

Asbestos Management Procedure

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Contents

1	I	Introduction			
2	I	Roles and Responsibilities2			
3	1	Asbestos4			
	3.1	What is Asbestos?4			
	3.2	2 Risks Associated with Asbestos5			
4		Asbestos Assessment			
	4.1	Asbestos Surveys5			
	4.2	2 Surveying and Bulk Sampling6			
	4.3	Asbestos Register7			
	4.4	Risk Assessment7			
	4.5	6 Actions			
5	Monitoring and Review				
	5.1	Re-inspections			
	5.2	2 Record Keeping9			
	5.3	8 Review9			
6	I	Project Works9			
7	I	Information, Instruction and Training10			
8		Acquisition, Demolition and Disposal of Premises10			
9		Asbestos Remedial Works11			
10	,	Waste Disposal11			
APPEND	IX -	Exposure to Suspect or Damaged Asbestos Flow Chart12			

Asbestos Management Procedure

1 Introduction

Glasgow Caledonian University recognises the responsibilities and duties placed on the University under the Control of Asbestos Regulations 2012. As the Dutyholder of the premises, Glasgow Caledonian University is responsible for managing asbestos containing materials (ACMs) to ensure the health and safety of all staff, students, building occupiers, contractors and others.

The aim of the University is to have a building portfolio which is fully safe from ACMs. It may not be possible to remove all ACMs as they may be part of the building structure however the University will ensure that ACMs are maintained in a good condition and not disturbed. Accredited asbestos analytical, surveying and removal contractors will be used for all asbestos works as necessary.

The University recognises the hazard of asbestos and the risks to health that it poses. Therefore, to fulfil its moral, social and legal obligations, an asbestos management plan has been developed and is being implemented to ensure that ACMs are kept in good condition and a risk based systematic process is followed. This includes re-inspection surveys being carried out and any actions added to the asbestos management plan.

This procedure details the health and safety arrangements that the University has in place to comply with the University Safety, Health and Wellbeing Policy and all relevant health and safety legislation including the Health and Safety at Work etc Act 1974 and Control of Asbestos Regulations 2012. Asbestos specific guidance documents and Approved Codes of Practices shall also be consulted in order to fulfil statutory obligations including HSG247, HSG248 and HSG264.

2 Roles and Responsibilities

The following responsibilities and tasks represent the performance standards required of University officers in the management of asbestos. As with other management responsibilities it is for the named officer(s) to ensure that the task or outcome is delivered by delegating tasks and functions to others, if required, and monitoring the results.

This Asbestos Management Plan (AMP) is designed in such a way to integrate into the existing Glasgow Caledonian University construction and maintenance/operations programmes. The following key personnel are, under Regulation 4 of the Control of Asbestos Regulations 2012 (Duty to Manage Asbestos in non-domestic premises), responsible for the implementation of the control measures discussed in this document:

Principal and Vice Chancellor

- The University commitment to promoting a healthy and safe working environment.

Chief Financial Officer

- Allocate funding for the asbestos management plan

Director of Estates

- Overall responsibility for the Directorate and is responsible for the overall asbestos management strategy including procedures and practices.
- Ensuring development and implementation of this Asbestos Management Procedure and AMP.

Head of Building Services

- Acts on behalf of the Director of Estates in respect of this Asbestos Management Procedure.
- Evaluate on an annual basis, or more frequently as required, the need to hold asbestos awareness and refresher training for any employees that manage and/or work near known or suspect ACMs.
- Assist the Safety and Compliance Officer in respect of their duties under the Asbestos Management Procedure
- Project Management
- Assist, by the provision of information, individual designers or project managers in the evaluation of any maintenance, renovation or construction activities in respect of the presence of ACMs.
- Identification and dissemination of information to appropriate staff following discovery any suspect material.
- Ensure all contractors working on asbestos are aware of and meet the requirements of the Asbestos Management Procedure
- Ensure project personnel (including contractors) are inducted.
- Instruction of any asbestos works.

