

## **RSPH Level 3 Award in Asbestos Surveying**

January 2020

Guided Learning23 hoursTotal Qualification Time40 hours

Ofqual Qualification Number 601/8289/1

## Description

The *Control of Asbestos Regulations* impose duties on every person who has, by virtue of a contract or tenancy, an obligation in relation to the maintenance or repair of non-domestic premises to manage the risk from asbestos.

There is thus a need for surveyors and similar specialists to have the knowledge to inspect buildings and premises for asbestos and to advise on how to manage any asbestos found. The objective of this qualification is to provide learners with this knowledge so that they can undertake this role. Possession of this qualification by staff will help organisations and companies meet the accreditation criteria for ISO 17020 (inspection bodies).

The qualification consists of four units:

- Unit One: Asbestos types, uses, health effects and legislation
- Unit Two: Asbestos surveying and management of asbestos in buildings
- Unit Three: Bulk sampling of asbestos
- Unit Four: Use of decontamination units and Class H vacuum cleaners during asbestos surveys

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## Unit One: Asbestos Types, Uses, Health Effects & Legislation

Guided Learning: 4 hours Total Unit Time: 7 hours Unit Level: 3 Unit Reference No. R/507/9967

#### Summary of Learning Outcomes:

#### To achieve this unit a candidate must:

- **1.** Understand the health risks, uses and properties of asbestos,, by being able to meet the following assessment criteria:
  - 1.1 State the properties and characteristics of different types of asbestos.
  - 1.2 Review the types and uses of asbestos containing products.
  - 1.3 Review the risks to health from asbestos exposures
- 2. Know legislation relating to asbestos, by being able to meet the following assessment criteria:
  - 2.1 Summarise appropriate legislation relating to the control and use of asbestos.

#### Content:

#### 1 Understand the health risks, uses and properties of asbestos

- 1.1 *Properties and characteristics of the different types of asbestos:* Crocidolite (blue asbestos), chrysotile (white asbestos) amosite (brown asbestos), actinolite, anthophyllite and tremolite, to include fibre size and shape, biopersistence, friability and solubility.
- 1.2 *Types and uses of asbestos containing products:* Asbestos contents, extent of use, reasons behind use, different fibre properties and resistances, materials asbestos was used with: sprayed coatings; lagging; insulating boards; ropes and yarns; cloth; millboard, paper and paper products; asbestos bitumen products; asbestos cement products; flooring; textured coatings and paints; mastics, sealants, putties and adhesives; reinforced plastics; plugging compounds; domestic appliances, plant and machinery, asbestos contamination in other products.
- 1.3 *Risk to health:* Asbestos related diseases: mesothelioma; asbestosis; lung cancer; risk of developing disease, including risks from low level exposures; induction or latency periods; levels of exposure to asbestos fibres; purpose of, and reasons for, asbestos control limits, clearance indicator levels and peak exposure levels.

## 2 Know legislation relating to asbestos

2.1 Legislation: main points of the following Acts and Regulations that are relevant to asbestos or any superseding legislation; Health and Safety at Work etc. Act 1974, Management of Health and Safety at Work Regulations 1999, Control of Substances Hazardous to Health Regulations and amendments, Control of Asbestos Regulations 2012, Construction (Design and Management) Regulations 2015, Hazardous Waste (England & Wales) Regulations 2005, duties of employers in control of workplaces; legal status of Approved Codes of Practise, HSE regulations and guidance notes.

## Unit Two: Asbestos Surveying & Management of Asbestos in Buildings

Guided Learning: 8 hours Total Unit Time: 13 hours Unit Level: 3 Unit Reference No. Y/507/9968

## Summary of Learning Outcomes:

## To achieve this unit a candidate must:

- 1. Understand the processes and procedures to be used prior to undertaking a survey, by being able to meet the following assessment criteria:
  - 1.1 Outline the different types of survey relating to asbestos.
  - 1.2 Describe method statements / risk assessments for surveying.
  - 1.3 Outline the preparations required for a survey; to include survey planning, desk top studies and data collection.
- 2. Know procedures for carrying out asbestos surveys, by being able to meet the following assessment criteria:
  - 2.1 Survey buildings for the presence of asbestos.
  - 2.2 Perform material assessment and priority assessment.
- **3.** Know how to report on the survey findings and assess risk, by being able to meet the following assessment criteria:
  - 3.1 Outline the requirements of a report.
  - 3.2 Prioritise material for remedial action.
  - 3.3 Suggest possible course(s) of action.
- 4. Understand factors affecting the presence and location of asbestos in a building, by being able to meet the following assessment criteria:
  - 4.1 Determine the age of a building from its method of construction.
  - 4.2 Describe how construction techniques affect asbestos usage.
  - 4.3 Explain methods of fire protection within a building.
  - 4.4 Outline the effect of building services on the distribution and spread of asbestos.

