

# UKATA

## SYLLABUS

### ASBESTOS IN SOILS

#### Introduction

This syllabus sets out the guidance issued by the UK Asbestos Training Association (UKATA) for the provision of asbestos in soils training for **'Supervisors, Managers and CDM Duty Holders'** engaged in work on sites that have been identified as potentially having asbestos containing materials (ACMs) within the soil on site in accordance with the Control of Asbestos Regulations 2012 (CAR).

#### NB:

- This course does not provide delegates with suitable and sufficient information, instruction and training to enable them to work with asbestos containing materials.
- The document provides the training syllabus requirements along with guidance in relation to the minimum **'mandatory'** course content for all courses.
- Training Providers/Trainers can offer bespoke or tailored training for the remainder of any training session; providing that the **'mandatory'** core requirements are delivered.

***This syllabus is open to all UKATA Professional Members as an additional course offered and approved by UKATA. Applicants must be able to demonstrate compliance with this syllabus by way of material verification and audit, which must include course presentation, course handouts, proformas, the documentation used and or referred to; and details in relation to the trainer's knowledge and understanding of the CDM 2015 Duty Holder's responsibilities and details of the course assessment/examination process.***

#### Purpose

The syllabus will assist delegates to meet their legal obligations by providing them with an explanation of the properties of asbestos and its effects on the health of individuals, the types, uses and the visible manifestation of asbestos in soils and the understanding and interpreting soil reports. The course will also highlight the general procedures that need to be followed in the event of an emergency and how to avoid the risks from ACMs in soil.

#### Course Objective

To provide delegates with: -

- The theoretical skills to undertake work on sites (brownfield and greenfield sites) which have been identified as having asbestos containing materials within the soils; or in which asbestos containing materials have been identified (i.e. from previous construction or demolition operations or previous pipe bursting operations or repairs on asbestos cement water mains in which the ACMs have been left on site).
- An understanding of the appropriate action that must be taken in the event of non-notifiable and notifiable asbestos containing materials being identified/recorded within the soil analysis report; and or being identified on site in accordance with the CAR 2012.
- An understanding of the emergency procedures that must be implemented in the event of ACMs on site accidentally escaping their control.

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#### Duration

#### **NB:**

It is advised, that when a training provider is contacted by a prospective client, the following questions are asked to determine that the correct training is provided [this list is not exhaustive]: -

- i. Who is the training for?
- ii. What type of work does the company/individual undertake?
- iii. Specifically, what tasks will be conducted and how are ACMs likely to be encountered?
- iv. What type of ACMs are likely to be encountered?
- v. What type of work will the delegate(s) be undertaking with ACMs?
- vi. What previous experience does the delegate have? Can this be evidenced? When was this undertaken?
- vii. Does the work involve work on predominantly contaminated/brownfield sites?
- viii. Are you involved with the excavation, processing, treatment or disposal of waste soils and made ground?
- ix. Are you involved in site investigations of contaminated land (e.g. geotechnical, chemical investigations)?
- x. What level of insurance do you have in relation to working with asbestos containing materials?

The duration of the training can be divided into three categories; the chosen category should be determined by undertaking a training needs analysis on individual delegates attending open courses or discussions with the client at the time of booking, to establish the correct course and duration for the training:

AS1) Initial training with NO previous asbestos awareness training undertaken,

AS2) Initial training with previous UKATA certificated asbestos awareness training (within 6 months),

AS3) Refresher training as deemed necessary (see definition below).

#### **Definition:**

AS1) Initial training with no previous asbestos awareness training undertaken – The expected duration for this training will be 1½ day or a minimum of 9 hours tutor/learning time, this training must include the asbestos awareness element as laid down in the UKATA Asbestos Awareness Syllabus (A0022),

AS2) Initial training with previous UKATA certificated asbestos awareness training within 6 months of the certificate start date. Verification of the asbestos awareness training must be undertaken by the Training Provider and must be 6 months from the date of the asbestos awareness training, should the asbestos awareness training fall outside of this then AS1 training will be required. The expected duration for this training will be 1 day or 6 hours,

AS3) Refresher training should be considered if work methods change or gaps in competency have been identified by means of carrying out a TNA. It is important to note that Reg 10 of the ACoP requires employers to make sure that anyone who supervises employees who are liable to disturb asbestos during their work ensures they receive the correct level of information, instruction and training to enable them to carry out their work safely and competently and without risk to themselves or others.

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#### Delegate Ratio

The maximum number of delegates allowed on a UKATA asbestos in soils training course is 15.

