

TRAINING PROGRAMS **INDUSTRY**

PPEs related Safety



SAFETY-EXP OFFERS ON SITE OR CLASS ROOM TRAININGS

Safety-EXP is an academy founded by a group of professionals with a proven experience in various industries (Mining, Oil and Gas, Firefighting and other segments). We complete our certifications with an experience forged on field and as former employees of leading multinational companies of safety equipment and solutions manufacturing.

Knowing and mastering standards and procedures is one thing, applying them effectively is quite a challenge.

Safety-EXP offers a range of trainings and consultancy services helping companies to develop a positive health and safety culture that combines an optimized balance of procedures and technical expertise.

Safety-EXP offers training courses that can be carried out on site or in a class room. Our training courses are performed by a group of professionals with a proven international experience in health and safety having been a part of R&D or certified technical trainers, they have evolved in different fields of applications and have acquired a recognized experience.

Safety-EXP offers training courses with in-depth theoretical and technical content, based on current international norms and regulations and physical and scientific basics that every professional should know in order to frame the risk and optimize Safety. Our trainings are reinforced by practical experiences, enabling participants to practice all the information acquired during the courses. Participants will also be given up to date information as well as proposals for optimum solutions that takes in account the hazards associated with each activity and alternatives to tackle budgetary restrictions.

We do offer modular content allowing you to configure your trainings courses that can be booked either in French English or Arabic.

Our philosophy is to ensure that training is centered on you and your work environment. With this in mind, we designed a training program fully customized and tailored to your needs to ensure the best possible learning experience.

TRAINING RATE PER GROUP ON SITE

Rates of our training modules include VAT and trainer's expenses (travel, expenses and hotel accommodation if applicable).

In case of no-show of the group or in case of cancellation less than 24 hours before the training, the training fee will be charged.



CERTIFICATION

After completing each training module, the participant will receive a training attendance certificate. It is highly recommended to reproduce the training course after two years to get the necessary safety information updates and stay connected with the newest technologies and safety improvements.

TRAINING MODULES



M1 - TRAINING MODULE 1 GAS DETECTION

- Everything you need to know about gases – fumes and their behavior.
- Basic fundamentals of gas detection.
- Current sensor's technologies in use and working principles.
- Everything you need to know about portable gas detection instruments.
- Everything you need to know about fix gas detection systems.
- Confined space entry techniques and safety equipment used.
- Understanding bump testing and calibration .
- Preventive maintenance related to the gas detection instruments.

M2 - TRAINING MODULE 2 RESPIRATORY PROTECTION

- Everything you need to know about gases - fumes and their behavior.
- Working principles of full and half face masks.
- Combined filters working principle and selection.
- Self contained breathing apparatus working principle.
- Static and dynamic testing of self-contained breathing apparatus.
- Correct use of self contained breathing apparatus.
- Powered air-purifying respirators (Positive Pressure).
- Cleaning and disinfection of respiratory protective equipment.
- Understanding the (EN 136 : 1998 / EN 137 : 2006) evolution.
- Breathing air quality check (standard EN 12021).
- Smoke composition and toxic twins.

M3 - TRAINING MODULE 3 ESCAPE AND RESCUE

- Training modules 1 - Gas detection.
- Training module 2 - Respiratory protection.
- Personal self-rescue devices.
- Escape devices and solutions in use.
- Victim's rescue techniques from confined space manhole.
- First aid training.
- Anti-cyanide poisoning kits.

M1 - TRAINING MODULE 1

GAS DETECTION

Targeted audience

HSE managers, firefighters, operators and responders on industrial or mining sites, first aiders, law enforcement officers.

DETAILED CONTENT OF THE TRAINING MODULE

Everything you need to know about gases - fumes and their behavior:

Participants will acquire sufficient knowledge about different types of gas (EX, TOX, O₂, VOC) fumes and their behavior in ambient air and the impact of concentrations changes on the human body.

Basic fundamentals of gas detection :

Participants will understand the basics and physical principles of gas detection and the interpretation of the measurement units of gas concentrations used in accordance with international standards (VOL%, LEL, PPM, PPB).

Current sensor's technologies in use and working principles :

Participants will understand the operating principle of the various sensors technologies (EC, CatEX, IR, PID) and acquire the basic techniques and knowledge for choosing the right sensor to use with the single-gas or multi-gas detection instruments.

Everything you need to know about portable gas detection instruments :

Participants will learn how to correctly use and deploy portable gas detectors, their applications respective, as well as the regular tests required before and after every use.

Everything you need to know about fix gas detection systems :

Participants will learn about the fix gas and fire detection systems, as well as how to dimension a centralized full detection system with data transmission to the contrôler, alarms and control of external devices.