## Content:

## 1. Processes and procedures

- 1.1 *Surveys relating to asbestos:* Survey requirements for presumptive, sampling, management, refurbishment or demolition surveys; benefits and limitations of each survey type; appropriateness of each survey type for different scenarios e.g. targeted refurbishment surveys, demolition surveys and also for assisting the demolition process. Requirements for refurbishment or demolition surveys to include enclosures for access and decontamination facilities if necessary.
- 1.2 *Method statements / risk assessments:* Purpose and role of method statements and risk assessments; risk assessments prior to the survey to include: different building types, working at heights, working in confined spaces, working on operable machinery or plant, hazards (electrical, chemical, biological, fire and noise), lone working and vehicle movements; methods for reducing risk; safe systems of work; use of personal protective equipment and decontamination requirements.
- 1.3 *Preparations for a survey:* Survey planning; exchange of information between the client (duty holder) and surveyor to ensure that the survey meets the duty holder's requirements, preliminary site meeting and walk-through, survey plan.

Desk-top studies; information needed to be collected by the surveyor, including plans or drawings to be provided by duty holder, site hazard information, emergency procedures,

Data collection; survey strategies; survey plans; sampling strategies; methods for reporting and presenting data.

## 2. Procedures for carrying out asbestos surveys

- 2.1 Survey of buildings for the presence of asbestos: Use of building plans; consideration of the age of the building and refurbishments; likely location of asbestos-containing materials; identification of building structures and components which may contain asbestos such as barge boards, chimney cowls, ducts, eaves, fascias, fire dampers, flue terminals and risers, gables, plenums, soffits and stud partitions; random occurrences of asbestos due to contamination from installation; assessment of extent of contamination; identification of asbestos-containing material; potential for fibre release due to type of material and its properties, type of asbestos, condition and location of material; need for surveys to be conducted in a structured, systematic and thorough manner.
- 2.2 *Material Assessment:* Use of algorithms, decision trees and flow diagrams; advantages and disadvantages of assessment processes; deciding whether a material risk assessment is needed for a refurbishment or demolition Survey.

## 3. Report on the survey findings and assess risk

- 3.1 *Requirements of a report:* Report format to include descriptions of the areas included in the survey, description of any areas not included in the survey, the identification of the asbestos location, extent of asbestos (such as area, length, thickness, volume), type of asbestos product, type of asbestos, accessibility (if appropriate), damage or deterioration (if appropriate), surface treatment of asbestos containing material (if appropriate), assessment of potential for asbestos fibre release, appropriately marked or annotated drawing or plan of the survey area.
- 3.2 *Prioritise material for remedial action:* Distinguish between asbestos containing materials that require immediate attention and those that do not; rank material for action by consideration of material assessment scores, location and extent of material, use and occupancy of location; assessment of risk due to release of asbestos fibres by use of algorithms, decision trees and flow diagrams; references to Priority Assessment algorithm as required by HSG227; preventing disturbance of asbestos containing material; typical asbestos exposure levels produced by remedial action; requirements to notify HSE and compliance with HSE guidance notes.
- 3.3 *Possible courses of action:* Options for dealing with asbestos containing material, such as manage in situ and re-inspect, repair, encapsulate, enclose, remove; reference to requirements for management plan; guidance on reasonable report caveats; duties of employers to assess and manage the risks from asbestos; purpose of an asbestos survey with regard to the management plan process.

# 4. Factors affecting the presence and likelihood of spread of asbestos in a building

- 4.1 Age of a building: Estimation of a building's age from its construction; likelihood of asbestos being present and amount of asbestos present due to age of material likely to contain asbestos, estimates of total amounts of crocidolite, chrysotile and amosite used in the UK for building during different periods, and estimates of amount of asbestos remaining in buildings.
- 4.2 *Construction techniques:* Construction techniques in common use at the time of the original construction, to include system built structures (CLASP buildings, etc.); need to take into account the possibility of later maintenance, refurbishment and any extension works; correct names for typical building structure components and architectural spaces.
- 4.3 *Fire protection:* Types of fire protection used within buildings according to age of building; compartmentalisation of buildings and other methods to prevent spread of fire; materials used in fire protection and reasons for its use; location and amount of asbestos used in fire protection.

