



The Chartered  
Society for Worker  
Health Protection



# Certificate of Competence

## Asbestos

### Qualification Guide

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# 1. Qualification Overview

## 1.1 Qualification Introduction

The **Certificate of Competence (CoC) in Asbestos** is for candidates wanting to establish their competence in the specific field of asbestos, and follows on from successful completion of the appropriate Occupational Hygiene or Proficiency modules.

In addition to having passed the appropriate module(s), candidates should also have accumulated a minimum of three years of relevant experience, in order to be eligible to apply for a Certificate of Competence in Asbestos.

The BOHS and OHTA educational modules required for this qualification, by either pathway, are BOHS level 4 courses whereas the CoC Asbestos is a BOHS level 5 qualification. Thus, candidates should expect that they will need to demonstrate their abilities at this higher level. The CoC in Asbestos Qualification has 13 UK educational credits which requires a minimum 130 hours of learning experience. This experience will include time attending lectures, practical work both as tutorials and as personal practice, experience learning, document preparation and the professional discussion.

There are two routes to this qualification, depending on a candidate's previous experience and qualifications (see appendix 1

- **Pathway 1.** Candidates taking this pathway from the BOHS Proficiency modules, need to satisfactorily complete a **written assignment** and a **professional discussion**.
- **Pathway 2.** Candidates taking this pathway, from the OHTA/BOHS W504 module or other equivalent BOHS modules, need to satisfactorily complete a **portfolio of evidence**, a **written assignment** and a **professional discussion**.

Overall, the combination of the assessment methods aims to probe the candidate's knowledge, understanding of UK legislation as well as operational and practical skills in the subject area.

The Certificate of Competence in Asbestos is only awarded to those candidates who satisfy the examiners as to their knowledge in that subject and demonstrate by their education, training and experience that they are competent to practice in the subject field.

Successful candidates are awarded the **Certificate of Competence in Asbestos** and are entitled to use '**CoCA**' as post nominal letters after their names.

The allowed timeframe for this qualification is **18 months** from the point of acceptance, and candidates are advised to check the BOHS website for information to help them with planning their time effectively.

## 1.2 Entry Requirements

Applicants for this qualification are expected to demonstrate that they have **three years' professional experience**. This experience needs to include some management including preparation of quotations/tenders, discussions with workers /colleagues/clients regarding relevant subject matters, development of procedures, and control recommendations.

The first route (see **Pathway 1** in appendix 1) to this qualification is for candidates who have attained all of the P401, P402, P403, P404 and P405 modules.

The second route (see **Pathway 2** in appendix 1) to this qualification is for candidates who have attained the OHTA/BOHS W504 module or equivalent BOHS modules such as S301 module. [This latter course is no longer available).

Candidates will be required to complete an application form showing their previous qualifications and experience. BOHS will review the application, and allocate the candidate to the appropriate pathway according to the qualifications they hold.

Applicants should note that the components of this qualification are assessed online, and therefore access to a computer and the internet is essential.

## 1.3 Application Procedure

Applicants may commence this qualification by submitting an online application form. The form is located on the BOHS website on the 'Certificate of Competence' page. Applicants should follow the instructions for completion carefully. Applications are considered on an academic and relevant professional experience basis to ensure that entry requirements have been met, using all information provided. Candidates will be sent an email to inform them of the outcome of their application.

There is no charge for the application. Candidates are liable to pay fees for each component as they progress through their qualification. A full list of current fees is available on the BOHS website.

## 1.4 Using the Online System

Candidates will create their own account on [www.bohs-hub.org](http://www.bohs-hub.org), which will then give them access to:

- Pay for each qualification component
- Submit the necessary assessment documents, such as a written assignment or portfolio of evidence
- View feedback comments and assessment results
- Book the professional discussion appointment

## 1.5 Using this Guide

The remainder of this guide goes into detail for each assessment method and provides candidates with further information.

## 2. Portfolio of Evidence

### 2.1 General Information

The Portfolio of Evidence is a required component for candidates following **Pathway 2** towards the **Certificate of Competence in Asbestos**.

The portfolio of evidence will allow candidates to demonstrate their knowledge, experience learning, operational and practical skills in the subject.

Candidates who have been allocated to **Pathway 1** are not required to complete this element of the assessment and should move to section 3 of this guide.