Safety and Compliance Officer

- Commissioning and implementing the AMP.
- The day-to-day administration and maintenance of the AMP.
- Monitor the implementation of the AMP.
- Commission or otherwise complete a detailed and comprehensive asbestos register for all buildings suspected of containing ACMs. This includes for any future acquisitions.
- Maintenance of the Asbestos Register and all other relevant information pertaining to the control and management of asbestos.
- Co-ordinate the response to any report of suspect ACMs, asbestos debris, damage or disturbance. This will include evaluation of circumstances under which it has been encountered and initiating the necessary sampling, clean-up, removal or repair as appropriate liaising with the Head of Building Services who will be responsible for final approval.
- Provide detailed technical specifications (including the surveying and air monitoring services) for scheduled or emergency abatement works.
- Commission or otherwise complete a regular review and evaluation of all ACMs once per year or more frequently as circumstances and assessments warrant.
- Provide final approval for all "asbestos work requisitions" forwarded for their attention.
- Critically review all management processes and their effectiveness as well as the overall progress made against the AMP.
- Advise managers and project managers on the retrieval and evaluation of information within asbestos registers and any additional asbestos surveys required for any maintenance or refurbishment activities that are being planned.
- Monitor asbestos work instructions/method statements to ensure the individual manager or project manager in charge of the work has followed this Asbestos Management Procedure and update the asbestos register accordingly.

- Ensure that completion paperwork and all necessary air monitoring certificates are available to those that require this information.
- Ensure that all original and subsequent asbestos survey information is available.
- Report to the Head of Building Services any defects or non-compliances relating to the performance of asbestos Contractors, including suitability of work areas, adherence to method statement and compliance with University procedures.

All Contractors/Trades/Employees

- Ensure that any works that may disturb or damage ACMs are avoided.
- Report to the Head of Building Services any suspect material discovered and if any has been damaged or disturbed where staff/contractors are likely to undertake work that may affect such materials.

Asbestos Surveying and Analytical Contractors

As and when required:

- Undertaking surveys and sampling, where requested, in accordance with current legislation.
- Checking areas on completion of works to ensure that the LARC has completed their scope of works and all affected areas have been left in a satisfactory condition.
- Issuing survey reports and air testing certificates to meet the standards of HSG 264 and 248
- Bringing to the attention of the Estates Manager and/or the Safety and Compliance Officer any asbestos concerns on University Premises.

Licensed Asbestos Removal Contractor (LARC)

- Complying with current legislation, ACOPs and guidance including HSG247
- Removal and/or encapsulation of ACMs in a safe and controlled manner without increasing risk of exposure to asbestos fibre to staff, students and visitors etc.
- Attend site for the making safe of any uncontrolled disturbances of ACMs.
- Liaise with Asbestos Analyst to complete works as per HSG248.

University Health and Safety Advisor

- Liaise with University Duty holders above as necessary.

3 Asbestos

3.1 What is Asbestos?

Asbestos is a naturally occurring fibrous material with unique properties that make it ideal for reinforcing many materials used in the manufacturing of building products. Used throughout the construction of public, commercial and industrial buildings, it is used as an insulator, has good fire protection properties and protects against corrosion. Asbestos is often mixed with other materials, so it can be difficult to know whether it is present without carrying out specialised surveys. However, buildings which were built before the year 2000 are likely to contain asbestos somewhere within the premises and it can be found in:

- Ceiling and floor tiles
- Lagging used on pipes and boilers
- Sprayed and textured coatings
- Insulating board
- Gaskets and seals

Asbestos Management Procedure November 2017 There are three main types of asbestos

- Chrysotile (white)
- Amosite (brown)
- Crocidolite (blue)

All asbestos types are dangerous carcinogens but brown and blue are more hazardous than white. It should be remembered that the colour itself is not a reliable indication of the type of asbestos, since the natural colour tends to change through age and reaction to heat. Analysis of samples within a laboratory is the only way to confirm the type of asbestos.

3.2 Risks Associated with Asbestos

Asbestos is only a risk to human health if asbestos fibres are released into the air and breathed into the lungs. Breathing in air containing asbestos fibres can lead to asbestos-related diseases, mainly cancers of the lungs and chest lining. There is usually a long delay between first exposure to asbestos and the onset of disease. This can vary from 15 to 60 years. There is no cure for asbestos-related diseases.

The presence of asbestos within buildings does not, in itself, present a hazard since the asbestos is likely to be mixed with other substances and sealed with paint or encapsulated (enclosed) by other materials. Surveys show that asbestos in good condition does not release hazardous fibres, unless it is subjected to disturbance or damage. Therefore the risk of exposure to breathable fibres from asbestos found in normal circumstances is low. It is generally safer, especially where asbestos is located in a position which is out of reach, to contain the asbestos materials in situ; since there can often be a greater hazard created by removal. Containment of asbestos is achieved by sealing, painting and physical encapsulation.