4.4 *Building services:* Key services used in buildings; operation of these services; use of asbestos in building services; potential of services to spread asbestos fibres.

## Unit Three: Bulk Sampling of Asbestos

Guided Learning: 7 hours Total Unit Time: 13 hours Unit Level: 3 Unit Reference No. D/507/9969

#### Summary of Learning Outcomes:

#### To achieve this unit a candidate must:

- **1.** Understand preparations for taking asbestos samples, by being able to meet the following assessment criteria:
  - 1.1 Ensure that an area or location is safe to enter before sampling.
  - 1.2 Outline RPE and PPE requirements for sampling of materials.
  - 1.3 Prepare the sampling area.
- 2. Carry out sampling utilising correct sampling techniques,, by being able to meet the following assessment criteria:
  - 2.1 Explain the requirements for the collection of samples for analysis.
  - 2.2 Undertake sampling utilising correct sampling techniques and equipment for two different material types.
  - 2.3 Perform post sampling duties of sealing the material sampled, cleaning of area, disposal of contaminated items correctly and labelling the sampling point.

## Content:

#### **1** Preparations for taking asbestos samples

- 1.1 *Ensure that an area or location is safe to enter:* Factors that will prevent entry to a site, such as excessive contamination with debris; need for risk assessments before entering locations such as ceiling voids, risers, floor ducts, loft spaces and confined spaces.
- 1.2 *RPE & PPE requirements:* Different RPE and PPE types available, minimum requirements of RPE and PPE to be used when sampling; methods for disposal of used RPE and PPE; requirements and procedures for mask inspections.
- 1.3 Sample area preparation: set up of sampling area; door signage; protection of floor and other areas below collection point; isolating of area before sampling; arrangement of tools and equipment required for sampling.

## 2 Sampling Techniques

2.1 *Requirements for the collection of samples for analysis:* precautions to take during sampling; methods for collection of samples from different asbestos-

containing materials; recording and labelling of samples; air-monitoring, its benefits and limitations; main points of and compliance with HSE guidance; use of trained staff or contractors.

- 2.2 Undertake sampling: Carry out sampling of at least **TWO** different types of asbestos containing material to include at least one higher risk material from: cement, insulating board, floor tiles, bituminous products (eg roofing felt, damp proof courses, mastics, glues and thermoplastic floor tiles), laggings (preformed/friable), sprayed and loose fill insulation, textiles and gaskets, hard set lagging, decorative plaster/textured coatings/paints, vinyl floor tiles; correct labelling and bagging of samples.
- 2.3 *Post sampling duties:* Clean area and ensure the sample location has been sealed and labelled, correct cleaning methods of tools used, disposal of contaminated items; completion of documentation and records of surveys to meet industry standards and requirements to include material risk assessment, marking-up / annotation of plans, photographic records.

## Unit Four: Use of Decontamination Units and Class H Vacuum Cleaners During Asbestos Surveys

Guided Learning: 4 hours Total Unit Time: 7 hours Unit Level: 3 Unit Reference No. R/507/9970

## Summary of Learning Outcomes:

## To achieve this unit a candidate must:

- 1. Understand decontamination requirements and use of related equipment, by being able to meet the following assessment criteria:
  - 1.1 Safely use and maintain decontamination units.
  - 1.2 Safely use and maintain Class H vacuum cleaners.

## Content:

#### **1** Decontamination Requirements and Equipment

- 1.1 Safely use and maintain decontamination units: Occasions when a decontamination unit (DCU) must be utilised as part of a survey; procedures for setting up DCUs; tests for ensuring correct use of DCU (including DOP, gas test, previous 4 stage clearance, PAT Test, earthing rods); procedures for use of DCU and correct decontamination to include primary, transit and full decontamination and disposal of contaminated RPE and PPE.
- 1.2 Safely use and maintain Class H vacuums cleaners: Occasions when Class H vacuum cleaners must be utilised as part of a survey; procedures for setting up and checking use of vacuum cleaners, to include checks for DOP, PAT Test and service requirements; procedures and requirements for bag changes.

#### Assessment:

Attainment of the Learning Outcomes for Units 1, 2 and part of 3 will be assessed by a written examination.

Attainment of the Learning Outcomes for Unit 4 and part of Unit 3 will be assessed by a practical examination which will include tasks for each of the assessment criteria for these units. Tasks will be carried out in a realistic work environment and include the use of non-asbestos materials. Assessment of sampling techniques must include a core sample. Asbestos containing material or presumed asbestos containing material must not be used in any part of the practical assessment. Candidates will also be assessed by oral questioning during the practical.