### 2.2 Objective of the Portfolio of Evidence

To prepare a portfolio of evidence that demonstrates the breadth and depth of technical competence in occupational hygiene practice within the field of asbestos.

The purpose of the written assessment is for the candidate to demonstrate:

- a) Their knowledge and practical experience in airborne fibre sampling and slide counting, asbestos surveys and microscope identification of asbestos types
- b) Their knowledge and practical experience of asbestos removal and including clearance procedures
- c) Their knowledge and practical experience in managing asbestos-containing materials in buildings

### 2.3 Contents of the Portfolio of Evidence

The portfolio of evidence must satisfy each of the assessment criteria listed below and be dated within the last five years;

Assessment Method	Evidence Criteria
1. Confirmation of the candidate's participation in a laboratory QA scheme for bulk sample identification.	Either a copy of the AIMS submission identifying the candidate or a verified copy of a testing laboratory's internal QA scheme showing the candidates successful participation.
2. Confirmation of the candidate's participation in a laboratory QA scheme for fibre counting and of the candidate's ability to undertake air monitoring.	Either a copy of the RICE submission identifying the candidate or a verified copy of a testing laboratory's internal QA scheme showing the candidates successful participation, <b>AND</b> A verified copy of an air monitoring certificate identifying the candidate as the analyst.

3. Verified copies of two asbestos survey reports undertaken and produced by the candidate.	The candidate must submit both a management survey <b>AND</b> a refurbishment survey report. Both reports must comply with all the requirements for the survey type as outlined within HSG 264.
4. Verified documentation detailing the candidate's involvement in asbestos management and/or removal and/or remediation projects.	The candidate must provide one piece of documented evidence that shows their personal involvement in one of the following: <ul style="list-style-type: none"> <li>a. Managing an asbestos removal project or</li> <li>b. The production of an asbestos management plan compliant with HSG 227.</li> </ul>

The table above identifies the criteria and evidence that a candidate must submit in order to provide a successful portfolio. However, it is recognised that through career progression some candidates may no longer have access to each of the evidence types required. In these circumstances the candidate must document why they are unable to satisfy the assessment criteria through the submission of the required evidence. They must explain within their submission why they believe it demonstrates that they have sufficient experience within the assessment criteria topic where evidence is missing and why it is equivalent.

## 2.4 Format of the Portfolio of Evidence

The portfolio of evidence should be compiled in an electronic format, into either Microsoft Word or PDF documents. Candidates are able to submit a maximum of 20 files, a maximum of 1mb per file; candidates should consider this when preparing their documents. The portfolio of evidence should be submitted as a series of documents labelled with sequential numbers following the candidate's name e.g., smithj1.pdf, smithj2.pdf etc. In addition, each document should also clearly identify the assessment criteria topic plus the type of evidence being submitted. Candidates should not submit additional/extra evidence documents as these will not be assessed.

## 2.5 Submitting a Portfolio of Evidence

Having completed the portfolio of evidence, candidates will now be required to submit the documents through [www.bohs-hub.org](http://www.bohs-hub.org) in accordance with the onscreen instructions.

Before submitting any documents, candidates will be asked to electronically accept a statement of authenticity to indicate that the work is their own.

## 2.6 Assessment and Results

The submission is allocated to an assessor who will review the submission.

The assessment will consider the quality of the individual items and evidence of the application of the core competencies at a required level for this qualification.

If they are assessed as acceptable, the candidate will be notified through email that they have passed this component. The email will contain information about the next stage of the qualification, which is outlined in section 2.7 below.

If they are assessed as unacceptable in terms of content or quality, or if the assessor requires further information to evaluate the submission, the candidate will be contacted via email and asked to upgrade the submission. The candidate has two further attempts to update the submission to meet the required standard. If the submissions are still unacceptable, then the application will lapse and the fee will be forfeited.

## **2.7 The Next Step**

Once a candidate has successfully completed this component, they will move on to providing the written assignment as outlined within section three.

## 3. Written Assignment

### 3.1 General Information

Candidates following either **Pathway 1** or **Pathway 2** are required to produce and submit a **written assignment**.

The assignment is designed to assess the candidates' technical knowledge and ability, plus knowledge of the legislative framework. The assignment must be directly concerned and relevant to the subject area of examination.

### 3.2 Written Assignment Topic

For the written assignment, candidates are asked to produce and submit an essay of 5000 words (+/- 10%). The assignment must demonstrate the candidates understanding of the applicable legislation and available guidance on the chosen topic.

