## UNIVERSITY POLICY STATEMENT S2/14

## ASBESTOS

### Summary of changes

The changes are fairly limited and only affect those who work with asbestos containing materials (ACMs). Since University staff are not permitted to work with any form of asbestos the impact of the changes on University departments is negligible.

For those contractors who do work with ACMs certain non-licensed work is now subject to additional requirements, i.e. notification of the work to the enforcing authority (HSE), arrangements for medical surveillance and record keeping. All other requirements set out in the legislation remain unchanged.

The management of asbestos in the University is a corporate responsibility and decisions on whether non-licensed work is now notifiable will be made on the basis of a risk assessment following discussions involving the asbestos removal contractor, Estates Services and the Safety Office.

#### 1. Introduction

This Policy has been revised to take account of the Control of Asbestos Regulations 2012 (CAR), which requires employers to manage the risks to health arising from asbestos on their premises.

Many University buildings will have asbestos containing materials (ACMs) in the building fabric, as they were in common use until the mid-1980s; they may also be present in old equipment. Where these materials are in good condition and remain undisturbed they do not present a risk to health. When asbestos is disturbed or damaged, fibres may become airborne and can be inhaled. This can happen when work is carried out on or near ACMs, especially if they are broken, sawn, drilled, or sanded, or are in a poor state of repair.

The University's Estates Services is responsible for managing asbestos in the fabric of buildings and departments are responsible for managing that present in equipment.

## 2. Asbestos materials

The three principal types of asbestos are crocidolite (blue), amosite (brown), and chrysotile (white). Crocidolite is rare in University buildings; the others are commonly found in the fabric of older buildings. All may produce harmful effects if fibres are inhaled.

Because of their excellent heat resistance, chemical inertness, and mechanical strength asbestos products were once widely used in the building industry. For instance, within the University, asbestos has been found in:

- (a) thermal insulation on pipes and boilers
- (b) insulation boards for fire protection, as thermal and acoustic insulation on walls, ceilings and structural steelwork



- (c) sprayed coatings for fire protection on structural steelwork
- (d) ropes and yarns as a sealing material or for filling gaps
- (e) asbestos cement in wall claddings, partitions, roofing, or guttering.

Asbestos may also be present in laboratories, inside old equipment such as ovens, furnaces, and autoclaves; or as heat resistant mats.

Useful photographs showing typical ACMs may be found at:

http://www.hse.gov.uk/asbestos/gallery.htm

## 3. Work on asbestos

The CAR and the associated Approved Codes of Practice govern work on asbestos. Work on asbestos insulation or coating, or on asbestos insulation board (AIB), may only be done by contractors licensed by the Health and Safety Executive (HSE) and all arrangements for such work must be made through Estates Services.

Some work on materials where asbestos fibres are firmly retained in a matrix (e.g. asbestos cement, or asbestos-containing floor tiles) may not require the use of a licensed asbestos contractor. However, such non-licensed work must still be carried out with the appropriate controls in place, and by properly trained operatives, and is therefore subject to risk assessment by a competent person and the approval of the University Safety Office.

From April 2012 some non-licensed work with asbestos, where the risk of fibre release is greater, will require notification to the HSE. This work is known as notifiable non-licensed work (NNLW).

A number of factors are taken into account when deciding whether work is licensed, nonlicensed or NNLW. However, University personnel are not permitted to carry out any of the work described above with any form of asbestos. Any decisions on the work will be taken by the Safety Office in consultation with Estates Services and a competent contractor.

## 4. Record keeping and risk assessment – the asbestos register

## (a) Asbestos in the fabric of buildings

Estates Services is responsible for maintaining a record of asbestos in the fabric of University buildings and this is available on their web pages. This record (the asbestos register) is the result of a management survey carried out by a licensed asbestos contractor and/or Estates Services' asbestos monitoring surveyors.

