



## Hydrogen Sulphide (Sulfide) Awareness

### Target Group

Hydrogen Sulphide poses a serious threat to people or assets because of its extremely toxic and corrosive properties. It is important, therefore, for all personnel who may stay and work in an environment with potential for exposure to H<sub>2</sub>S gas to be competent in emergency response practices during accidental release of H<sub>2</sub>S. This 4 hour presentation aims to satisfy that requirement. Maximum number of attendees is 15.

### Aim

The aim of the course is to provide selected delegates with basic underpinning knowledge H<sub>2</sub>S (hydrogen sulphide), a gas that can be created by natural biological processes or by human activity

### Training Objectives

By the end of the course, delegates will be able to demonstrate knowledge of:

- The definition of Hydrogen Sulphide along with its toxicity, common names and how it is formed
- The properties and characteristics of H<sub>2</sub>S and common locations where H<sub>2</sub>S can be found
- Concentrations/toxic levels of H<sub>2</sub>S along with exposure levels and toxic gas comparisons.
- Common H<sub>2</sub>S effects on individuals along with entry routes, susceptibility and hyper susceptibility issues.
- Comparisons/contrasts of detection and monitoring of personal, portable and fixed monitors and detectors
- Breathing apparatus sets:- Special problems created with the use of corrective glasses/contact lenses; facial hair and facial characteristics, and proper maintenance and inspection.
- Donning and Emergency Response and Emergency Rescue

### Course Content:

- Module 1: H<sub>2</sub>S and its Properties (What is H<sub>2</sub>S? How H<sub>2</sub>S is formed and where it is found? Other names used to describe H<sub>2</sub>S, and Properties and characteristics of H<sub>2</sub>S)
- Module 2: Physiological Effects of H<sub>2</sub>S (Parts per million (ppm) as a measurement parameter, occupational exposure limits to H<sub>2</sub>S and factors affecting individual susceptibility to H<sub>2</sub>S)
- Module 3: H<sub>2</sub>S Detection (Types of H<sub>2</sub>S Detector Equipment)
- Module 4: Respiratory Protection (Types of respiratory protection equipment and pre-use checks of personal detection devices and EBA)
- Module 5: Emergency Response and Rescue (Responding to an H<sub>2</sub>S alarm and Rescue Strategy)

### Achievement Measurement

Based on the OPITO training standard, this presentation also takes its references from OSHA 29, API RP 14C, API RP 49 and API RP 55. On successful completion of a short written test, delegates will be awarded a certificate valid for 2 years.