PRACTITIONER GUIDE

Management of Asbestos Containing Materials on the Defence Estate

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Who Should Read this: Top Level Budget Holders, Commanding Officers, Heads of Establishment, CEstOs, MOD IPTLs, Defence Estates (DE) Deputy Directors Estates Management, DE Advisors, DE Project Managers, DE Facility Managers and Maintenance Management Organisations,

When it takes effect: 3rd September 2007
When it is due to expire: 30 November 2012

Equality And Diversity Impact Assessment

This policy has been Equality and Diversity Impact Assessed in accordance with the Department’s Equality and Diversity Impact Assessment Tool against:

Part 1 Assessment Only (no diversity impact found).

This document replaces the Defence Estates - Design and Maintenance Guide 16 (DMG 16) issued November 2003

This Practitioners Guide is the MOD approach to the Management of Asbestos Containing Materials and gives guidance to assist in compliance with the Control of Asbestos Regulations 2006, which came into effect on the 13th November 2006.

This document gives guidance on how an Asbestos Management Plan (AMP) can be established and operated.

The preceding DMG 16 (Nov 2003) had a significant direct impact on cost, as the requirement reflected a change to earlier practice on the Defence Estate. This document should not have any additional costs associated with it as all Establishments should have already implemented the requirements of the Control of Asbestos at Work Regulations 2002. However, costs incurred in meeting Statutory and MOD mandatory requirements are essential to safeguard the Department’s interests and to secure the health and safety of MOD employees and others carrying out work on its estate.

Advice and assistance on asbestos related matters can be obtained from Defence Estates through local offices or direct from:

Defence Estates
Kingston Road
Sutton Coldfield
Amendments to this document will be advised via Policy Instructions issued through standard DE publication procedures. It is the responsibility of the user to ascertain if they have the most up to date version of the document. 

PG 02/07 Amended: February 2009 see PI 03/09

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1 INTRODUCTION AND SCOPE

What is asbestos and where might you find it?

Asbestos is a naturally occurring mineral. It can be amphibole asbestos which includes crocidolite (blue) and amosite (brown) asbestos, or serpentine asbestos which is chrysotile (white) asbestos. These are the three main types used in Great Britain.

Exposure to amphibole asbestos poses a greater health hazard than exposure to chrysotile, but all types can cause asbestos-related diseases.

Asbestos containing products have been widely used in buildings as construction materials, fireproofing, thermal insulation, electrical insulation, sound insulation, decorative plasters, roofing products, flooring products, heat-resistant materials, gaskets, friction products etc. Further information is available in Health and Safety Executive's (HSE) guidance on the management of asbestos in premises? In the 1960s and 1970s annual imports of asbestos containing products peaked at over 150,000 tonnes each year. Since 1985 the new use of any material containing blue and brown
asbestos has been banned. This means that in Britain there are many thousands of tonnes of 
asbestos still in buildings, where, so long as it is in good condition and remains undisturbed, it does 
not present a risk.

By 1999 the new use of any building materials containing white asbestos had been banned. 
Therefore, an assessment of premises constructed after 1999 should be very easy. Unless you have 
information to the contrary, you would simply have to record the fact that the date of construction 
indicates there is no asbestos present.

(HSC ACOP - L127 The management of asbestos in non-domestic premises paragraphs 8 to 11, 
HSE Books)

The ‘Duty to Manage Asbestos in Non-Domestic Premises’ introduced in the Control of Asbestos at 
Work Regulations 2002(CAWR)and re-enacted in Regulation 4 of the Control of Asbestos 
Regulations 2006 requires all establishments to have in place a suitable Asbestos Management Plan.

This document provides guidance on the requirements and procedures for managing the asbestos 
risk. The procedures cover:

• priority risk assessment – a determination of the level of asbestos risk
• the requirement for a written plan identifying those parts of the premises covered and the 
measures which will be taken for managing the risk
• the requirement to maintain a record of Asbestos Containing Materials (ACMs) - this is to 
include an asbestos register, accurate drawings and photographs (where practicable) 
which detail the location of ACMs for each site, including details of where asbestos has been removed
• the action to be taken when asbestos is discovered or suspected
• the action to be taken when there is a risk that asbestos fibres have been released into the 
atmosphere
• the action to take to reduce the spread of asbestos
• the use of warning notices where the presence of asbestos could give rise to the emission of asbestos fibres in some circumstances
• the action to be taken when a building is being acquired, dismantled or demolished.

JSP 375 and JSP 418 describe MOD policy based on elimination, substitution, control, 
segregation, information, instruction and training.