The main purpose of the management survey is to locate, as far as reasonably practicable, the presence and extent of any ACMs that could be damaged or disturbed during normal occupation of the building, including any foreseeable maintenance or installation, and includes an assessment of the condition of the materials. Survey results are updated at least annually and amended whenever asbestos is newly discovered, or when it is repaired or removed. Departments must notify Estates



Services where they suspect asbestos containing materials have been found and the Safety Office should be consulted if there is doubt over identification.

Asbestos is difficult to identify without laboratory analysis and poor sampling technique may result in uncontrolled release of fibres from ACMs. Only competent persons (e.g. a licensed asbestos contractor, one of the Estates Services' asbestos monitoring surveyors, a UKAS accredited laboratory, or the Safety Office) are permitted to take samples for asbestos analysis.

### 5. Asbestos in equipment

The asbestos register relates only to the building fabric: it does not include asbestos in laboratory equipment, which is the responsibility of departments. The head of department should ensure that the department keeps records that show the location of such equipment, and the condition of the asbestos if possible. Asbestos that is damaged or in poor condition must be repaired by a licensed contractor, or the equipment should be disposed of intact as asbestos waste. Records should be kept up to date, amended following disposal or relocation of equipment, and a copy should be sent to the Safety Office at the start of each year.

#### 6. Marking of asbestos

ACMs in the building fabric and laboratory equipment identified as containing asbestos should normally be marked with appropriate warning labels, which are available from the Safety Office. Estates Service's asbestos monitoring surveyors are responsible for the building fabric, but departments are responsible for labelling their own equipment. There may be circumstances where labelling is considered inappropriate, but the agreement of the Safety Office should be sought in such cases.

#### 7. Disturbance of asbestos

#### (a) **Planned work**

The uncontrolled release of airborne fibres will present a hazard to health if work on ACMs is carried out without proper precautions. This can be avoided by proper job planning.

Whenever work is carried out that may involve the disturbance of ACMs (e.g. work on wallboards, old fire doors, or pipe insulation) then the person in charge of the project must first assess the nature of the materials involved. Depending on the size and complexity of the job, this will involve:

- (i) checking for asbestos labels
- (ii) checking Estates Services' asbestos register
- (iii) checking for asbestos hidden in ducts, above suspended ceilings and behind panels
- (iv) sampling of suspect materials
- (v) a thorough refurbishment and demolition type survey carried out by a licensed asbestos contractor or United Kingdom Accreditation Service (UKAS) accredited laboratory.



A refurbishment and demolition survey is required before any refurbishment or demolition work is carried out. It is used to locate and describe, as far as reasonably practicable, all ACMs in the area where refurbishment will take place, or in the whole building if demolition is planned. The survey will be fully intrusive and involve destructive inspection where required to gain access to all areas, including those that may be difficult to reach. This type of survey may also be required where more intrusive maintenance or repair is planned, or for the dismantling and /or removal of heavy plant (e.g. in boiler houses).

## (b) Hidden ACMs or accidental damage to ACMs

Where ACMs are found to be damaged, or have deteriorated, Estates Services (in the case of the building fabric) or the Safety Office (in the case of asbestos in departmental equipment) must be informed so that steps can be taken to assess the situation and deal with it.

If, despite taking every precaution, ACMs are discovered during the course of work, or known ACMs are damaged, the following actions must be taken:

- (i) stop work immediately
- (ii) prevent anyone entering the area
- (iii) to avoid spreading asbestos fibres, remove any footwear or clothing contaminated with dust or debris and seal it in a plastic bag
- (iv) report the problem as soon as possible to the person in charge of the project and to the University Safety Office.

## 8. ACMs in departmental equipment

Asbestos was used in older laboratory equipment because of its heat resistant properties (e.g. in the linings or door seals of ovens). It can be difficult to identify and may be impossible to distinguish from other materials simply by looking at it.

Departmental workshop staff are most likely to encounter asbestos when dismantling equipment to carry out repairs. They should be made aware of this and be prepared to stop work immediately and seek advice from the University Safety Office if there is any doubt about the nature of the materials they are working with. The Safety Office will organise asbestos awareness courses from time to time and workshop staff should be encouraged to attend.

