

## Proficiency Module Syllabus

### P405 - Management of Asbestos in Buildings

#### Aim

To provide candidates with practical knowledge and skills to manage asbestos in buildings and to provide a basic knowledge of asbestos removal procedures.

#### Prior Knowledge

Candidates for this course are expected to be aware of the contents of The Control of Asbestos Regulations 2012 and in particular Regulation 4 and the supporting Approved Code of Practice and guidance L143 Managing and working with asbestos.

#### Content

The syllabus is structured into five sections:

	<b>Time Allocation</b>
<b>1 Legislation</b>	<b>20%</b>
<b>2 Management of Asbestos in Buildings</b>	<b>30%</b>
<b>3 Asbestos Remediation</b>	<b>20%</b>
<b>4 Role of Laboratory/Analysts</b>	<b>5%</b>
<b>5 Practical Work</b>	<b>25%</b>

**Note:** Reference is made in this syllabus to HSE guidance and other documentation. These may not be the most up-to-date relevant publications from HSE/other sources and are intended as guidance for candidates only.

#### 1 Legislation (20%)

**Educational Objectives** Candidates should gain a clear understanding of the legislation relating to asbestos and those aspects of other health and safety regulations relevant to the management of asbestos in buildings.

##### 1.1 *Health and Safety at Work etc. Act 1974*

1.1.1 Discuss the basic concepts of this enabling legislation with particular reference to employers' responsibilities for asbestos.

##### 1.2 *Health and Safety Regulations*

Review all the relevant current Regulations on asbestos:

1.2.1 Control of Asbestos Regulations 2012, especially the duty to manage asbestos in non-domestic premises.

1.2.2 Management of Health and Safety at Work Regulations 1999.

1.2.3 Hazardous Waste Regulations 2005.

1.2.4 The Construction (Design and Management) Regulations 2015.

##### 1.3 *Approved Codes of Practice*

1.3.1 Discuss the provisions of the Approved Codes of Practice for the CAR and the status of the ACOP. (1)

1.3.2 Consider the management of asbestos removal projects, with particular attention being paid to legal duties imposed by the Health and Safety at Work Act, the Control of Asbestos Regulations and the various Codes of Practice which apply. (1) (11-) (12)

## 1.4 *Health Effects of Asbestos*

- 1.4.1 Describe the full range of health effects ranging from the benign (pleural plaques) to the terminal (mesothelioma) in the light of results from epidemiological studies carried out on asbestos workers.

## 2 **Management of Asbestos in Buildings (30%)**

**Educational Objectives** Candidates should be able to identify the main types of asbestos materials in buildings, the appropriate means of recording their locations, and be fully aware of the procedures and methods for the prevention of future damage to asbestos-containing materials. Candidates should be able to develop an action plan on the basis of survey information and properly manage the asbestos that is remaining in the premises by suitable schemes.

### 2.1 *Types and Uses of Asbestos in Buildings*

- 2.1.1 Use the HSE (2) and/or the DETR (3) as a primary source of information on products and their locations in buildings.
- 2.1.2 Explain the physical and chemical properties of asbestos which have determined the use to which it has been put by industry.
- 2.1.3 Discuss the three types of asbestos which have found significant commercial use (amosite, chrysotile and crocidolite) in relation to sprayed and thermal insulation, insulating boards, coatings, cement products and other reinforced products (e.g. vinyl tiles, roofing felts) commonly used in building construction.
- 2.1.4 Discuss the uses and composition of other asbestos products likely to be used or found inside buildings on plant, machinery or domestic appliances (e.g. textiles, friction materials, seals, gaskets etc.).
- 2.1.5 Describe the use and occurrence of the other types of asbestos particularly as possible contaminants in other minerals.

### 2.2 *Recording and Labelling*

- 2.2.1 Outline the need for systems of recording and labelling asbestos identified as being present in buildings and the procedures for preventing damage to asbestos-containing materials.

### 2.3 *Reporting and Management Plan*

- 2.3.1 Conversion of asbestos survey report data into a proper working asbestos register with action plan and programmed reviewing. Full understanding of the principles and practice of material and priority assessments.

### 2.4 *Asbestos Register*

- 2.4.1 Emphasise the need for the maintenance of asbestos registers and the use of all management actions to minimise exposure to asbestos in buildings, including permits to work to control the work of sub-contractors/maintenance operatives.

## 3 **Asbestos Remediation (20%)**

**Educational Objectives** Candidates should be thoroughly familiar with current good practice for asbestos remediation, including encapsulation, sealing and removal operations and should be able to identify examples of poor working procedures in practical situations.

### 3.1 *Preparation*

- 3.1.1 Discuss the steps required in a job specification, preparation of a plan of work by the contractor, tender evaluation and the various roles required under the CDM Regulations for management of the site.
- 3.1.2 Include health and safety aspects including emergency procedures. (1) (9)

### 3.2 Enclosures

With reference to HSE Guidance Notes (11) and Approved Codes of Practice (1), describe with practical examples the following:

- 3.2.1 Correct principles of design, erection, and operation of an enclosure for asbestos removal.
- 3.2.2 Methods of enclosure examination and the documentation associated with the enclosure.
- 3.2.3 Correct facilities and procedures for entry, exit and decontamination.
- 3.2.4 The use of negative pressure monitors.
- 3.2.5 Use of secondary enclosures.