#### Who should attend?

Any persons responsible for managing sites in which the soil analysis report has identified asbestos containing materials within the soils on site; or where ACMs could be encountered within the soils on site. This would include, but is not limited to the following – The CDM 2015 Duty Holders i.e. clients, client's agent, the principal designer, the principal contractor, HSEQ managers/advisors (including any consultants fulfilling these roles and responsibilities), and any contractor's employees responsible for excavations, on-site remediation, site investigations and the disposal of waste from site.

#### Learning Objectives

On successful completion of this course, delegates will: -

- Have an increased awareness of the nature and properties of asbestos and its effects on health, including the increased risk of lung cancer for asbestos workers who smoke, the difference in exposure from asbestos in soils and construction and demolition materials compared with exposure to asbestos in buildings.
- Be familiar with the types, uses and likely occurrences of asbestos in buildings and how the asbestos containing materials came to be within the ground/soils on site(s).
- Know what asbestos containing materials in the soils look like; and what are the risks/hazards likely to be.
- Know how to avoid the risks from asbestos by understanding:
  - where to obtain information on asbestos on site prior to commencing work;
  - what to do if suspicious materials are found;
  - how to use appropriate workplace precautions, including the risk assessment process, nuisance dust mitigation measures or seek advice on workplace precautions, in respect of the risks of asbestos. This will include the prevention of ACMs being spread on site and the decontamination of plant equipment and personnel;
  - how to undertake work activities in a safe manner and without risk to themselves or others;
  - how to select the correct RPE and other PPE that may be required.
- Have an awareness of the key aspects of the asbestos regulations and how they fit into the broader context of health and safety legislation.
- Have an awareness of other Statutory Instruments that must be heeded, eg Environmental Protection Act 1990 (esp Part II), Town & Country Planning Act 1990, Contaminated Land (England) Regulations 2006. **Note: - the learning objectives must be tailored to suit the target audience and the location in which the training is delivered i.e. to capture the following by way of examples** - Contaminated Land (Scotland) Regulations 2005, Northern Ireland Waste and Contaminated Land (Northern Ireland) Order, the Contaminated Land (Wales) (Amendment) Regulations 2012.
- Have an understanding of the procedures that must be followed when coming into unintentional contact with ACMs and an understanding of the appropriate emergency arrangements.

- Understand the requirements for clients and/or their appointed representatives to conduct a desktop study or obtain soil analysis test reports during the pre-construction phase of any project to identify the presence of any contamination; including the presence of asbestos containing materials.
- Be familiar with soil analysis results and how to decipher/understand the information contained within the soil analysis report. Include an understanding of when preliminary results indicate that a more robust and targeted asbestos in soils site investigation is required.
- Understand the risk assessment process requirements.
- Be able to develop an asbestos management plan including an action plan.
- Be able to determine the correct course of action for managing the removal of the asbestos containing soils in line with the identified levels of contamination/type of ACMs.
- Be able to understand which types of work need to be conducted by a Licensed Asbestos Contractor, which work is non-licensable and which activities are classified as notifiable non-licensable work.
- Be able to understand the requirements associated with the removal of soils containing asbestos material in accordance with legal and safe working practices and be able to recognise signs of poor or bad working practices.
- Have an appreciation of the control measures that must be implemented on site to prevent ACMs escaping site i.e. damping down.
- Be familiar with the method to be used to verify that the asbestos containing material has been effectively removed.
- Be familiar with the legal requirements associated with the disposal of asbestos containing materials.

#### Course Syllabus

THEORY MODULES	TIME
<b>Asbestos awareness training</b> (in accordance with UKATA Syllabus A0022)	3.00 hours
<b>Legislation</b> <ul style="list-style-type: none"> <li>• CAR 2012</li> <li>• CDM 2015</li> <li>• Environmental Protection Acts (cont. ground)</li> <li>• Hazardous Waste Regulations</li> <li>• Contaminated Land Regulations</li> </ul>	30 minutes
<b>The Site Survey</b> <ul style="list-style-type: none"> <li>• Sampling: boring holes, trenches</li> <li>• Requirement for asbestos analysis</li> <li>• UKAS accredited labs and limitations of labs</li> <li>• Identification of risk</li> </ul>	45 minutes
<b>Materials Management Plan</b> <ul style="list-style-type: none"> <li>• Contents</li> <li>• Development</li> <li>• LW, NLW, NNLW</li> </ul>	45 minutes