Asbestos fire blankets should all have been withdrawn from use and replaced with modern alternatives, but departments should ensure that they notify the Safety Office if any still remain.

#### 9. **Removal or encapsulation of asbestos**

Where asbestos is discovered in the fabric of a building, or where it might be disturbed in the course of a job, then Estates Services (in consultation with the Safety Office) will decide whether it should be removed or encapsulated. Any work on the ACM must be registered with the Estates Services' technical clerk, who will issue an asbestos checklist that must be returned at the end of the project to ensure the asbestos register is kept up to date. All such work will be dealt with under the procedure outlined in the appendix to this Policy Statement.



The responsibility for meeting the costs of the works is as follows (see Buildings Committee paper BC(87)5):

- (a) where previously unknown asbestos in an unsafe state is discovered, or where an ACM has been accidentally damaged, the University Safety Office will meet the cost
- (b) where Estates Services carries out scheduled work that involves disturbing known ACM, they will meet the cost
- (c) where work involving disturbance of known ACM is carried out at departmental request, the department must meet the cost.

#### 9. Asbestos waste

Waste ACMs are defined as hazardous waste and they must not be disposed of in normal waste streams. The Safety Office has provided an asbestos waste skip in the Science Area for the disposal of small amounts of asbestos waste from departments. Items must be dampened, double-wrapped in heavy (minimum 400 gauge) polythene, and sealed with tape. Care should be taken to maintain the integrity of the wrapping, to avoid contaminating the skip. If items are too large for the skip, contact the University Safety Office to make alternative disposal arrangements.

Unwanted equipment containing asbestos must be disposed of as described above. It must not be sold or given away as this would constitute supply of asbestos-containing products in breach of the CAR. Before disposal it should be double wrapped and disposed of intact: no attempt must be made to dismantle it.

#### 10. **Departmental action**

(a) Departments should note that University personnel are not permitted to work with any form of asbestos. With few exceptions, only a licensed contractor may carry out work with asbestos, and only then with the approval of the Safety Office.

Departments should be aware of the location of known ACMs in their buildings; the asbestos register is available on the Estates Services' web application FacilityNet (Planon). The University has a duty to warn staff or contractors of the presence of asbestos, so that those intending to work near it can take proper precautions to avoid accidental damage or disturbance.

- (b) Planning for repairs, refurbishments, and maintenance should include consideration of the possibility of disturbing previously undiscovered asbestos during the course of the work. In some cases, an asbestos survey will need to be carried out as part of the planning process, especially where any demolition work is contemplated. The responsibility for ensuring that planning and/or surveys are carried out may lie with individual departments or with Estates Services, depending on who is in control of the work.
- (c) Departments should report any new discoveries of asbestos to Estates Services, so the asbestos register can be updated and any necessary action taken. Any damage to,



or deterioration of, asbestos should also be reported without delay so that remedial action can be taken.

- (d) Departments should keep records of the location of laboratory equipment containing asbestos and amend them following removal or disposal of the equipment. Copies of these records should be sent to the Safety Office annually.
- (e) Laboratory equipment containing asbestos should be disposed of intact, either in the asbestos skip or by a licensed contractor.

# THIS STATEMENT FORMS PART OF THE UNIVERSITY SAFETY POLICY. UNIVERSITY POLICY NOTE S9/10 IS WITHDRAWN. PLEASE AMEND THE INDEX.

October 2013

J Black

CIRC: A, C, H, O, S: Heads, DSO1s, DSO2s, Admins, DDSO1s, DDSO2s, List V.



Appendix 1

## ARRANGEMENTS FOR REMOVAL OR ENCAPSULATION OF ASBESTOS

Estates Services is responsible for drawing up a specification for the works, which will include information on the nature and condition of the asbestos containing material (ACM). If necessary, they will obtain a competitive tender from a contractor holding a current HSE licence.

