The British Occupational Hygiene Society
Faculty of Occupational Hygiene

PROFICIENCY MODULE SYLLABUS

P405: Management of Asbestos in Buildings

Aim: To provide a practical knowledge and the skills to be able 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 2006 and in particular regulation 4 and the supporting Approved Code of Practical L127.

Content:	**Topic**		**Time Allocation**
	1	**Legislation**	**20%**
	2	**Management of Asbestos in Buildings**	**30%**
	3	**Asbestos Remediation**	**20%**
	4	**Role of Laboratory/Analysts**	**5%**
	5	**Practical Work**	**25%**

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

1 Legislation (20%)

1.1 Health and Safety at Work etc Act 1974

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

1.2 Asbestos Regulations

Review all the relevant current Regulations on asbestos:

- Control of Asbestos Regulations 2006 especially the duty to Manage Asbestos in Non-Domestic Premises
- Management of Health and Safety at Work Regulations (1999)
- Hazardous Waste Regulations 2005
- Construction (Design and Management) Regulations 2007
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995.

Maintenance and testing of enclosures and the need for control other than RPE. Consider the management of asbestos removal projects, 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) (6) (7).

1.3 Approved Codes of Practice

Discuss the provisions of the Approved Codes of Practice for the CAR and the status of the ACOP (1) (2).

1.4 Health Effects of Asbestos

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.

Educational Objectives The student must have a clear understanding of the legislation relating to asbestos.

2 Management of Asbestos in Buildings (30%)

2.1 Types and Uses of Asbestos in Buildings

Use the HSE (3) and/or the DETR (4) as a primary source of information on products and their locations in buildings. Explain the physical and chemical properties of asbestos which have determined the use to which it has been put by industry. 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.

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.) Describe the use and occurrence of the other types of asbestos particularly as possible contaminants in other minerals.

2.2 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 Conversion of asbestos survey report data in to a proper working asbestos register with action plan and programmed reviewing. Full understanding of material and priority assessments.

2.4 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.

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

3 Asbestos Remediation (20%)

3.1 Preparation

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. Other health and safety aspects including emergency procedures must be included (1) (6).

3.2 Enclosures

With reference to HSE EH Guidance Notes (7) and Approved Codes of Practice (2), describe with practical examples the following:

- correct principles of an enclosure for asbestos removal
- Methods of enclosure examination and the documentation associated with the enclosure
- correct procedures for entry, exit and decontamination
- the use of negative pressure monitors
- use of secondary enclosures.

3.3 Remediation Measures

- encapsulation
- sealing.

3.4 Removal Procedures

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

3.5 Waste Removal

Describe the requirements for removal, storage and disposal of waste from an enclosure (1) (7) (8).

Educational Objectives The student must be thoroughly familiar with current good practice in enclosures for asbestos remediation and must be able to identify examples of poor working procedures in a practical situation.

4 Role of the Laboratory/Analyst (5%)

4.1 Role of Analyst

Describe the role of the analyst as a competent person/consultant. (14) Understand the requirements for quality management systems in accordance with ISO17025 (9) and accreditation by UKAS.

4.2 Air monitoring and Other Techniques

Identify the various stages where air monitoring must be employed and discuss what 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) (7) (10).

Discuss the qualitative and quantitative limitations of microscopy methods for counting asbestos fibres (10).

4.3 Four Stage Clearance Procedure and Testing of Enclosures

Discuss all of the essential requirements of four stage clearance procedure, clearance testing and re-occupation certification for an asbestos enclosure and the decontamination unit (1) (10).

Educational Objectives The student must be able to understand the role of the analyst, air monitoring techniques and the four stage clearance procedure.

5 Practical Work (25%)

5.1 Pre-start Inspections

As part of section 3 there must be practical demonstrations of a pre-start enclosure inspection and smoke test, checks of paperwork and methods statements.

5.2 Role Playing

The practical must include role playing with the various parties including the Client, Contractor's contract Manager and supervisor, HSE Inspector/EHO, analyst and TU representative.

Educational Objectives The student must have a good understanding of the pressures and demands on various parties during an asbestos removal project.

References

(1) HSE ACOP (L143 (2006) Work with Materials containing Asbestos
(2) HSE ACOP (L127) 2006 Management of Asbestos in Non-Domestic Premises
(3) HSE Guidance HSG 264 Asbestos: The survey guide
(4) Asbestos and Man Made Mineral Fibres in Buildings, Practical Guidance. Thomas Telford DETR (1999)

(5) HSE Guidance INDG 223 (2001) Managing Asbestos in Workplace Premises
(6) HSC ACOP and Guidance HSG 224 (2001) Managing Health and Safety in Construction. Construction (Design and Management) Regulations 2007
(7) HSG 247 (2006) Asbestos: The Licensed Contractor's Guide
(8) HSE Guidance Note HSG 213 (2001) Introduction to Asbestos Essentials
(9) ISO 17025 (2005) General Requirements for the Competence of Testing and Calibration Laboratories
(10) HSE Guidance HSG 248 Asbestos: The Analyst's Guide for sampling, analysis and clearance process

Course Length

It is envisaged that this course will be conducted over 3 days with a further 1 day for the examination and assessment.

This course will require 24 hours of study time (teaching and practical), some of which may need to be undertaken in the candidates own time.

Course Examination/Assessment

The students would be assessed as follows:

- A 90 minute BOHS examination consisting of 40 short answer questions
- A practical assessment carried out by an approved practical assessor as detailed below.

Practical Assessment

The assessment must include:

- Method statement evaluation report. The student will be required to assess a method statement submitted by a contractor for a project and write a report on items of improvement. This must be marked against a marking schedule
- Candidates must demonstrate their knowledge of how to carry out an enclosure and hygiene unit inspection both prior to works and post remediation
- Evaluation of the ability to convert survey data into an action plan.

Full details of the practical assessment requirements are provided as a separate document GE.2 P405 Practical Requirements.

Successful completion of the above will lead to a:

'PROFICIENCY CERTIFICATE' in
Management of Asbestos in Buildings