

COURSE TITLE:		Field Sampling and Hazard Screening (15 hr 1 Day Blended)		Course No. & Version:	HAZ034 April 2013
TOPIC AREA:		Hazardous Materials		LEVEL:	Technician
SOURCE:		Internal RTC		Course No.	HAZ034
PRIMARY DOMAIN:		<input type="checkbox"/> Didactic <input type="checkbox"/> Psychomotor <input checked="" type="checkbox"/> Combination			
DELIVERY METHOD:		% Lecture 47% Hands-on 53% Online % Other:			
DURATION:		15 Hrs	SCHEDULING:	8 hrs Online 7 hrs Drill in one session	
PROGRAM GOAL:		<p>Given scenarios involving unidentified hazardous materials and, while working down range in PPE as a member of a team, the hazardous materials technician, shall demonstrate the ability to properly collect and screen samples of an unidentified/potentially hazardous substances to determine general hazards of the material.</p>			
TARGET AUDIENCE:		<p>This program is designed for members hazardous material response teams. Participants must be previously trained to the Hazardous Materials Technician level and be a member of such a resource. Allied response personnel (e.g. law enforcement, environmental, hazardous waste, forensic) may also benefit from this training but must be certified by their employer to operate in mission specific areas including: personal protective equipment, basic air monitoring, technical decontamination and other areas specific to their job function. Pre-Requisite Training: Hazardous Materials Technician or Mission Specific Operations Level (Required) NIMS ICS 300 (Recommended)</p>			
COURSE DESCRIPTION:		<p>This program utilizes a blended educational approach. Both instructor led online training sessions and hands-on drills using simulated situations at the organization's site are used.</p>			
MAX STUDENTS:		21 (15 minimum)	MAX INST. RATIO:	1:7 (hands-on)	
STANDARDS MET:		NFPA 472 2013 ed. Chapter 5 and 6.2, 6.5, 6.7 as appropriate NFPA 472 20 13 ed. Chapter 7.2, 7.3 as appropriate Florida SERC HazMat Operations Level Training Guidelines Chapter 9, 2010			
APPROVALS					
Organization	No. / Date		Conditions		
NOTES					

Course Goal

Given scenarios involving unidentified hazardous materials and, while working down range in PPE as a member of a team, the hazardous materials technician, shall demonstrate the ability to properly collect and screen samples of an un-identified/potentially hazardous substances to determine the general hazards of the material.

Program Concept

Field Sampling and Hazard Screening is designed to be a blended training program using both internet based, instructor led, asynchronous educational methodologies in combination with hands-on centralized in-services that will develop or maintain the skills of the hazardous materials technician.

Primary areas of focus for this program shall include:

- Important physical and chemical properties
- Selection and proper use of sampling tools and supplies
- Screening and analysis equipment/supplies and proper use

Educational Objectives

1. The hazardous materials technician, given example materials, shall identify the characteristics that contribute to the hazards of the material.
 - Associate how various physical properties contribute to the potential hazards of a material.
 - Describe the importance of vapor pressure as it related to volatility.
 - Identify the relationship between temperature, pressure and volume as it relates to vapors and gases.
 - Identify four primary hazards of hazardous materials.
2. Given scenarios and a simulated incident and, while working as a member of a team, demonstrate the ability to function down range in PPE for the purpose of collecting and screening representative samples.
 - Identify the FBI 12 step process for proper evidence collection.
 - Don and operate in personal protective ensembles provided by the AHJ that have been identified as appropriate for the risks associated with the incident.

3. Given a simulated incident and, while working as a member of a team, demonstrate the ability to participate in the collection and hazards screening of un-identified materials while using equipment and supplies provided by the authority having jurisdiction.
 - Identify the purpose, capabilities and limitations of sampling supplies and tools used to collect, contain, label and document representative samples.
 - Identify the proper sequence of use for AHJ provided direct reading instruments for the purpose of identifying any existing IDLH conditions based upon the four primary hazards.
 - Demonstrate the ability to select an appropriate location for field screening and analysis procedures.
 - Demonstrate the ability to properly collect, package, label and document representative samples.

4. Given simulated incidents, demonstrate the ability to conduct the following screening processes at a down range location:
 - Demonstrate the ability to screen for IDLH conditions using radiological survey meters, pH paper, four gas detectors (O₂, CGI, CO, H₂S), photo-ionization detectors.
 - Demonstrate the ability to use field screening techniques to identify acids, bases, fluoride compounds, oxidizers, organic/inorganic differentiation, aqueous solutions, proteins, chemical and biological agents.

Field Sampling and Hazard Screening for HazMat Technicians
(1 Day Blended Training Program)
Program Schedule

Online Session – Risk Assessment and Sampling Techniques

- Module 1 – Four Hazards
Assessing On-scene Risks
- Module 2 – Initial Entry Monitoring
Review of the Air Monitoring Strategy
- Module 3 – FBI 12 Step Process
- Module 4 – Field Screening Techniques
Sampling Techniques and Team Roles
Basic Screening Techniques

Drill Session – Screening and Analysis

- 0900 – Introduction
Pre-Test covering online session # 1
- 1000 – Sampling & Screening Techniques
- 1030 – Skill Station 1: Sampling Techniques
Skill Station 2: Screening Techniques

- 1200 – 1230 Lunch On-site

- 1230 – Briefing
- 1300 – Rotating situations (7 person teams)
Scenario 1 – Abandoned Materials
Scenario 2 – Illicit Lab
- 1730 - 1800 Clean-up, Debriefing and Exit Evaluation

All scenarios shall involve initial risk assessments, use of PPE, initial entry & air monitoring, sampling and hazard screening mission.