Where damage to ACMs is found the area must be locked down and remedial treatment carried out including removal where necessary. All asbestos remedial works will be carried out by a specialist contractor.

4 Asbestos Assessment

4.1 Asbestos Surveys

Asbestos surveys are carried out for the University by a specialised contractor with qualified asbestos surveyors carrying out these surveys. These are produced in report format to the University in order to meet the scope of the works requested within the order. The survey will determine the location, form, type and condition of all suspected/confirmed ACMs as per the areas within the scope of works.

The type of survey/inspection undertaken will be appropriate for the circumstances. There are two survey types in accordance with HSE Guidance Document: HSG264, Asbestos – The Survey Guide for the surveying, sampling and assessment of asbestos containing materials.

Management Survey – Sampling, identification and assessment survey

The management survey is carried out to locate, as far as reasonably practicable, the presence and extent of any suspect ACMs in the building. This is to ensure that no one is harmed by the continuing presence of asbestos in the premises during normal occupation and use of the premise i.e. ACMs remain in good condition and are not inadvertently disturbed during maintenance, general use and other works. Minor intrusive work may be required.

<u>Refurbishment/Demolition survey</u> – Full access sampling and identification survey (predemolition/major refurbishment works)

This type of survey is designed to be used as a basis for tendering for the removal of ACMs from buildings before demolition or major refurbishment, by locating and describing, as far as reasonably practicable, all ACMs in the building. This will involve destructive inspection as necessary to gain access, including gaining access to difficult to reach areas. A full sampling programme is undertaken to identify possible ACMs and estimate the volume and surface area of ACMs.

Although different types of surveys can be specified and used depending on the circumstances, it is important that the building owner, employer and the surveyor knows exactly which type of survey is to be carried out, what the specifications for each type are and in which areas they are to be used. The type of survey must conform to HSG264, otherwise interpretation of the survey reports will be difficult and the management plan produced may not adequately minimize the risks involved. It is possible that at larger premises a mixture of survey types will be appropriate e.g. a boiler house due for demolition will require a refurbishment/demolition survey, while other parts of the premises require a management survey. Therefore it is important that there is a clear statement and record of the types of surveys that are to be carried out, including the reasons for the type selected, where they are to be carried out and an estimate of the number of samples to be collected.

It is vitally important to provide a clear scope of works to the surveyor so that the survey covers the areas of the refurbishment works. Any changes to the scope of works being carried out for the refurbishment may require a further asbestos refurbishment/demolition survey to be carried out. There are instances where differing types of asbestos surveys are carried out within a building. Again, it is important that the asbestos information covers the areas required for works being carried out.

4.2 Surveying and Bulk Sampling

Both management and refurbishment/demolition surveys require the removal of samples to identify the presence of asbestos content within the material. The only way to confirm asbestos content is to have the sample analysed under controlled conditions. There may be some instances where a suspicious material is discovered and directed sampling of the material is required by the surveyor rather than a full survey carried out. Asbestos samples must be sent to a laboratory for analysis.

The University will only use accredited surveyors for asbestos surveys, which includes the collection of bulk samples. HSG264 and HSG248 provide details for suitable sampling and analysis strategy and must be followed by the contractors.

Any laboratory to which bulk samples are sent for testing must be accredited by UKAS for the relevant testing method. Analytical laboratories must hold Category 1 laboratory status in the Regular Inter-laboratory Counting Exchanges (RICE) scheme and have a satisfactory performance in the Asbestos in Materials Scheme (AIMS) scheme.

Only UKAS accredited analysts will be used for analytical services following the completion of asbestos remedial or removal works. Works must be in accordance with HSG248.

4.3 Asbestos Register

The asbestos register forms an up-to-date record of all ACMs within any given location or property within the University. Details of any asbestos removal works will be clearly recorded in the asbestos register. The register should also contain information about materials that are suspected or presumed to contain asbestos but that have not been accessed or sampled for confirmatory analysis. Any areas or items not accessed must also be recorded and presumed to contain asbestos unless there is strong evidence to prove otherwise.

The asbestos register is available in electronic format with a hard copy located in the Security Office. The Safety and Compliance Officer is responsible for updating the asbestos register.

Unless otherwise stated, the asbestos register only contains those ACMs that are reasonably accessible and does not include ACMs that may be hidden within the fabric of the building or in inaccessible areas. Further investigation must be carried out for these areas in the form of a refurbishment survey.