Candidates should choose **one** of the following topics;

The assignment submitted can cover any of the aspects outlined below;

Assessment Method	Evidence Criteria
In order to assess the candidate's knowledge and understanding of UK legislation relating to asbestos, candidates should provide a written summary for one of the identified topics.	<p>A topic should be chosen from:</p> <ol style="list-style-type: none"> <li>1. Taking of bulk samples and their subsequent analysis</li> <li>2. Carrying out an asbestos survey</li> <li>3. Carrying out air sampling as part of licensed asbestos removal work</li> <li>4. Undertaking project management of an asbestos remediation project</li> <li>5. Producing and implementing an asbestos management plan</li> </ol>

### 3.3 Written Assignment Structure

The assignment must be properly structured and would normally be expected to include the following sections:

- a. Title page, including a title and a unique number by which the assignment can be identified.
- b. Introduction or background. Discussion and conclusions.
- c. Where reference is made in the assignment to legislation, approved codes of practice or other documentation these must be the current situation and should not contain out of date references.

### 3.4 Guidelines

Candidates should be aware of the following guidelines when writing and submitting their assignment:

- This **written assignment** must not have previously been submitted for examination purposes.
- It is the responsibility of the candidate to hold a copy (or the original and submit a copy) of their assignment for any alternations which might need to be made following marking.
- Before submitting any documents, candidates will be asked to electronically accept a statement of authenticity to indicate that the work is their own.
- If at any time the submitted assignment or accompanying documents are found to be deliberately misleading or fraudulent, then BOHS will immediately withdraw any issued Certificate of Competence in Asbestos and not allow the candidates to resubmit assignments. This sanction will have no exceptions, but will be subject to an appeal procedure.
- The assignment will be rejected for correction and resubmission where it contains misleading or inconsistent information.

### 3.5 Submission

Having completed the written assignment, candidates will be able to submit this for marking through [www.bohs-hub.org](http://www.bohs-hub.org). Instructions on how to create an online account and how to make a submission will be included in the qualification acceptance email.

The items must be submitted in either Microsoft Word or a PDF format and use the candidate's name as the file name - e.g., smithj.pdf. The submission may be submitted as a series of documents labelled with sequential numbers following the candidate's name e.g. smithj1.pdf, smithj2.pdf etc. In addition, each document should also clearly identify the assessment criteria topic plus the type of evidence being submitted. Candidates should not submit additional/extra evidence documents as these will not be assessed.

Candidates are able to submit a maximum of 20 files, a maximum of 1mb per file; candidates should consider this when preparing their documents.

Full details on how to submit the documents are provided in the online submission facility on [www.bohs-hub.org](http://www.bohs-hub.org).

### 3.6 Assessment and Results

The submission is allocated to an assessor who will review the submission.

The assessment will consider the quality of the individual items and evidence of the application of the core competencies at a required level for this qualification.

If they are assessed as acceptable, the candidate will be notified through email that they have passed this component. The email will contain information about the next stage of the qualification, which is the professional discussion.

If they are assessed as unacceptable in terms of content or quality, or if the assessor requires further information to evaluate the submission, the candidate will be emailed and asked to upgrade the submission. The candidate has two further attempts to update the submission to meet the required standard. If the submission is still unacceptable, then the application will lapse and the fee will be forfeited.

### **3.7 The Next Step**

Once a candidate has successfully completed this component, they will move on to book an appointment for the professional discussion. Instructions on how to do this will be sent by BOHS through email.

## 4. Professional Discussion

The final component required to achieve this qualification is the professional discussion. This section explains how to book your professional discussion, how to prepare for it and what to expect on the day.

### 4.1 Booking your Discussion

Once a candidate has received a successful assessment of their portfolio of evidence and/or written assignment (according to their pathway), they will receive notification from BOHS advising them to proceed onwards to book the professional discussion.

Candidates will book the examination through [www.bohs-hub.org](http://www.bohs-hub.org), which they have used previously in this qualification to make assessment submissions. Full instructions on how to do this will be included in the notification email from BOHS.

Professional discussions are held on a quarterly basis at the BOHS offices in Derby. Candidates are responsible for the costs incurred relating to travel and accommodation in order to attend the discussion.

Once the appointment has been booked, the candidate will receive an automatic confirmation email.

