

## Section 6

### Syllabus

The qualification is structured into five sections, each with an indicative time allocation:

| Section |  | Time allocation |
|---------|--|-----------------|
| 1       | Good practice in asbestos removal and remediation  | 10%             |
| 2       | Asbestos removal control plan                      | 15%             |
| 3       | Air sampling for asbestos                          | 15%             |
| 4       | Enclosures, clearance air monitoring and reporting | 20%             |
| 5       | Practical work                                     | 40%             |

#### 1 Good practice in asbestos removal and remediation (10%)

##### Educational objectives

Candidates should have a clear understanding of the health effects relating to asbestos and current best practice for asbestos removal and remediation.

##### 1.1 Health effects

- 1.1.1 Outline the full range of health effects of asbestos ranging from the benign to the terminal in the light of results from epidemiological studies carried out on asbestos workers.
- 1.1.2 Review influential publications.
- 1.1.3 Cover dose-response relationships, the effects of smoking while working with asbestos and the risks to health from low level exposure.

##### 1.2 Good practice methodology

- 1.2.1 Outline the best practice methods for asbestos removal, including the duties of the asbestos removal contractor, employer, building owner and laboratory analytical service.
- 1.2.2 Refer to good practice techniques for asbestos removal and remediation.
- 1.2.3 Review generally accepted control limits governing exposure to airborne asbestos.
- 1.2.4 Review generally accepted clearance indicators, together with the underlying philosophy of setting such limits.

#### 2 Asbestos removal control plan (15%)

##### Educational objectives

Candidates should be thoroughly familiar with current good practice in the design and construction of enclosures for asbestos remediation, and must be able to identify examples

of poor working procedures in a practical situation.

- 2.0.1 Discuss the importance of the asbestos removal control plan, and the use of control measures to reduce airborne asbestos emissions and to limit the spread of debris.
- 2.0.2 Look in detail at the design, construction, testing and maintenance of enclosures and negative pressure air management systems.
- 2.0.3 Discuss the role and use of personal protective equipment, including hygiene facilities. Cover the importance of cleaning the area and the safe removal and disposal of debris.
- 2.0.4 Describe the various stages of clearance testing and its certification, and the requirements of the asbestos removal control plan. This includes work areas, enclosures, hygiene facilities, transit routes and waste disposal.

### 3 Air sampling for asbestos (15%)

#### Educational objectives

Candidates should have a detailed knowledge of the best practice methods for sampling of airborne asbestos fibres.

#### 3.1 *Types of air sampling*

- 3.1.1 Detail the types of air sampling that can be carried out.
- 3.1.2 Review sampling strategies and their relevance for identification of sources of contamination [e.g. requirements and locations for leak testing, background testing, reassurance sampling and personal monitoring]. Review assessment of personal exposure and the checking of efficiency and effectiveness of control measures.
- 3.1.3 Describe the set-up of air sampling trains for monitoring of airborne fibre concentrations, calibration techniques and minimisation of sampling errors.

#### 3.2 *Air sampling equipment and procedures*

- 3.2.1 Discuss the requirements of the WHO counting method in relation to sampling of airborne asbestos.
- 3.2.2 Discuss the requirements for recording calibration and site sampling information to ISO 17025 standards.
- 3.2.3 Overview of fibre counting procedures, including the process of sending air samples to a laboratory for analysis and receiving of results.

### 4 Enclosures, clearance air monitoring and reporting (20%)

#### Educational objectives

Candidates should be able to describe the methods used to inspect and test an enclosure used for asbestos removal, and to describe the various stages for clearance inspections.

#### 4.1 *Safety aspects*

- 4.1.1 Discuss face fit testing, the selection and use of PPE and RPE, its place in the

hierarchy of control and the likely protection it gives.

- 4.1.2 Describe transit and decontamination procedures that may need to be followed.
- 4.1.3 Discuss the medical records that may need to be kept, together with other risk assessments that may be necessary.

#### 4.2 *Enclosure evaluation*

- 4.2.1 Describe inspection procedures to detect any deficiencies in enclosures, including smoke testing, leak testing, and identification of faults in enclosure design.
- 4.2.2 Emphasise the need to include the decontamination unit and any other equipment in the evaluation of the enclosure.

#### 4.3 *Thorough visual inspections and clearance sampling*

- 4.3.1 Describe when and how visual inspection and clearance sampling is carried out, what must be looked for and the types and frequency of dust disturbance which must take place prior to clearance sampling.
- 4.3.2 Describe clearance inspections of enclosures and decontamination units, and give advice as to where asbestos may be found after contractors have completed stripping operations.
- 4.3.3 Examine guidance documents in relation to clearance sampling, the meaning of 'thoroughly visually clean' and how this is assessed.

#### 4.4 *The clearance indicator threshold and the role of clearance sampling*

- 4.4.1 Discuss the significance of the clearance indicator threshold and its application to clearance sampling.
- 4.4.2 Discuss the requirements imposed by ISO 17025 accreditation and the role of the authorities (or national equivalents) in ensuring that certification is carried out with integrity.
- 4.4.3 Discuss areas of potential conflict of interest and action to be taken if undue pressure is exerted on the sampler.

#### 4.5 *Final assessment post-enclosure/work area dismantling*

- 4.5.1 Describe areas for inspection outside the enclosure and the disposal of asbestos-containing materials in compliance with the asbestos removal control plan.

#### 4.6 *Clearance certificates*

- 4.6.1 Identify who must issue and who must receive the clearance certificate, and what it must contain.
- 4.6.2 Clarify the status of any conditions specified in the certificate.

#### 4.7 *Communications and reporting*

- 4.7.1 Explain the need for clear communications with colleagues and clients.
- 4.7.2 Describe the requirements for formal reporting of analytical results and the clearance.

## 5 Practical work (40%)

### Educational objectives

Candidates should be able to carry out the full air monitoring procedure, correctly use PPE/RPE and personal decontamination, and understand the various stages of clearance inspections through to issuing clearance certificates.

#### 5.1 *Asbestos Removal Control Plan (25%)*

5.1.1 Reviewing the Asbestos Removal Control Plan and comparison with site details.

#### 5.2 *Air sampling (15%)*

5.2.1 Confirmation of the candidate's ability to do all relevant calculations relating to the number of samples to be taken for clearance, the air volume for each sample.

5.2.2 Setting up and calibrating of relevant sampling trains for all types of asbestos monitoring and sampling strategies.

#### 5.3 *Clearance testing (45%)*

5.3.1 Confirmation of the candidate's full knowledge of all of the elements of the clearance procedure.

5.3.2 Enclosure inspection - prior to work and to detect deficiencies, smoke testing, leak testing and enclosure design.

5.3.3 Visual clearance of enclosure post remediation.

5.3.4 Use of PPE/RPE and personal decontamination procedures.

5.3.5 Issuing a clearance certificate.

#### 5.4 *Role plays (15%)*

5.4.1 Dealing with awkward and pressured situations.