A verification form must be signed upon reading the asbestos register to confirm that the work areas have been checked within the asbestos register prior to beginning works. This is available from the asbestos register within the Security Office.

4.4 Risk Assessment

A risk assessment will be carried out for all ACMs and reviewed at regular intervals. The risk assessment will follow the algorithm set out in HSG264 (Asbestos: The Survey Guide) which provides a material assessment of the ACM (i.e. the condition of the asbestos) and a priority assessment (i.e. the environment it is within). These two aspects will bring together the overall risk assessment score of the ACM.

The material assessment looks at four key areas. These are:

- Product Type
- Damage
- Surface Treatment
- Asbestos Type

The material assessment looks purely at the ACM to assess the overall condition of the ACM. Each aspect contributes to the overall material score.

The priority assessment looks at four further areas in relation to the area of the asbestos. These are:

- Maintenance activity;
- Occupant activity;
- Likelihood of disturbance
- Human exposure potential

These areas are essential to assess whether the ACM is influenced by the environmental that it is in. This is because it can be within a high footfall area which increases the potential for fibre release or the area may require access readily for maintenance meaning it is of higher risk of being disturbed. An algorithm score is produced from the four main areas to provide the result of the priority assessment.

The overall risk assessment is the combination of the material and priority assessment and this will form the control measures that are required for the ACMs. Detailed knowledge of the use of the buildings is required to ensure that accurate priority assessments are completed. The results of the risk assessment will determine the action plans that are required.

4.5 Actions

The asbestos management plan will detail the actions that are required for ACMs based on the outcome of the risk assessment. Various aspects will be considered when implementing an action as it may not be possible to remove the ACM depending on the area/construction of the material. The following actions will be considered:

Monitor the condition of ACMs: The material is in good condition and unlikely to be disturbed during normal occupation and use of the premise. The condition of the ACMs will be monitored regularly and results recorded. The minimum period of re-inspection will be annually.

Encapsulate or Seal ACMs: The material is showing slight signs of damage therefore a protective coating can be applied to the ACM to inhibit the release of asbestos fibres.

Enclosure: The material is showing slight signs of damage. A barrier is placed between the accessible area and the ACM to protect the ACM from damage. This may be in the form of plywood. If barriers are installed they must be on a monitoring regime and categorised as either permanent or temporary. Temporary barriers must be inspected weekly and must only be installed for a maximum of six months.

Removal: The material is showing signs of deterioration or at risk of being disturbed therefore removal should be considered. Material must be removed under controlled conditions which is dependent on the type and location of the ACM.

5 Monitoring and Review

5.1 Re-inspections

Asbestos re-inspection surveys will be carried out by an asbestos surveying contractor that is accredited by UKAS (United Kingdom Accreditation Service). These will be carried out on an annual basis or at shorter intervals depending on the result of the risk assessment. The re-inspection survey will consist of a visual assessment of the condition of the ACMs and will be updated in line with the risk assessment as per the algorithm set out in HSG264. A further assessment will be carried out for the priority aspect of the algorithm to form the overall risk assessment. The overall risk assessment will be updated following this re-inspection survey and any new actions will be added to the AMP. The asbestos register will also be updated as necessary.

It is not normal practice to require re-sampling of materials during a re-inspection survey. However, if unidentified or undocumented suspect materials are discovered during the re-inspection survey these will be sampled and analysed as required. The asbestos register will be updated and re-issued as necessary.

5.2 Record Keeping

Glasgow Caledonian University Estates Department shall maintain detailed records of all activities relating to asbestos works which have been undertaken within and on Glasgow Caledonian University premises. Records marked with a (*) must be retained for a minimum of 40 years. The records kept shall include:

- Copies of all asbestos survey reports, including updates and amendments;*
- Site induction records for contractors confirming the presence of asbestos on site;
- Records of asbestos awareness training for employees;
- Records of any asbestos abatement works performed on site;*
- Clearance certificates indicating areas are safe to reoccupy after asbestos abatement works;*
- Asbestos fibre air monitoring results;*
- Records of management plan reviews.

Accident and near miss records will be sent to <u>hsforms@gcu.ac.uk</u>, the University Health and Safety Advisor and the Safety and Compliance Officer.