Additional Guidance can be obtained free of charge from the Health and Safety Executive on 
www.hse.gov.uk/asbestos/essentials/index.htm

2 ABBREVIATIONS

ACM Asbestos Containing Material
ACOP Approved Code of Practice
AMP Asbestos Management Plan
BOHS British Occupational Hygiene Society
BS British Standard.
CAR 2006 Control of Asbestos Regulations 2006
CO/HoE Commanding Officer / Head of Establishment
DEFINITIONS

3.1 Asbestos Types

Crocidolite (commonly known as blue asbestos)
Amosite (commonly known as brown asbestos)
Chrysotile (commonly known as white asbestos)

Other ACMs include fibrous actinolite, fibrous anthophyllite and fibrous tremolite.

3.2 Duty Holders

Duty Holder Every person who has, by virtue of a contract or tenancy, an obligation of any extent in relation to the maintenance or repair of non-domestic premises, or any means of access or egress to or from. This includes the CO/HoE, DE DD EM and any Maintenance Management Organisation (MMO).

In this guidance the ‘Duty Holder’ refers to the CO/HoE unless it is clearly shown that someone else is carrying out the duties on their behalf e.g. ‘the DE DDEM as duty holder’ or the MMO as duty holder

Area Custodian: Area Custodian means a person appointed under the MOD 4C system (JSP 375 vol 2 leaflet 34 “a person appointed by line management, in consultation with the 4C Duty Holder to compile hazard registers for the area concerned and liaison with visiting workers.”

MMO The generic term MMO has been used to represent the contractor providing maintenance services under all delivery methods, e.g. PPP / PFI / RPC / MAC

3.3 Asbestos Surveys

An asbestos survey is, as far as reasonably practicable, a formal exercise to locate and assess all the ACMs present in the building and record their location and condition. The purpose of a survey is to present the information collected in a way which allows the employer to manage the risk. Asbestos surveys are usually referred to as Type 1, Type 2 or Type 3 depending on the level of investigation undertaken.

ROLES AND RESPONSIBILITIES
4.1 Commanding Officer / Head of Establishment (CO/HoE)

The CO/HoE as the Duty Holder is to:

- ensure that a suitable Asbestos Management Plan is prepared and implemented for their establishment
- ensure that the contents of the Asbestos Management Plan are communicated to all visiting workers / contractors or other persons who may through their work activity, have cause to disturb any ACM
- ensure that workplace inspections required by JSP 375 Vol 2 Leaflet 21, monitor the visible condition of known accessible ACMs and establish a fault reporting regime to ensure early notification of suspected asbestos related degradation or incidents of damage to those responsible for implementing the AMP
- ensure that the AMP is reviewed at regular intervals and ensure that its effectiveness is monitored. For practical purposes it is expected that this task would normally be undertaken (within the limits of their contract) by the MMO on his behalf

4.2 Defence Estates Deputy Director Estates Manager (DE DD EM)

Within the scope of the Regional Prime Contracts (RPC’s) the DE DD EM is a duty holder and shall through his Facilities Managers (DEFM):

- assist the Duty Holder in implementing the AMP
- ensure that their contractors and other relevant personnel on site are aware of the Asbestos Management Plan and of known asbestos risks
- receive reports and advice from the RPC with regard to ACMs and act accordingly

4.3 Regional Prime Contractor (RPC)

The RPC, as an MMO, is responsible for:

- implementing, maintaining and ensuring the ongoing effectiveness of the Asbestos Management Plan, for those asset, at every establishment within the scope of the RPC contract
- ensuring all works carried out under their control are compliant with current legislation and MOD mandatory requirements
- ensuring the health and safety of his employees and subcontractors and the impact of their activities on the health and safety of others
- provide information from the AMP on request, to any other party intending to access or carry out work in/on any part of the establishment
- where necessary arrange for asbestos surveys to be undertaken as directed by the DE DD EM
- in accordance with the establishment’s AMP make recommendations to the DE DD EM for action required on asbestos related issues, including:
I. advice on the need for any asbestos surveys

II. the immediate action taken following discovery of damage to asbestos

III. the need for further more detailed studies

IV. consideration of any work to be included in the Forward Maintenance Register or similar plan for future maintenance work

V. reporting on the regular inspections required by the AMP and the included Asbestos Register (an example format is included in Annex D)

VI. ensuring that any Asbestos Register as part of an AMP is maintained and up to date

4.4 Maintenance Management Organisations (MMOs)

The main vehicle for maintaining the defence estate is the Regional Prime Contracts.