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<b>Inadvertent Identification</b>	60 minutes
<ul style="list-style-type: none"> <li>• Make safe, damp down area, water spray, water bowser</li> <li>• PPE, RPE</li> <li>• Cordon off area, "zone" to allow other site workers</li> <li>• Sample and analyse</li> <li>• Type of contractor</li> <li>• Removal, consignment notes, haulier, landfill</li> <li>• Air sampling strategy</li> <li>• Boundary, personal, plant and machinery</li> <li>• Decontamination</li> <li>• People and machinery</li> </ul>	
<b>Planned Work</b>	45 minutes
<ul style="list-style-type: none"> <li>• Establish dirty zone, clean zone</li> <li>• Access and egress procedures, decontamination procedure</li> <li>• Air sampling strategy</li> <li>• Remediation works</li> <li>• Final decontamination of plant and machinery method types of samples: air tests, acceptance criteria</li> </ul>	
<b>Case Studies, Group discussions</b>	60 minutes
<b>Developing a Materials Management Plan</b>	45 minutes
<b>Assessment</b>	30 minutes

The above timings are provided as a guide and subject to alteration by the course tutor.

#### Course Content (Theory Elements)

**Asbestos Awareness training** (in accordance with UKATA Syllabus A0022)

##### **Legislation**

This module must cover the Construction Design and Management (CDM) Regulations 2015 – Regulation 4: Client duties; Regulation 11: Duties of principal designers. The module should explain the client’s and principal designer’s duties in relation to the provision of pre-construction information prior to the work commencing; which must include the provision of asbestos survey reports, soil analysis reports (ground contamination) along with the client’s duties to ensure that suitable and effective welfare facilities are available and useable prior to work commencing on site, in accordance with Schedule 2 of CDM 2015.

This module should cover and discuss the specific regulations of the CAR 2012 and how they fit with contaminated land and contaminated soil. Reference to CL:AIRE, Control of Asbestos Regulations 2012: Interpretation for Managing and Working with Asbestos in Soil and Construction & Demolition materials: Industry Guidance (shortened name CAR-SOIL)

Other legislation that should be included within this module shall include ensuring an awareness of other Statutory Instruments, e.g. Environmental Protection Act 1990 (esp Part II), Town & Country Planning Act 1990, Contaminated Land (England) Regulations 2006. **Note: - the learning objectives must be tailored to suit the target audience and the statutory location in which the training is delivered i.e.** Contaminated Land (Scotland) Regulations 2005, Northern Ireland Waste and Contaminated Land (Northern Ireland) Order, the Contaminated Land (Wales) (Amendment) Regulations 2012.

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#### **The Site Survey**

This module should provide the delegate with a full understanding of the investigative process carried out on a suspect contaminated land site at the inception stage of the project. This should cover in detail the initial steps that should be undertaken before starting the on-site survey. This must include the initial desktop investigation of historical records and local authority records. Following on from this the tutor must cover in sufficient detail the planning of the ground assessment, describing how the survey may be compromised by conditions and surroundings. Details of the survey method should be described, including type and depth of sampling, sampling strategies, probability sampling and judgemental sampling, giving examples of each and composite sampling. This module should also include the sampling equipment, decontamination requirements, PPE and RPE. The module should also explain in sufficient detail the analysis of the soil samples, the need for UKAS accreditation, the process including stage 1 through to stage 3, cone and quartering, gravimetric analysis and the soil analysis report.

Example soil analysis reports should be shown with particular reference to the layout and information contained within the report. This module should also explain the Hazardous Waste threshold of 0.1% with respect to free fibres and/or discrete fragments.

#### **Materials Management Plan**

This module must cover in sufficient detail the contents of a materials management plan (MMP) and how the risks identified will be managed. It should include, but not be limited to, responsibilities, removal of contaminated materials from site, remediation and the reuse of material on site as fill, grading or landscaping. The module needs to refer to this issue and how the information should be captured within the MMP.

The module should include the delegate undertaking a practical example of developing a management plan, utilising what they have learned throughout the training, giving them the opportunity to understand what is required within the management plan and how best they can implement similar plans within their own business.

This module should cover the requirements laid down in CAR 2012. It should describe the different types of ACMs and situations that are licensable and require the use of an Asbestos Licensed Contractor and those that are non-licensable work. This should also include notifiable non-licensable works (including NNLW).

#### **Inadvertent Identification**

This module should cover when and how asbestos could be found and what to do should the contractor inadvertently discover hidden asbestos products during excavation. The module should include make safe, isolation of the area, emergency equipment to hand, PPE, RPE, contamination of personal clothing and the need for sampling and analysing before continuing. This module should continue to provide a solution to the issue and include emergency remediation actions, including removal, disposal, the contractor's role, temporary storage, air monitoring strategies, boundary monitoring, plant and machinery and decontamination.