Confined space entry techniques and safety equipment used :

Participants learn the techniques involved in entering confined spaces, the procedures to be put in place to reinforce safety, the essential safety equipment and how to draw up access permits.

Understanding bump testing and calibration :

Participants will technically learn the principles and recommended frequency to perform calibration and bump testing of detection equipment and how and how often these actions should be carried out.

Duration

2.5 days

**Number of participants
per group :**

**8 participants
maximum**

M2 - TRAINING MODULE 2

RESPIRATORY PROTECTION

Targeted audience

HSE managers, firefighters, operators and responders on industrial or mining sites, first aiders, law enforcement officers.

DETAILED CONTENT OF THE TRAINING MODULE

Everything you need to know about gases - fumes and their behavior :

Participants will acquire sufficient knowledge about different types of gas (EX, TOX, O₂, VOC) fumes and their behavior in ambient air and the impact of concentrations changes on the human body.

Working principles of full and half face masks :

Participants will understand the operating principles and design of both full and half masks, as well as the possible issues and failures.

Combined filters working principle and selection :

Participants will understand how filters are designed and the filtering stages combinations for particles and gas molecules. Participants will also learn the selection techniques of the right level of filtration to ensure efficient protection against any toxic substance in a hazardous area.

Self contained breathing apparatus working principle :

Participants will learn about the operating and working principles of a self-contained breathing apparatus and all the components of the system (Full face mask, Lung demand valve, pneumatics, Gauge, whistle and the compressed air cylinder with valve).

Static and dynamic testing of self-contained breathing apparatus :

This course is devoted to learn how to perform functional (static and dynamic) testing of SCBAs before and after use. Participants will learn the test actions and procedures for a safe use of SCBA prior to the emergency response.

Correct use of self contained breathing apparatus :

Participants learn the correct and professional procedures for donning and doffing SCBA and develop reflexes for quick manual testing right before use.

Powered air-purifying respirators (Positive Pressure) :

respiratory protection has become an essential and widely dominant protection technique. Participants will understand how protection systems combining filtration and overpressure works and what are the limitations related.



Cleaning and disinfection of respiratory protective equipment :

Participants acquire the knowledge and techniques needed to clean and disinfect contaminated respiratory protection equipment after use.

Understanding the (EN 136 : 1998 / EN 137 : 2006) and evolution :

Participants will understand the requirements of the regulations and norms organizing the SCBAs manufacturing and testing, so the limits of protection that a SCBA can provide during operations in of high stress conditions can be understood.

Breathing air quality check (standard EN 12021).

In the end of this course participants are aware of the importance of the breathing air the quality and the dangers behind a contaminated breathing air, the techniques and tools to perform an air quality check.

Composition of the smoke :

The international community is raising the awareness about the composition of smoke. Participants will learn about the impact of the long term exposure to the toxic composition of smoke and what are the toxic twins.

Duration
2.5 days

**Number of participants
per group :**
**8 participants
maximum**

M3 - TRAINING MODULE 3

RESCUE AND ESCAPE

Targeted audience

HSE managers, firefighters, operators and responders on industrial or mining sites, first aiders, law enforcement officers.

DETAILED CONTENT OF THE TRAINING MODULE

Covering this training module requires the completion of both modules 1 and 2: (Detailed content previously mentioned)

- **Gas detection.**
- **Respiratory Protection.**

Implementing escape or rescue procedures requires a trained personnel with a good knowledge in gas detection and respiratory protection. These training modules will make the responders familiar with the rescue and escape devices used in an emergency response. Through this trainings the participants will reach a mandatory knowledge level to more on to specific courses.

Personal self-rescue devices :

Several types of self-rescue devices exists in the market for different applications and industrial environments. Participants are trained in self-rescue devices, their correct use in case of emergency response activity and how to select the proper rescue device.

Victim's rescue techniques from confined space manhole :

Work in confined spaces Is a common activity for a large proportion industry operators. Participants learn all the techniques and procedures related to the extraction of a victim from a confined space though a manhole.

First aid training :

First aid and resuscitation techniques are crucial when an incident occurs in an industrial environment: the right action at the right time can save a life. Participants are trained to be able to react and apply first aid when necessary.

Anti-cyanide poisoning kits :

Smoke is more deadly than fire. First-aiders often confuse CO and HCN poisoning. Participants learn about the toxic twins, how to identify the difference between CO and HCN poisoning and the importance of a Anti-cyanide poisoning kit and its use.

Duration
2.5 days

**Number of participants
per group :**
**8 participants
maximum**



DETAILS

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REGISTRATION

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