### 3.3 Remediation Measures

With reference to HSE Guidance Notes (11) and Approved Codes of Practice (1), describe with practical examples the following:

- 3.3.1 Techniques for encapsulation of asbestos-containing materials.
- 3.3.2 Techniques for sealing asbestos-containing materials.

### 3.4 Removal Procedures

- 3.4.1 Describe the various control measures available to a remediation company to ensure that asbestos waste is fully contained, and dust levels are kept as low as is reasonably practicable inside the enclosure. (11)

### 3.5 Waste Removal

- 3.5.1 Describe the requirements for removal, storage and disposal of waste from an enclosure. (1) (11) (12)

## 4 Role of the Laboratory/Analyst (5%)

**Educational Objectives** Candidates should be able to understand the role of the analyst, air monitoring techniques and the four-stage clearance procedure.

### 4.1 Role of Analyst

- 4.1.1 Describe the role of the analyst as a competent person/consultant. (14)
- 4.1.2 Understand the requirements for quality management systems in accordance with ISO17025 (13) and accreditation by UKAS.

### 4.2 Air Monitoring and Other Techniques

- 4.2.1 Identify the various stages where air monitoring must be employed and discuss other inspection techniques such as the dust lamp, smoke tubes, negative pressure monitors which are also useful for checking of the effectiveness of the work and the control measures. (1) (11) (14)
- 4.2.2 Discuss the qualitative and quantitative limitations of microscopy methods for counting asbestos fibres. (14)

### 4.3 Four- Stage Clearance Procedure and Testing of Enclosures

- 4.3.1 Discuss all of the essential requirements of four- stage clearance procedure, clearance testing and reoccupation certification for an asbestos enclosure and the decontamination unit. (1) (14)

## 5 Practical Work (25%)

**Educational Objectives** Candidates should be able to convert survey data into a building management action plan, carry out a thorough appraisal of contractor documentation and methods, and appreciate the pressures and demands on various parties during an asbestos removal project.

### 5.1 *Pre-start and post remediation Inspections (20%)*

- 5.1.1 Understand how to carry out inspections of an enclosure and hygiene unit both prior to works and post remediation.
- 5.1.2 This should include smoke testing, checks on paperwork and method statements.

### 5.2 *Role Playing (10%)*

- 5.2.1 Understand the roles played by the various parties including the client, contractor's contract manager and supervisor, HSE Inspector/EHO, analyst and TU representative, etc.

### 5.3 *Method Statement (40%)*

- 5.3.1 Be able to assess the components of method statements that have been submitted by a contractor for a project.
- 5.3.2 Be able to offer appropriate advice.

### 5.4 *Survey and Action Plan (30%)*

- 5.4.1 Be able to convert survey data into an action plan.
- 5.4.2 This must include detailed understanding of the principles and application of material and priority assessments.

## Relevant Documents

- (1) L143 (2013) Managing and working with asbestos. Control of Asbestos Regulations 2012, Approved Code of Practice and guidance
- (2) HSG264 (2012) Asbestos: The survey guide
- (3) Asbestos and man-made mineral fibres in buildings: Practical Guidance, Thomas Telford DETR (1999)
- (4) Managing asbestos in buildings: A brief guide (2012) INDG223 (rev5)
- (5) HSG227 (2002) A comprehensive guide to managing asbestos in premises, pages 48-69
- (6) HSG227 (2002) A comprehensive guide to managing asbestos in premises, Appendix 2 paragraphs 5-6 plus table 2
- (7) HSG227 (2002) A comprehensive guide to managing asbestos in premises, Appendix 3
- (8) HSG227 (2002) A comprehensive guide to managing asbestos in premises, Appendix 4
- (9) L153 (2015) Managing health and safety in construction, Construction (Design and Management) Regulations (2015), Approved Code of Practice
- (10) A short guide for clients on the Construction (Design and Management) Regulations 2015 INDG 411
- (11) HSG247 (2006) Asbestos: The licensed contractors' guide
- (12) HSG 210 (2012) Asbestos Essentials
- (13) ISO 17025 (2005) General requirements for the competence of testing and calibration laboratories
- (14) HS248 (2005) Asbestos: The analysts guide for sampling, analysis and clearance procedures

## Course Length

This course will require approximately 24 hours of study time, of which at least 18 hours will be taught and 6 hours will be independent (in the candidates' own time).

## Examinations

Candidates are required to pass two written examinations to be awarded the module.

### A Written Theory Examination

This is a closed-book examination comprising 40 short-answer questions to be answered in two hours. The examination covers sections 1 to 4 of the syllabus in proportion to the time allocation given on the front page the syllabus. The examination is overseen by a BOHS invigilator.

### B Written Practical Examination

This is an open-book practical examination with up to 35 questions, illustrated with photographs and including diagrams and extracts from documents, to be answered in two hours. The examination covers section 5 of the syllabus in proportion to the time allocation shown in section 5. Candidates are permitted to access relevant reference material but not electronic databases, computers, tablets or mobile phones. Communication between candidates is not permitted. The examination is overseen by a BOHS invigilator.

## Certification

Candidates who pass both examinations within 12 months will be awarded a ***Proficiency Certificate in Management of Asbestos in Buildings.***