

# Gas test atmospheres

## MSMWHS217 Gas test atmospheres

### Course aim

This unit of competency covers the skills and knowledge required to test the working atmosphere, using electronic test apparatus, to find out if it is safe for the proposed work.

It applies to situations where an individual may be required to carry out gas testing of an atmosphere prior to entering a specific area or workspace. The competency requires the person to interpret readings and take actions based on the interpretation.

Working environment may be hazardous, unpredictable, subject to time pressure, chaotic and expose responders to risk, on land or water, by day or night. Workplace atmospheres may include visible and invisible hazards and hazardous surfaces.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other shift team members and the control room operator, as appropriate.

### Course objectives

By the end of the course, the student will be able to:

#### *Demonstrate knowledge of:*

- Organisational procedures, including:
- Work permit systems
- Safety, hazards and hazard control
- Incident, fire and accident
- organisation standard operating procedures (SOPs)
- Common atmospheric hazards and contaminants
- Explosive range, upper and lower explosive limits
- PPE
- Exposure standards (time-weighted average, short-term exposure limits, peak limitation values, and examination of toxic effect at the level of a range of flammable gases)
- Conditions under which atmospheres become hazardous
- Units of measurement used to express concentration of atmospheric contaminants (mg/cubic m. ppm, % v/v)

#### *Demonstrate skills in the following:*

- Recognise and assess conditions that require testing
- Identify the appropriate action according to procedures and within scope of responsibility, including:
- Selecting, preparing and using gas testing equipment
- Applying testing regime
- Selecting and using personal protective equipment (PPE)
- Identifying hazards and applying control measures
- Cleaning and maintaining equipment
- Take readings and interpret, report/record relevant data
- Apply known solutions to routine problems
- Communicate clearly and unambiguously with a range of personnel on safety conditions and procedures.

**On successful completion students will be issued with:**

**Statement of Attainment in MSMWHS217 Gas test atmospheres**

### Course prerequisite

No prerequisite is required for the completion of this course.

### Course assessment

Students will be assessed to determine their competency in this course both theoretically and practically.

The theory assessment consists of multiple choice and short answer questions.

The practical assessment will require students to a fresh air calibration, bump test and clear the peaks on the gas detector and use it to determine the levels inside an actual or simulated confined space.

### Course duration

4 hours (Initial)

2 hours (Refresher)

(The times noted above includes a break.)

***Where delivered as a refresher, the delivery time is reduced and assessment time remains the same.***

### Trainer ratio

10 students per trainer

### Course location

Courses are primarily delivered at our facilities:

3M Australia,  
93 Derby Street, Silverwater NSW

The Construction Training Centre,  
460 Beaudesert Road, Salisbury QLD

However, courses can be delivered at your worksite if required. In this instance your employer will confirm there are suitable facilities on site to deliver the training.