#### **Planned Work**

This module should cover in detail the various options available depending on the level of contamination, type of contamination and other external factors. The module should include all options available viz. leave in-situ, on-site reuse, on-site treatment, hand picking from the ground, hand picking from a picking line, screening, stabilisation, off-site treatment, disposal and how these remediation options are undertaken with the correct personnel and systems in place to comply with the legislation. It should also discuss the factors which will determine the best course of action and include, but is not limited to land use, client's attitude to risk, programmes, regulatory control and recommendation, notifications to the relevant authorities etc.

The module should detail with examples, asbestos and non-asbestos areas, delineation of work areas, dirty zones, clean zones and the procedures for access and egress of personnel and machinery. It should also detail the air monitoring strategy and controls while remediation works are being undertaken, who where and when depend on the location of the site, the risks and the surrounding areas and persons at risk.

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#### **Photographic requirements for inclusion within the course**

The course should contain a selection of photos to show the key ACM product classes in various states of fragmentation in the soil to emphasise the difficulty in locating/identifying them.

Relevant photos of good/bad practice relating to sampling, on-site control measures, segregation and containment.

#### **Case Studies**

The course should include case studies of contaminated land and soils for discussion as a group about the reasons for the chosen remediation action.

It should also include real-life examples where HSE/EA/SEPA have successfully prosecuted breaches relating to asbestos in soils.

#### **Minimum Standards for Training Centre**

Training Centre minimum standards: -

- a) Physical layout must be comfortable for delegates undertaking training.
- b) Presentation equipment to be of a minimum requirement of the following:
  - overhead projector screen/integrated systems,
  - flip chart,
  - video delivery media unit.
- c) Training facility must comply with all relevant Health and Safety Regulations:
  - building risk assessment,
  - induction material for delegates to include fire evacuation procedures and emergency planning,
  - first aid facilities.
- d) Provision of satisfactory welfare facilities that meet legal requirements (for onsite training sessions the welfare facilities must comply with Schedule 2 of CDM 2015 L153 guidance on regulations):
  - WC and hand washing facilities,
  - place to consume refreshments,
  - drinking water readily available,
  - adequate heating and ventilation.
- e) Training facility to have relevant reference materials, narrative documents and ACoP Guidance:
  - Health and Safety at Work etc. Act 1974,
  - The Management of Health and Safety at Work Regulations,
  - The Control of Asbestos Regulations L143 Managing and working with Asbestos ACoP.

#### **Course Handouts**

The training provider must provide detailed course handouts for reference by the delegates throughout the training delivery.

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#### Assessment:

Attainment of the learning outcome for the qualification will be assessed by a multiple choice question paper examination consisting of at least 30 questions under exam conditions in line with notes (1), (2) below. At the discretion of the training provider, the candidates shall be allowed to refer to any notes they make during the training sessions and the course notes or training manual provided by the training provider.

The questions used must be developed by the training provider and be relevant to the course content and course syllabus. These will be reviewed at the time of the verification and or audit.

A candidate will be required to achieve a score of at least 24 out of 30 (80%) of in the examination. Failure to achieve this will result in the candidate being required to re-sit the examination under exam conditions. If a candidate fails the second attempt then they will be required to re-sit the course in its entirety.

#### Notes:

*(1) The examination should have a completion time of approximately 30 minutes. However, the tutor should recognise that delegates learning needs are varied and thus the time stated is for guidance only.*

*(2) The varied needs of delegates also include the ability to fully comprehend written English and the tutor may verbalise the questions to assist such delegates. However, no assistance may be offered in respect of providing answers.*

#### Competence:

All training should be provided by someone who is competent to do so, who has had adequate personal practical experience and who has a theoretical knowledge of all relevant aspects of the work being carried out.

#### Notes:

*The competence requirements for trainers is defined in the UKATA Rules of Membership.*

Training providers preferably delivering “Category B – HSG210 Non-Licensable Asbestos” training must be registered, verified and audited by UKATA. UKATA however understand that individual tutors may have sufficient skills, knowledge and experience and each application will be considered on a case by case basis, with the tutor providing supporting documentation and experience in this field.

Tutors wishing to deliver this syllabus will be required to provide experience of this subject matter by way of submitting a CV in conjunction with details/information in relation to how and where the tutor gained experience in this area of expertise. A trainer application form should be submitted for each trainer wishing to deliver this training course. All applications will be forwarded to the Membership Committee who will review the trainer's experience and expertise which will be assessed on a case by case basis.

Any enquiries regarding this syllabus should be made to UKATA.