### 4.2 Information about the Discussion

#### 4.2.1 General Information

In order to pass the professional discussion, candidates **must** be able to satisfy the examiners with regard to their knowledge including UK legislation, operational and practical skills in the full range of subject areas. The examiners will have access to the application form and assessment feedback and may refer to their contents during the examination.

Three examiners, who will ask questions, in turn, covering all aspects of the relevant syllabus, will conduct the professional discussion. They will expect the candidate to be forthcoming with appropriate answers. The questions will be straight-forward tests of knowledge and understanding of the information covered by the syllabus. If a candidate does not understand the question being put, they should ask for clarification by the examiner.

This professional discussion normally lasts up to 60 minutes.

On some occasions it will be necessary, as part of the BOHS quality assurance scheme, for an observer to sit in on the professional discussions. The observer will be observing the examiners and take no part in the results' process of the discussion.

Candidates **MUST** be able to demonstrate to the examiners that they have carried out relevant work and have knowledge in **ALL** of the areas of the syllabus.

Candidates are expected to have prepared themselves for this professional discussion by ensuring that they have appropriate knowledge of all parts of the subject areas and that it is up to date. A lack of knowledge of any part of the subject areas because, for example, those duties do not form part of the candidate's day-to-day responsibilities, will not be accepted by the examiners and candidates presenting themselves in this way will automatically fail the discussion.

#### 4.2.2 Specific Requirements

The professional discussion will test the candidates' knowledge and include the following areas:

- The three main asbestos types along with the less common types and all their uses. The health hazards that can occur as a result of exposure to asbestos and other fibres. The definition of a respirable fibre.
- The legislation, including the Control of Asbestos Regulations (2012) and other statutory documents, exposure limits and relevant guidance such as HSG247, HSG248, HSG 264 etc.
- Exposure prevention including all safety procedures including the appropriate use of PPE and RPE.
- Building surveys, bulk sampling methods, asbestos remediation including removal and its controls and disposal methods. Use of decontamination units, four stage clearance procedure and certificate for re-occupation.
- Bulk sample identification including the general use of microscopes, polarised light microscopy with refractive index oils.
- Exposure measurement, analytical methods used for fibre counting including the set-up of the microscope.
- Management of asbestos in buildings and the use of material and priority assessments.

#### 4.2.3 Further Information

Additional information about the professional discussion is available on [www.bohs-hub.org](http://www.bohs-hub.org).

