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Qualification Specification

Highfield Level 2 International Award in Basic H_2S Awareness and Use of EEBA (Onshore)

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Highfield Level 2 International Award in Basic H_2S Awareness and Use of EEBA (Onshore)

Introduction

This specification is designed to outline all you need to know to offer this qualification at your centre. If you have any further questions, please contact your centre manager.

Key facts

Assessment method:	Multiple-choice examination and Practical Assessment
Guided learning hours (GLH):	6 hours

Qualification overview and objective

The objective of the qualification is to support a role in the workplace. It is intended for learners already working in industries/environments where there is a significant risk of exposure to hydrogen sulphide (H_2S) gas (eg: oil and gas industry, wastewater treatment plants, rigs, confined spaces, petroleum sector, chemical Industry, laboratories etc).

This qualification will enable learners to understand the properties of H_2S; identify the sources and preventive measures to minimise the risk of H_2S; suitably respond to H_2S alarm and understand appropriate escape response to a H_2S emergency incident. Learners will understand the importance of the respiratory protective equipment and detectors and how to properly use and how to check the equipment before use.

Important note: Highfield International has developed this qualification referring to standards and best practice from industry experts in the Oil and Gas sector.
Highfield International recommends that you contact the relevant government department in the country that you want to deliver this qualification to ensure that local laws are being adhered to and that there are no additional approval requirements. It may be that you are required to register as a training provider within the country itself. Highfield approves centres based on its own criteria but does not represent any other organisations or departments.

Entry requirements

This qualification is for learners 18+ years of age, who are or will be working in industries/environments where Hydrogen Sulfide is a recognised hazard. Centres **must** assure themselves that learners are physically capable of completing the practical assessment.

Guidance on delivery

The total duration for this qualification is **6** hours. This is the total qualification time in which an average learner is taught by means of lectures, tutorials, supervised study and practical demonstrations, including the time spent on assessment. The delivery of this programme may be adjusted in accordance with learners' needs and/or local circumstances.

For effective delivery of this qualification and to ensure that every learner is thoroughly assessed on the theoretical and practical elements, the tutor to learner ratio in a batch **must not exceed 1 tutor for 8 learners.**

Guidance on assessment

This qualification is assessed in **two** parts:

1. **Part one – Centre marked multiple-choice questions – theory assessment:** this is assessed through a multiple-choice examination containing **10** questions. The duration of the assessment is **30 minutes.** Learners must answer a minimum of **8** questions correctly to pass this exam.

   The multiple-choice exam papers will be available to download from the members' area of the website. Learners can use the **Exam Answer Sheet (EAS) to record their answers.** Centre assessor can use **Oral questioning** for learners who are unable to complete the exam in English. The assessor must record the responses of learners **on the knowledge exam papers** and confirm on the paper if the exam was completed via oral questioning.

2. **Part two – practical demonstration** – this is assessed by learners performing various practical activities as listed within the Highfield **assessment pack**. This assessment pack is available from the download section of the 'member's area' of the Highfield website. This practical assessment will be marked by the centre assessor using the practical assessment matrix within the assessment pack. **Evidence** of videos and images of the practical assessments **must be stored by the centre for audit by Highfield** for upto 1 year post assessment date.

Centres must take all reasonable steps to avoid any part of the assessment of a learner (including any internal quality assurance and invigilation) being undertaken by any person who has a personal interest in the result of the assessment.

The completed assessment documents (for both practical and knowledge assessment) **must be** maintained by the centre for upto **1 year** post certification of learners. These must be produced when requested for external quality assurance reviews by Highfield.

Certification validity: This qualification is valid for **one year, after which a requalification is required.**

Centre requirements

To deliver this qualification, centres **must** have the following resources in place:

- An Emergency Escape Breathing Apparatus – EEBA***** - one hood **and** one mask EEBA **each for every learner in the batch and one for the tutor**
- H2S detectors***** (preferably two types - Personal H2S detectors/fixed detectors/multi-gas detectors)
- air compressor or a provision of filling the cylinder with proper breathing air supported by air quality test certificates by a third-party approved company
- Alarm system to demonstrate and test on response to alarm
- cleaning and sanitising material, procedures for the equipment
- Facial hair policy document made available to learners before they start the course
- adequate training and assessment facilities to accommodate learners on course; and
- venue which is safe, meets local regulations, has adequate ventilation, lighting sufficient for learners to read easily, and temperature suitable to maintain the comfort of learners for knowledge and practical training and assessment. It is also required that training rooms are able to cater for people with special needs (where appropriate – please refer to the Highfield Reasonable Adjustment Policy).

****ensure there is inspection, testing and service of all equipment as per manufacturer's instructions.***

Centres **must** notify Highfield of their training schedule **at least 3 - days in advance**. Highfield will conduct announced and un-announced audits to ensure that the training and the assessment is conducted to the right standard.

Tutor/Assessor requirements

Highfield requires that the nominated tutors/assessors for this qualification meet the following conditions:

- hold a relevant subject area qualification, which could include any of the following:
  - Highfield Level 4 Award in Health and Safety in the Workplace (RQF or International) **and** a valid H_2S level 3 certification; **OR**
  - National/International General Certificate in Occupational Safety and Health **and** a valid H_2S level 3 certification; **OR**
  - any other qualification deemed appropriate by Highfield

- have a minimum of **2 years of working experience/safety inspection experience** in similar work environments with risk of Hydrogen Sulphide; **or** any other relevant work experience deemed appropriate by Highfield.