There are other organisations undertaking maintenance on the defence estate:

- PFI/PPP’s (Aquatrine, Main Building, Flagship etc (This could include tenant farmers depending on their lease agreement))

- Other arrangements for maintenance of the establishments (e.g. DCRE, Housing, MACs ISPs etc)

These organisations will be responsible for the suitable management of asbestos containing materials in their areas of responsibility.

For these arrangements this means that duty holders are:

- Every person who has an obligation of any extent in relation to the maintenance or repair of non domestic premises or any means of access thereto, or egress therefrom.

The MMO is to:

- implement, maintain and ensure the ongoing effectiveness of the Asbestos Management Plan at every establishment within the scope of their responsibility, this is to include overseas locations

- ensure the health and safety of their employees and contractors and the impact of their activities on the health and safety of others

- ensure all works carried out under their control are compliant with current legislation and MOD mandatory requirements

- provide information from the AMP on request, to any other party intending to access or carry out work in/on any part of the establishment

- where necessary arrange for asbestos surveys to be undertaken

- in accordance with the establishment’s AMP make recommendations for action required on asbestos related issues, including:

  I. advice on the need for any asbestos surveys

  II. the immediate action taken following discovery of damage to asbestos
III. the need for further more detailed studies

IV. consideration of any work to be included in the forward maintenance register or similar document

V. reporting on the regular inspections required by the AMP and the included Asbestos Register (an example format for an Asbestos Register Sheet is included in Annex D)

VI. ensuring that any asbestos register as part of an AMP is maintained and up to date

Management Programme

The MMOs will, within the limit of their contract, undertake and manage the practical and technical aspects of the asbestos management programme. The CO/HoE, through their line managers, will need to maintain an active role in the management of asbestos to ensure that they are familiar with the documentation and ensure implementation and review processes are undertaken. It is essential that effective two-way communication is maintained to ensure that all parties cooperate to successfully manage ACMs.

4.5 United States Visiting Forces (USVF)

On MOD sites occupied by United States Visiting Forces (USVF), asbestos is managed as an environmental issue, not health and safety. The Environmental Management branch of Civil Engineering, United States Air Force in Europe Command level, as USVF executive agent for such issues in the UK, have come to agreement with the United States Forces Division of Defence Estates (DE USF), that they (USVF) assume the Dutyholder's Responsibilities in respect of the UK's Control of Asbestos legislation. However, USVF do this not out of compliance with UK legislation, but out of compliance with their own asbestos management policy. This policy is published in the US Department of Defense documents, Final Governing Standards - United Kingdom - ch 15 (FGS) and AFI 32-1052. The FGS-UK is applicable to all branches of the US Department of Defense operating in the UK.

USVF policy covers similar requirements to produce a plan to identify, risk assess, manage and communicate information about asbestos in facilities, and to mitigate occupational exposure. In line with UK legislation, DE USF co-operates closely with USVF as 'Dutyholder' in asbestos management matters, and ensures MOD contractors do likewise and comply fully with UK legislation.

5 ASBESTOS CONTAINING MATERIALS

Details of Asbestos Containing Materials are given in Annex A

6 LEGISLATION

Summary of Asbestos related Legislation is given in Annex B

7 MANAGING ASBESTOS CONTAINING MATERIALS

7.1 Management of asbestos in non-domestic premises

The Control of Asbestos Regulations has an explicit duty in regulation 4 to assess and manage the risks from asbestos in premises, this is supported by a HSC Approved Code of Practice ‘The management of asbestos in non-domestic premises L127’. The risks vary with circumstances, ranging from normal occupation of a building to the repair, refurbishment and demolition of the premises, and each circumstance needs to be assessed. HSG 227 ‘A comprehensive guide to managing asbestos in...
premises’ provides two algorithms which can be used for assisting in the assessment of ACMs, these are included at Annex E & F.

Material Assessment (Annex E) is an assessment of the type and condition of ACMs or presumed ACMs, and their ability to release fibres if disturbed.

Priority Assessment (Annex F) considers the likelihood of an ACM actually being disturbed and exposing employees or others to asbestos fibres. The priority assessment considers the normal occupant activity in that area, the likelihood of disturbance and so on.