5.3 Review

The asbestos register will be updated following any changes identified in the re-inspection survey or if any actions have been carried out. The AMP is a separate document and will also be updated at this point to reflect any of these changes that have been identified. The re-inspection survey will detail the frequency of future re-inspections but as a minimum these will be annually.

A review of all asbestos registers and procedures will be carried out annually or following any changes in legislation or approved codes of practices. A review will also be carried out, if necessary, following any asbestos incidents.

6 Project Works

An asbestos review must be completed prior to any planned refurbishment or demolition works taking place. It is the responsibility of the Project Manager to check the existing asbestos information for the area. The requirement for refurbishment/demolition surveys or asbestos removal works must be considered in relation to the project. The availability to remove ACMs should always be considered as this will remove the risk and also ongoing costs associated with re-inspection surveys. The University has a duty to manage the asbestos prior to any contractors starting works.

Asbestos remedial works will be undertaken by a licensed asbestos removal contractor in accordance with sections 9 and 10 of this Procedure. Appendix 1 of this document contains

procedures that must be followed in the event of exposure to suspected, unidentified or damaged ACMs as part of any project works.

7 Information, Instruction and Training

Appropriate information, instruction and training will be provided for all employees who are likely to work around or manage ACMs. All contractors working on behalf of the University must have up to date asbestos awareness training if there is the potential for them to be working around ACMs.

The asbestos awareness training will take the form of a face to face training session that shall cover general awareness of asbestos and the procedures in place within the University to manage asbestos. This includes re-inspection surveys, asbestos management plan and emergency procedures to follow if suspect asbestos is discovered. Each training session is tailored to address the needs of the group being trained and is mandatory.

Asbestos awareness training will be carried out on an annual basis that will be reviewed as necessary to comply with Regulation 10 of the Control of Asbestos Regulations 2012. The content of the asbestos awareness training shall cover the following areas, but not limited to:

- Properties of asbestos
- Effects on health
- Types, use and likely location of asbestos
- General emergency asbestos procedures
- Avoiding risk of asbestos
- GCU management of asbestos

8 Acquisition, Demolition and Disposal of Premises

When premises are surveyed with a view to the University acquiring them, the survey is to incorporate a statement regarding the availability of an up-to-date Asbestos Register and the extent, location and type of any ACMs in the premises. If there is any doubt in the standard or accuracy of the asbestos register/asbestos surveys, an asbestos survey must be commissioned. The survey must be carried out by a competent person as detailed in section 4.2 of this procedure.

Where premises are being sold or transferred, the Director of Estates must ensure that the person responsible for the disposal of the premises has been informed of the location and extent of any known ACMs on the premises, the limitations of the surveys undertaken and the location of the current asbestos register.

An asbestos refurbishment/demolition survey must be commissioned to identify any ACMs within the property prior to demolition. The Project Manager, in liaison with the Head of Building Services, must then assess the risks of asbestos removal prior to demolition in accordance with the Control of Asbestos Regulations 2012 and remove In accordance with HSG247.

9 Asbestos Remedial Works

The University will only use Licenced Asbestos Removal Contractors for asbestos removal or remediation works at any University owned or occupied premises. The contractor must be able to demonstrate compliance with the following requirements to ensure the safety of all stakeholders within the University and that a high standard of work is completed. Contractor must hold a valid HSE license (ASLIC) to comply with the Asbestos (Licensing) Regulations 1983.

The contractor must carry and/or be able to provide Professional Indemnity Insurance endorsed specifically to provide coverage in respect of any claim arising from the exposure, clean-up, removal, containment, testing or monitoring of asbestos. The said policy must provide coverage in an amount not less than one (1) million pounds (£1,000,000) per occurrence and must also be issued on an occurrence-based form. Additionally, the policy must provide coverage for public, product and pollution liability insurance of not less than five (5) million pounds (£5,000,000) and employer liability insurance of not less than ten (10) million pounds (£10,000,000).

10 Waste Disposal

All waste that contains asbestos will be disposed of under the Hazardous Waste Regulations; Scotland - The Special Waste Regulations 1996; The Special Waste Amendment (Scotland) Regulation 2004; The Waste (Scotland) Regulations 2012

A licensed carrier will transfer asbestos waste to a licensed waste disposal site or holding facility. Copies of the completed consignment note following disposal must be requested from the contractor and kept on file.

APPENDIX - Exposure to Suspect or Damaged Asbestos Flow Chart



Asbestos Management Procedure November 2017