- hold a relevant H_2S focused train the trainer certificate

Guidance on quality assurance

Highfield requires centres to have in place a robust mechanism for quality assurance. The quality assurance checks of the training delivery and assessments must be completed by a competent person at the centre, who must ensure that all Highfield training and assessment paperwork is completed to the correct standard and within the timescales advised by Highfield. Persons completing the quality assurance function should not have been involved in any aspect of the delivery/assessment of the course they are quality assuring.

Highfield will support centres by conducting ongoing engagements to ensure and verify the effective and efficient delivery of the qualification.

Reasonable adjustments and special considerations

Highfield has measures in place for learners who require additional support. Centres can allow 25% additional exam time for learners with English as a second language, when they sit the English exam. Centres must inform Highfield on the invigilation declaration document, of any learners who were allowed additional time. Please refer to Highfield Qualifications' Reasonable Adjustments Policy for further information/guidance.

https://www.highfieldinternational.com/download

ID requirements

It is the responsibility of the centre to have systems in place to ensure that the person taking an assessment is indeed the person they are claiming to be. All centres are therefore required to ensure that each learner's identification is checked before they undertake the assessment. Highfield Qualifications recommends the following as proof of a learner's identity:

- national identity card; valid passport (any nationality); signed photo card driving licence
- valid warrant card issued by police, government department or equivalent
- other photographic ID card, e.g. employee ID card (must be current employer), student ID card, travel card

If a learner is unable to produce any of the forms of photographic identification listed above, a centre may accept another form of identification containing a signature, for example, a credit card. Identification by a third-party representative, such as a line manager, human resources manager or invigilator, will also be accepted.

For more information on learner ID requirements, please refer to Highfield Qualifications' Core Manual.

Progression opportunities

On successful completion of this qualification, learners may wish to continue their development by undertaking the following qualification:

- Highfield level 3 International Award in Health and Safety qualification
- Highfield level 4 International Award in Health and Safety qualification

Useful websites

- www.highfieldqualifications.com (Highfield Qualifications)
- www.highfield.co.uk (Highfield Products)
- https://www.assp.org/ (American Society for Safety Professionals)
- https://www.ansi.org/
- www.hse.gov.uk (Health and Safety Executive)
- www.healthandsafetyatwork.com
- Other local regulations as available.

Recommended training material

Highfield Basic H2S Awareness and Use of EEBA (Onshore) – training presentation.

Appendix 1: Qualification content

Unit: **Basic H_2S Awareness and use of EEBA**
GLH: 6
Level: 2

Learning outcomes	**Assessment criteria**
The learner will	***The learner can***
1. Understand the characteristics of Hydrogen Sulphide	1.1 Define what is H_2S 1.2 Identify the **characteristics** of H_2S and its sources in **different environments** 1.3 Outline the responsibilities of the employer, employees and HSE officers with regards to safety against H_2S
2. Understand the impact of Hydrogen Sulphide in the workplace	2.1 Identify the symptoms caused due to exposure to H_2S. 2.2 Outline the effects on employee health due to exposure to H_2S based on **individual vulnerability of people** 2.3 Identify the **exposure limits** for H_2S for workplaces, based on local and international best practice.
3. Know the procedures for testing, measuring, and controlling access to areas with high risk of Hydrogen Sulphide	3.1 Identify the different **zones**/areas of work based on H_2S levels and the permit to work and safety requirements for working in these zones 3.2 Identify the **different types** of H_2S detectors and **different types** of respiratory equipment 3.3 Demonstrate how to check and how to use H2S detector 3.4 Demonstrate how to check and don the EEBA within 60 seconds: - with a hood - with a mask
4. Be aware of the emergency procedures and preparedness in case of a Hydrogen Sulphide emergency.	4.1 Demonstrate appropriate response to the H_2S alarm system 4.2 Outline the importance of a safety checklist and emergency escape plans and procedures

Amplification
1.2 **Characteristics** of H_2S: physical state, colour, odour, boiling point, melting point, corrosive, reactivity, solubility, explosive limits, flammability **Sources** of H_2S in **different environments:** - natural sources – decomposition of organic material, Sewage, stagnant water - industrial sources - Oil & Gas fields, water treatment plants, and chemical plants

2.2 **Individual vulnerability of people** to cover age, pre-existing health conditions, lifestyle (smoking/drugs/alcohol), body weight etc.

2.3 **Exposure limits for** H_2S for workplaces, based on local and international best practice:

- WEL – Workplace exposure limit
- IDLH – Immediately dangerous to life and health - limit
- PEL – Permissible exposure limit

3.1 C**ategories/zones/areas of work**

- Red Zone, Amber Zone, Yellow Zone and Green Zone.

Trainers can refer to different categorisations based on local regulation and company policies.

3.2 **Type of detectors**

- Personal H_2S monitors.
- H_2S fixed detection systems.
- Multi-Gas detectors
- Remote wireless monitors

Respiratory equipment

Emergency Escape Breathing Apparatus (EEBA)
Self-Contained Breathing Apparatus (SCBA)