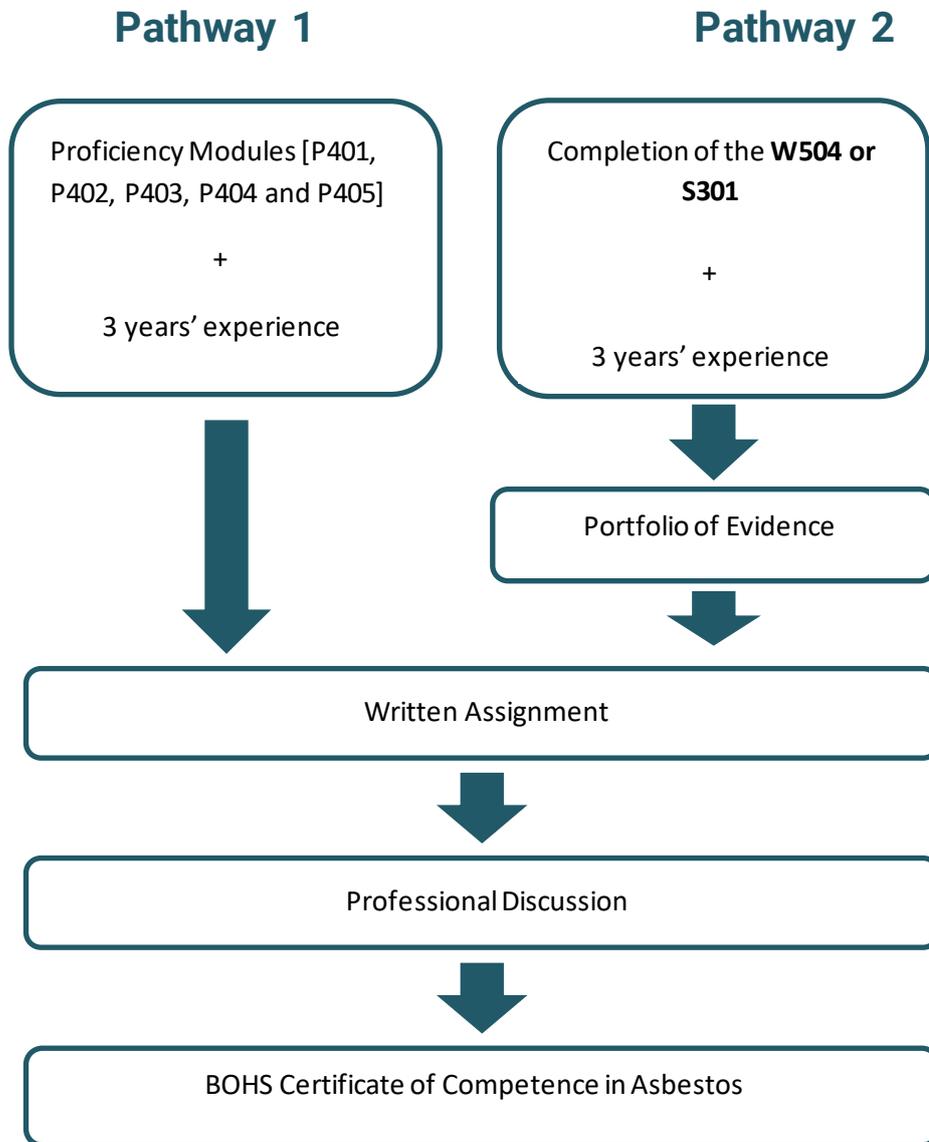
### 4.3 Results

Results are issued to the candidates via email within two weeks of attending the professional discussion.

If the candidate has passed the professional discussion, they receive notification by email followed by the certificate of successful completion of the qualification by post.

If the candidate has not passed the professional discussion, they will receive information from BOHS by email detailing how to rebook the professional discussion. In this case, feedback is given in order to help the candidate prepare for a further attempt. Candidates will be allowed to retake professional discussion for two further attempts (at the current fee for a professional discussion) provided that they remain within the 18-month allowable timeframe for the qualification. If candidates exceed the 18-month allowable timeframe, or are unsuccessful after their third attempt at the professional discussion, then they will be required to reapply for the qualification.

# Appendix 1 - Progression Routes to the CoC Asbestos Qualification



## Appendix 2: Core Competencies for the Certificate of Competence in Asbestos (CoC Asbestos) Qualification

At Certificate of Competence level, candidates are required to demonstrate knowledge across the full breadth of subjects and skills of an asbestos professional. This includes, but is not confined to, subject areas covered in the asbestos Proficiency modules P401, P402, P403, P404 and P405. Within the core topics of the Proficiency modules, candidates are expected to have practical knowledge and experience in the following areas:

- Have a good understanding of the main types of asbestos and their associated health risks.
- Be able to provide general guidance on all the procedures necessary to minimise exposure to any identified asbestos.
- Have the background knowledge and practical experience in the surveying of buildings for asbestos.
- Have the knowledge and practical skills to carry out bulk analysis and asbestos fibre counting in a laboratory, with adherence to the appropriate quality control schemes.
- Have the knowledge and practical skills to carry out four stage clearance post remediation with a full understanding of all the relevant sampling and analysis requirements, including the appropriate quality assurance and management procedures.
- Have the knowledge and practical skills to manage asbestos in buildings and manage remediation projects, with understanding of asbestos removal procedures.

The table in the following pages presents an overview of the knowledge and skills required of holders of the Certificate of Competence in Asbestos.

Topic	Competency area	Required competency	Further information
Asbestos	Sources of asbestos	Knowledge of the main sources of asbestos and where it is currently being mined.	Open cast mines in Canada, South Africa, Russia, China etc.

