

COURSE TITLE:	Rapid Identification and Risk Assessment of Hazardous Materials (In-Service)		Course No. & Version:	HAZ026
TOPIC AREA:	Hazardous Materials	LEVEL:	Technician/Command	
SOURCE:	Internal	Course No.		
PRIMARY DOMAIN:	<input checked="" type="checkbox"/> Didactic <input type="checkbox"/> Psychomotor <input type="checkbox"/> Combination			
DELIVERY METHOD:	60% Lecture % Hands-on % Distanced 40% Other: Classroom table top exercises and case studies			
DURATION:	Hrs 7	SCHEDULING:	0900 - 1700 less lunch and breaks	
PROGRAM GOAL:	Upon completion of this inservice, given both identified and un-identified hazardous materials, the participant will be able to rapidly identify the fire, reactivity, health and radioactivity risks associated with the substance.			
TARGET AUDIENCE:	The primary target audience for this program is hazardous materials technicians or operations level responders you have mission specific responsibilities of monitoring or sampling. However, this program will also benefit life safety inspectors, code enforcement officers and hazardous waste management personnel.			
COURSE DESCRIPTION:	The program builds upon commonly accepted and simplified chemistry concepts and the basic principles of air monitoring, detection and field chemical analysis. The program follows a decision logic based upon whether or not the identity of a potentially hazardous material is known. The participants are stepped through the decision logic to make valuable decisions concerning the hazards and risk involved based upon either the name of the material, scene size-up information or air monitoring and field analysis findings.			
MAX STUDENTS:	30	MAX INST. RATIO:	1:15	
STANDARDS MET:	The program addresses competencies found in NFPA 472 at the Operations Core Level, Mission Specific Level for Air Monitoring and Sampling and at the Technician Level.			

APPROVALS		
Organization	No. / Date	Conditions
NOTES		

RAPID IDENTIFICATION AND RISK ASSESSMENT HAZ026

Educational Objectives

The participant shall list the key physical and chemical characteristics of hazardous materials that should be evaluated during a hazard/risk assessment process. To including:

Physical state and form	Pyrophoric, hydrophoric
Vapor pressure and volatility	Hypergolic
Solubility	Energetic
Polarity	Water reactivity
Flash point	Oxidizer
Flammable range	Oxidation reaction
Routes of exposure	Corrosivity
Target organs	Reactivity
IDLH	Polymerization
Signs and symptoms	Salt
Five acute toxidrome	Non-salt
Ionizing radiation	

Given situations and case studies in which the identity of a hazardous material or substance is not known, the participant shall identify the characteristics that should be evaluated in order to develop an initial hazard and risk assessment.

Using a the Hazard/risk assessment job aid and, given situations and case studies in which the name of the hazardous materials involved is known, predict the likely fire, reactivity, toxicity and radioactivity risks associated with the product within 5 minutes.

Identify the proper sequence of air monitoring during an incident involving identified and un-identified potentially hazardous materials.

Identify the appropriate action levels for each type of air monitoring equipment used in the analysis process.

Demonstrate the ability to interpret the hazards and risks associated with a material based upon the results of air monitoring instrumentation.

Demonstrate the ability to perform field screening of an unidentified, potentially hazardous material

Demonstrate the ability to perform field expedient quick hazard screening tests to identify the potential hazards and risks of unidentified solid and liquid hazardous material.