Written and practical examinations will be set and marked by the centre and will be externally verified by RSPH.

In order to be awarded the certificate candidates must achieve the learning outcomes for all units.

Recommended Reading & Additional Reading		Qualification				
	Analyst	Surveyor	Project Manager	Dutyholder	Bulk Analysis	
Asbestos - The Analyst's Guide for Sampling, Analysis and Clearance Procedures (HSG248) HSE	~	~	~	√	~	
Asbestos: The Licensed Contractors Guide (HSG247) HSE	~		~	√		
Asbestos and Man-Made Mineral Fibres In Buildings. Practical Guidance Thomas Telford 1999		~				
Asbestos Essentials - Task Manual Task guidance sheets for the building, maintenance and allied trades. (HSG 210) HSE	~		~	√		
Introduction to Asbestos Essentials comprehensive guidance on working with asbestos in the building maintenance and allied trades. (HSG 213) HSE	~		~	√		
Asbestos: The Survey Guide (HSG264) HSE		~		√		
HSG189/2 Working with asbestos cement HSE	~		~	√		
Managing and Working With Asbestos, Approved Code of Practice (L143) HSE	~	√	~	√	~	
HSG53 The selection use and maintenance of respiratory protective equipment HSE	~	~	~			
Lab 30 – Application of ISO/IEC 17025 for Asbestos Sampling and Testing UKAS			~			
RG8 - Accreditation of Bodies Surveying for Asbestos in Premises UKAS		~				
Asbestos for Surveyors (W. Sanderson) Estate Gazettes 2 <sup>nd</sup> edition (2007)		~				
A Comprehensive Guide to Managing Asbestos in remises (HSG 227) HSE		~		√		
Asbestos: RICS Guidance Note: Implications for members and their clients. RICS Books 2003				√		
Construction (Design and Management) Regulations ; ACOP & Guidance, (L153) HSE			~	$\checkmark$		

#### Guidance:

How Are You Managing? - Dealing with the Risks of Asbestos in Buildings (DVD)				~	
Managing Asbestos in Buildings: A Brief Guide. INDG223 HSE 2012		~		~	
Hazardous Waste Regulations 2005	✓		✓	✓	

Note that many of the HSE publications are available as free downloads from the HSE web-site at <u>http://www.hse.gov.uk/pubns/books/index-catalogue.htm</u>

The following web-sites also have useful information:

Asbestos Testing and Consultancy Association <u>www.atac.org.uk</u> Asbestos Removal Contractors Association <u>www.arca.org.uk</u> Health and Safety Executive <u>www.hse.gov.uk</u> Royal Institution of Chartered Surveyors <u>www.rics.org.uk</u>

## **Progression:**

Learners who achieve this qualification can progress to the: RSPH Level 4 Certificate in Asbestos Laboratory and Project Management

## **Special Assessment Needs:**

Centres that have candidates with special assessment needs should consult The Society's Reasonable Adjustments and Special Consideration Policy; this is available from RSPH and the RSPH web site (www.rsph.org.uk).

## **National Occupational Standards:**

The qualification has been mapped to the following National Occupational Standards of Construction Skills:

COSA009. Survey the asset for the presence and condition of asbestos COSA011. Plan asbestos bulk analysis test requirements, methods and outputs COSA010. Prepare asbestos survey reports and records

Further details of these National Occupational Standards can be obtained from RSPH Qualifications.

## **Recommended Qualifications and Experience of Tutors:**

RSPH would expect that tutors have teaching experience and a qualification in a relevant subject area, but recognises that experienced teachers can often compensate for a lack of initial subject knowledge, or experienced practitioners for a lack of teaching experience.

RSPH recommends that centres utilise a team of tutors in the delivery of this qualification, and that at least one tutor has suitable practical experience in the conduct of asbestos surveys and/or building surveys within the previous five years.

#### **Other Information:**

All RSPH specifications are subject to review. Any changes to the assessment or learning outcomes will be notified to Centres in advance of their introduction. To check the currency of this version of the specification, please contact the Qualifications Department or consult the RSPH website.

Centres must be registered with RSPH.

Any enquiries about this qualification should be made to:

The Qualifications Department, Royal Society for Public Health, John Snow House 59 Mansell Street, London E1 8AN Tel. 0207 265 7300 www.rsph.org.uk Email: info@rsph.org.uk