Topic	Competency area	Required competency	Further information
	Properties of asbestos	Knowledge of the chemical and physical properties of the six main forms of asbestos.	Fibrous mineral (amphibole and serpentine), thermal insulation, fire proof etc.
	Utilisation of asbestos	Knowledge of the main commercial uses of asbestos.	The three main types of asbestos which have found significant commercial use (Amosite, Chrysotile and Crocidolite). An overview of the application where the rarer forms of asbestos may be utilised.
	Identification of likely asbestos products	Knowledge and practical ability to identify asbestos-containing materials in buildings and other equipment.	The application of asbestos in sprayed and thermal insulation, insulating boards, coatings, cement products and other reinforced products (e.g., vinyl tiles, roofing felts) commonly used in building construction. 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.).
	Contaminants in other minerals	Understanding the use and occurrence of the other types of asbestos or asbestiforms as possible contaminants in other minerals.	Tremolite in talc. Anthophyllite in talc. Asbestiforms in China clay etc.
	The health effects of asbestos	Understand the health effects of exposure to asbestos.	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.
		Understand the strategies for assessing and controlling health risk.	Dose-response relationships, the effects of smoking whilst working with asbestos and the risks to health from low-level exposure.

Topic	Competency area	Required competency	Further information
		Fully understand the route(s) that allow asbestos to enter the human body.	Inhalation as the primary route of exposure with an understanding of fibre size and dimension that allow this to happen.
Legislation and Code of Practices	Strategies and procedures for the assessment and management of asbestos	Good working knowledge of the legislation, guidance and procedures for: <ul style="list-style-type: none"> <li>• Surveying and sampling</li> <li>• Bulk analysis</li> <li>• Remediation methods and procedures for re-occupation</li> <li>• Air monitoring and analysis</li> <li>• Managing asbestos in buildings</li> <li>• Asbestos removal and waste disposal</li> </ul>	CAR 2012, Approved Code of Practice for the CAR and the status of the ACOP. The relationship with the Health and Safety at Work Act 1974 and guidance documents HSG264: The Survey Guide; HSG248: The Analysts Guide; HSG247: Asbestos: The licensed contractors' guide; HSG227: A Comprehensive Guide to Managing Asbestos in Premises et al.
Working safely with asbestos	Roles and responsibilities	Understand the roles of different asbestos practitioners and how they should all work together.	Duty holders, surveyors, contractors, analysts, removalists etc. The requirements of these roles in accordance with regulations and HSE guidance.
	Exposure risk control	Understand exposure limits and their application.	Control limits, limit of detection, the safety precautions required when working with asbestos and other fibres.
	Limitation of control procedures	Understand the limitations of particular control procedures, and how these limitations can be mitigated.	Control measures to reduce exposure such as enclosures, ventilation systems, gloves boxes etc. along with wetting down and other dust control measures.
	PPE and RPE	Understand the different types of PPE and RPE available for different tasks.	Overalls, boots, gloves, dust masks, air-fed respirators, etc.
		Understand and be able to demonstrate a good working knowledge of protection factors and face fit testing procedures.	Protection factors provided by the various types of PPE and RPE. Length of time for wearing non-powered and powered RPE. and other ergonomic factors.

Topic	Competency area	Required competency	Further information
	Decontamination procedures	Understand personal decontamination procedures, including full and preliminary decontamination.	Knowledge and practical experience of how to enter an airlock/bag lock and intermediate decontamination procedures, transit routes etc. plus a full experience of decontamination procedures.
	Waste disposal	Understand how to remove and securely dispose of asbestos waste, including appropriate record keeping.	Waste regulations, double-bagging and labelling requirements and full record keeping requirements
	Incidents and emergency procedures	Understand how to deal with an asbestos-related incident and instigate emergency procedures as appropriate.	Investigations and reporting, use of RIDDOR.
Communication and documentation	Communication	Be able to communicate clearly with clients, regulatory bodies, removal contractors and staff at all levels.	Requirements for all asbestos-related procedures in detail, both verbally and in documentation.
		Provision of appropriate practical advice to clients.	Advising building occupiers and clients on technical requirements, in order to provide appropriate solutions for asbestos problems, which can then be carried out without harming individuals.
	Reporting	Be able to prepare reports, quotes and tenders for clients.	Survey reports, analysis reports, certificates of reoccupation, along with quotations and appropriate work plans
Bulk sample analysis	Macroscopic examination	Knowledge and practical skills in use of low power stereo microscope for analysis of bulk samples in controlled conditions (small controlled environment enclosures).	Recognition of the basic physical properties of the main asbestos types (i.e., colour, lustre, elasticity, tenacity, morphology and behaviour in water.)

