19.6 - 20.7%	≤ 19.5%	
Oxygen (High)		21.0-23.4%	≥ 23.5%	
Radioactivity	≤ 2 mRem/hr	2 – 10 mRem/hr	≥ 10 mRem/hr	At 2 mRem/hr, it takes ~ 50 ho to get annual public dose. At 10 mRem/hr, it takes ~ 10 h to get annual public dose. Measurements 2x background warrant further investigation.
WARNING: Control Zones		dynamic in nature and there e ERDSS for Chemical Specif		luated throughout the response.
TECHNICAL GUIDE		se enuss for Crieffical specif	ic duidance	CONTROL ZO

