Assessment Requirements for PUAFIR306
Identify, detect and monitor hazardous materials at an incident
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Modification History

Release 1. This is the first release of this unit of competency in the PUA Public Safety Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions on at least one occasion and includes

- analysing and communicating detection results
- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) organisational requirements
- assessing hazardous materials at an incident
- collecting and interpreting safety and hazard information
- complying with legislation
- demonstrating safe working practices
- developing, implementing and reviewing an entry plan
- donning and operating in, decontaminating and removing in personal protective clothing and equipment
- establishing control zones
- identifying and assessing hazards at an incident including implementing hazardous control zones
- identifying hazardous materials
- identifying, selecting, checking, testing and maintaining personal protective clothing and equipment for a range of hazardous materials
- implementing decontamination procedures
- implementing organisational procedures and operating guidelines
- interpreting hazardous conditions using detection equipment
- maintaining monitoring equipment
- operating breathing apparatus
- recommending appropriate actions when identifying, detecting and monitoring materials
- recording and interpreting data
- reviewing entry plan
- selecting, operating and interpreting detection equipment
Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions and includes knowledge of:

- apparatus (breathing) maintenance and procedures
- asphyxiates including simple, chemical, flammable gases and liquids
- basic chemistry concepts
- conditions under which atmospheres become hazardous
- decontamination procedures and types of decontamination including
  - decontamination areas including holding, wash, disrobing and rest
  - decontamination plan and corridor
  - decontamination techniques including emergency, emergency mass and technical decontamination
- detection strategies applied for decontamination
- dynamic risk assessments
- dynamics of toxicity, corrosivity and flammability
- effects on humans exposed to commonly encountered atmospheric contaminants such as reaction products, combustion products and variable oxygen concentrations
- entry plans
- flammable range
- identification of hazardous materials
- information sources
- legislation relevant to organisation
- local and systemic effects of industrial toxins
- main routes for entry of toxins into the human body
- odour threshold including exposure standards including time weighted average, short term exposure limits and peak limitation values and Immediate Danger to Life and Health (IDLH) which may include Acute Exposure Guideline Levels (AEGL)
- organisational documentation, policies and procedures including those of government
- personal protective clothing and equipment use and limitations for a range of hazardous materials
- physical and chemical properties
- potential behaviour of hazardous materials including corrosivity, entry routes of toxins, flammability, toxicity, vapour density and pressure
- procedures for establishment, maintenance and review of control zones including entry plans and decontamination
- response situations
- roles and responsibilities of other agencies
- support organisations required to assist
- types of hazards including chemical, biological and radiological, physical, electrical, mechanical, thermal, visual, environment and dangerous situations and pressure vessels and lines
• types of hazard control zones including
  • area of likely contamination (hot zone)
  • area of operations (warm zone)
  • controlled exits, entrances, refuges and emergency exits
  • criteria applied to determine the extent of hazardous areas
  • support zone (cold zone)
• units of measurement used to express concentration of atmospheric contaminants (mg/cubic m, ppm, % and v/v)
• upper and lower flammable limits
• use and limitations of workplace exposure standards
• Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) organisational requirements including risk mitigation

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in industry approved simulated workplace operational situations that reflect workplace conditions.

Competency should be demonstrated over a range of situations in environments with detectable but safe levels of contaminants using different types of detection equipment.

Resources for assessment must include access to
• a range of relevant exercises, case studies and/or simulations
• relevant and appropriate materials, equipment, tools and personal protective clothing and equipment currently used in industry including
  • a range of detection equipment
• applicable documentation including organisational procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links