Topic	Competency area	Required competency	Further information
	Sample preparation	Knowledge and skills on the options for sample preparation; how to segregate the asbestos for analysis and how to prepare slides for PLM.	Sample preparation methods to remove matrix materials before PLM identification, including acid washing, solvent extraction and combustion. Preparation of slides with appropriate RI fluids. The problems with analysing products such as floor tiles, and issues caused by the effects of heat on asbestos fibres.
	Polarised Light Microscopy	Understand how to set up and use a Polarised Light Microscope.	The alignment of the optics and obtaining Koehler or Koehler type illumination. The alignment and use of the rotating stage, polarisers and cross-hair eyepieces, field and sub-stage diaphragms, phase and dispersion staining objectives.
		Understand the theory of polarised light.	The effects produced on crystalline and amorphous or vitreous materials. The basic physics behind colour, pleochroism, birefringence (interference colours), sign of elongation and extinction.
		Understand physical observations of polarised light.	The occurrence of colour, pleochroism, birefringence (interference colours), sign of elongation and extinction. The use and effects of refractive index oils and the use of Becke line and dispersion observations.
	Dispersion staining	Knowledge and skills in using dispersion staining techniques.	Dispersion staining microscopy using R.I. liquids, McCrone dispersion staining objective or phase contrast microscopy with polariser, in relation to the assessment of refractive indices of asbestos and other fibres.

Topic	Competency area	Required competency	Further information
	Interfering fibres and other materials	Be able to recognise and identify interfering fibres.	Other types of fibres which may interfere with asbestos identification (e.g., leather swarf, polyethylene, spider's webs, etc.)
	Quality control	Knowledge and understanding of Internal quality control requirements for sample analysis.	Quality control procedures; detection limits; problems of cross-contamination during sampling and analysis; the handling of homogeneous and heterogeneous samples.
		Understanding and possible participation in external quality control requirements for sample analysis.	External proficiency schemes such as AIMS, RICE etc.
Surveying	Survey types	Understand the different types of asbestos surveys.	Management; refurbishment and demolition; re-inspection; bulk sampling surveys.
	Survey planning	Be able to carry out preliminary preparation for surveys, including hazard and risk assessment.	Preliminary assessment through desktop exercise; walkthrough of site; health and safety assessment to cover all work that is carried out during surveying. The various safety precautions required during survey work, including an initial risk assessment and PPE requirements.
		Understand how to plan and conduct a survey for the presence and condition of asbestos.	Parameters that need to be assessed; common errors; how to present results; level of access required; quality control methods; safety precautions; reporting requirements.
	Assessment of asbestos-containing materials in buildings	Understand the details, purpose and strategies for assessment of asbestos-containing materials in buildings.	The compilation of asbestos registers. The types and sources of information required and the uses to which this information is put. The different assessments that are required and how these help to determine control actions. Common errors in the survey and risk assessment process.

Topic	Competency area	Required competency	Further information
		Understand the roles and use of other trades and professionals to assist with surveying and sampling	Working with other skilled persons, including licensed asbestos removal contractors for difficult access areas, electricians, plumbers etc.
	Bulk sampling	Detailed knowledge and skills of the techniques used and precautions required when collecting asbestos bulk samples.	The reasons for bulk sampling ranging from the collection of one small sample for identification purposes, through to a complete survey of a building in order to compile an asbestos register. Sampling strategies and techniques for all types of asbestos-containing materials (i.e., spray coatings, pipe insulation, insulating board, ceiling tiles, cement materials etc.)
		Sample recording and labelling.	The requirement to uniquely identify samples in double-sealed bags, and to record, label and photograph the location where the sample has been taken from.
	Management of identified asbestos-containing materials	Understand how to manage identified asbestos-containing materials in buildings, and the actions required to reduce exposure.	The steps necessary to manage identified asbestos in buildings (i.e., location survey, asbestos register, risk assessment, written plan of control actions.) The ongoing management actions necessary to minimise exposure to identified asbestos in buildings, (i.e., maintain register, monitor condition, label, restrict access, inform, train, define and use safe systems of work, operate a permit to work system.)
	Post-survey evaluation	Understand how to carry out a post-survey evaluation.	Material assessments, priority assessments, reporting.