Estates Services will give the selected contractor an official order containing the agreed asbestos clauses and send a copy to the University Safety Office. The order will include the arrangements for a pre-work site meeting of interested parties (including representatives from Estates Services, the Safety Office, the contractor, the department concerned, and the recognised trades unions). Where the works may affect adjacent departments, then they should also be invited to send a representative.

Estates Services will be responsible for inviting all participants except representatives of the trades unions, who will be invited to attend by the University Safety Office. Reasonable notice of the meeting should be given.

The following matters should be discussed at the meeting, and notes taken:

- 1. The University requires the work to be carried out in accordance with the Control of Asbestos Regulations 2012 and the associated Approved Codes of Practice.
- Asbestos contractors must give details of their current HSE licence and indicate whether the work requires notification. The notes should indicate whether they have provided (or will be providing) a copy of the HSE notification form ASB5.
- 3. Before work starts, the contractor must provide a written assessment and method statement and Estates Services should send a copy to the Safety Office.
- 4. The department should ensure that all its members in the vicinity of the works are advised of the following:
  - (a) the start time and duration of the job
  - (b) the precautions taken to protect their health and safety
  - (c) any areas that will be out of bounds to them for the duration of the job



- (d) who to contact to discuss any concerns about the job
- (e) arrangements for informing them when it is safe for the area to be reoccupied.
- 5. The contractor must take reasonable steps to ensure that no University personnel may enter any designated asbestos area or respirator zone. All such areas and zones must be properly demarcated and identified in accordance with regulation 18 of the Control of Asbestos Regulations 2012.
- 6. The contractor must ensure that a copy of the latest test certificate for his exhaust ventilation equipment is present on site for the duration of the works.
- 7. Any vacuum cleaners on site must meet British Standard BS5415: Part 2, Section 2.2, Supplement No 1, type H tested with absolute filtration. Copies of test certificates for this equipment must be available on site.
- 8. The material to be removed must be clearly identified and the contractor must have information on the nature of the asbestos.
- 9. The meeting should consider other safety matters relevant to the work, e.g. isolation of electrical or piped services or fire alarm systems, or identification of any high-risk activities nearby.
- 10. Arrangements for the contractor's access to the areas concerned must be agreed, as must the positioning of the decontamination unit, power, water, drainage, and electrical protection, where appropriate.
- 11. If negative pressure equipment is used, it must be left running continuously for the duration of the removal works, unless otherwise agreed with the University Safety Office.
- 12. A smoke test must be carried out to prove the integrity of any negative pressure enclosure in the work area. The University Safety Office will nominate a person to observe this and the contractor should provide 24 hours' notice of the test.
- 13. Arrangements for preventing false triggering of the fire alarm system during the smoke test must be agreed.
- 14. The contractor's employees must use protective clothing to the HSE approved standard (normally coloured overalls in the dirty area, white in the clean area).



- 15. Before it leaves the work area waste must be double contained in plastic bags (red inner bags and clear outer bags). Safe arrangements for the transfer of waste from the work area should be agreed. The sealed bags must be stored in a locked container until the contractor removes them from site. Containers for asbestos should be clearly labelled in accordance with the Control of Asbestos Regulations 2012.
- 16. Contractors must provide a copy of their Waste Transfer Note to Estates Services, where it will be retained for at least two years.
- 17. Following completion of the work, visual inspection and air monitoring must be carried out (unless otherwise agreed with the University Safety Office) by a UKAS accredited laboratory operating to criteria equivalent to those specified in ISO/IEC 170. Clearance levels of less than 0.01 fibres per ml are required before any enclosure is removed. The contractor must forward the laboratory's report to Estates Services, who will keep a copy for at least five years.
- 18. The meeting should identify someone to check on behalf of the University that the work has been carried out in accordance with the contract.

Estates Services will send the meeting notes to all those who attended and the arrangements made will be binding on the contractor and the department. The University Safety Office will forward copies to the recognised trades unions.