Topic	Competency area	Required competency	Further information
Air monitoring and fibre counting	Air sampling strategies	Understand how to plan and undertake air monitoring and air sampling, and the purpose(s) of carrying this out.	The different types of air sampling that can be carried out. Air sampling strategies (e.g., requirements and locations for leak testing, background testing, reassurance sampling and personal monitoring). Relevance for identification of sources of contamination, assessment of personal exposure and the checking of efficiency and effectiveness of control measures.
		Understand and be able to set up, calibrate and properly locate samplers in all possible requirements.	Setting up the detailed sampling trains for all the various applications including flow calibration and stability checks to meet all appropriate quality standards.
		Detailed understanding of the requirements for the counting of air samples to the WHO method.	The requirements of the counting method in HSG248 in relation to sampling of airborne asbestos, and MDHS 59 in relation to MMMF. The requirements for recording calibration and site sampling information to ISO 17025 standards Setting-up of air sampling equipment and quality assurance requirements.
	Slide manufacture	Detailed understanding of sample filter mounting on slides with clearing procedure.	The mounting method with a heated block. The use of acetone to clear the filter, and di acetone alcohol to mount the coverslip. Relevant quality assurance procedures including labelling.

Topic	Competency area	Required competency	Further information
	Phase Contrast Microscopy (PCM)	Understand how to set up a PCM microscope and prepare slide for analysis.	Use of light microscopy; setting up of Koehler or Koehler type illumination; calibration of stage micrometer; Walton-Beckett graticule and use of test slides.
	Fibre counting	Understand how to undertake fibre counting.	Counting of fibres in accordance with the recognised counting rules, of the WHO method as specified in HSG 248.
	Results	Be able to calculate results accurately and comply with quality control schemes.	Calculation of results and comparison with appropriate standards. Reliability of results in relation to quality control schemes such as UKAS, RICE and ISO and European Standards for GLP. Internal quality schemes (i.e., counting of blank filters and counting audits.)
	Communication	Be able to communicate and report findings formally and professionally.	Clear communication and reporting of results with colleagues and clients.
Clearance testing	4 Stage Clearance Procedure	In-depth knowledge and understanding of the 4 stage clearance procedure.	Stage 1 Enclosure evaluation Stage 2 Thorough visual inspections Stage 3 The clearance indicator threshold and the role of the clearance sampling Stage 4 Assessment of the site for reoccupation.
	Communication and reporting	Understand the requirements for formal reporting of analytical results to the client.	Issuing certificates of reoccupation; communicating with clients and contractors.
	Roles in clearance	Understand the possible conflicts of interest for the different job roles of all involved in clearance decisions.	Awareness of the pressures that can be applied to various parties during this procedure and how to avoid conflict.
Management of asbestos in buildings	Management of asbestos-containing materials	Be able to identify asbestos-containing materials and locate asbestos products.	Recording and labelling; reporting and updating management plan; asbestos registers.

<b>Topic</b>	<b>Competency area</b>	<b>Required competency</b>	<b>Further information</b>
	Asbestos management plan	Basic knowledge of asbestos management plans for all premises where there is asbestos present.	The requirements and documentation required to properly manage asbestos in premises, including inspections and remediation plans, and control systems such as permits for work.
	Asbestos remediation	Knowledge and experience in managing remediation projects.	Job specifications; 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. Control measures to reduce airborne asbestos emissions and to limit the spread of debris. The design, construction, testing and maintenance of enclosures and negative air management systems; waste removal. Planning and risk management of the asbestos removal or remediation process.
	Method statements/Plan of Works	Understand how to prepare method statements/Plan of Works.	The first stage of reoccupation and its certification, and the requirements of the method statement. The importance of the role of the method statement/Plan of Works, including work areas, enclosures, hygiene facilities, transit routes and waste disposal.
Behavioural practice	Communication	Communicate clearly, respectfully and in a way that is easy to understand for clients, staff and subordinates.	
	Legislation and best working practice	Be able to work to recognised industry standards at all times.	Compliance with regulations and HSE codes of practice.
	Ethics	Be able to work in an open, honest and trustworthy manner.	

Topic	Competency area	Required competency	Further information
		Understand how to make efficient use of resources to give value for money to clients.	
		Be able to provide informed and ethical advice, and exercising sound judgement regardless of commercial pressures.	Adhering to best working practice when under pressure from clients or contractors, avoiding bias.
		Be able to challenge poor working practice in a constructive manner.	
	Personal development and behaviours	Undertake personal development to maintain level of competence and knowledge in asbestos.	Attend learning events, conferences etc. Keep up-to-date with changes in legislation, refresher training etc.
		Understand personal competence level and work within it.	
		Be able to problem solve and critically evaluate work.	