Each ACM is scored and these scores are added together to give a risk assessment score.

\[
\text{Material assessment score for each ACM} + \text{Priority assessment score for each ACM} = \text{Risk assessment score for each ACM}
\]

This will enable the Duty Holder to rank/prioritise the risk assessment scores

**Algorithms help you assess the risk from your ACMs; they don't tell you what to do with them.**

The assessment must be used to produce a management plan, which details and records the actions to be undertaken to manage and reduce the risks of exposure to asbestos. The Duty Holder is required to:

- take reasonable steps to find materials in premises likely to contain asbestos and to check their condition
- presume that materials contain asbestos unless there is strong evidence to suppose they do not
- make a written record of the location and condition of the asbestos and presumed asbestos containing materials (ACMs) and keep the record up to date; (See 7.4)
- assess the risk of the likelihood of anyone being exposed to these materials; and
- prepare a plan to manage the risk and put it into effect to ensure that:
  i. any material known or presumed to contain asbestos is kept in a good state of repair
  ii. any material that contains or is presumed to contain asbestos is, because of the risks associated with its location or condition, repaired or if necessary removed; and
  iii. information on the location and condition of the material is given to anyone potentially at risk.
- take steps to ensure that the actions above are carried out.

To manage the risk from asbestos-containing materials the CO/HoE as Duty Holder shall have in place procedures to ensure the above is suitably managed using the services of competent persons, such as the MMO. These procedures should be detailed in the Asbestos Management Plan.

**7.2 Asbestos Management Plan**

In order to have an effective Asbestos Management Plan, the Duty Holder is to;
• establish clear lines of responsibility for the plan’s management and implementation

• ensure suitable surveys of the premises have been undertaken to locate and assess the ACMs.

The results of the survey are required to be recorded in an easily retrievable form, which can then be used to make a risk assessment and draw up a management plan. Where a Regional Prime Contract is in operation on an establishment the DE DD EM is to assist the Duty Holder in the preparation of the AMP. For establishments outside of the scope of the Regional Prime Contracts the MOD manager responsible for the MMO will undertake the above task.

DE managed contracts will implement asbestos management procedures in accordance with the DE Process ‘Coherence Asbestos Management on the Defence Estate’ as detailed in the DE Estates Business Management System (EBMS)

http://deintranet-ebms.de.r.mil.uk/qmap/coherent_asbestos_management.htm

The Coherent Asbestos Management suite of documents is referenced in Annex G and uncontrolled copies are attached as separate annexes to this PG.

The AMP may include some or all of the following options:

• clean up debris
• repair
• encapsulate (paint or seal)
• enclose
• remove
• maintain and update log of ACMs
• monitor condition (applies to all presumed or identified ACMs)
• restrict access/isolate
• label or colour code
• inform
• train
• define and use safe systems of work
• operate a permit-to-work system

Monitoring of the implementation of the AMP will take place at regular intervals to make sure that the arrangements are working and that people are fully aware of what their responsibilities are in order to comply with the duty to manage. The arrangements will need to be reviewed and changes made particularly when there are changes in building custodians. The arrangements shall be reviewed every six months, (even if there have been no changes), or more frequently if the situation requires and records of that review maintained.

The details of the review, when it is made, are to be written down, including whether the arrangements are still satisfactory or whether any changes are made. Everyone who needs to know should be informed of any changes made.

Before allowing a visiting worker / contractor access to his area of responsibility, the Area Custodian, (as required by JSP 375 Vol 2 Leaflet 34) is to ensure any visiting worker / contractor has been given relevant information regarding ACMs within the facility. If the visiting worker / contractor can not demonstrate that they have the relevant information they are to be directed to where the information is held.

The Area Custodian must ensure that information regarding the location of the AMP and the details of person(s) to contact is available at the entrance(s) to the building/facility, and made known to those persons who need to work in the building/facility.
A template for an Asbestos Management Plan is contained within the Coherent Management of Asbestos on the Defence Estate suite of documents. However, for those establishments not supported by a DE Managed contract using the Coherence documents an alternative Template for an Asbestos Management Plan is provided in Annex H'

7.3 Asbestos Surveys

The type of survey undertaken may vary, depending on the aim and purpose for which it is to be used. Most surveys will be undertaken initially to comply with the duty to manage asbestos in premises. In these cases, the aim of an asbestos survey is, as far as reasonably practicable, to locate and assess all the ACMs present in the building and its purpose is to present the information collected in a way which allows the employer to manage the risk.

The aim, purpose, type of survey and report format required should be clearly established before starting the survey. One of the main issues is to decide when samples should be taken to prove that ACMs are not present.

An asbestos survey has four main elements:

1. it must, as far as reasonably practicable, locate and record the location, extent and product type of any presumed or known ACMs
2. it must inspect and record information on the accessibility, condition and surface treatment of any presumed or known ACMs
3. it should determine and record the asbestos type, either by collecting representative samples of suspect materials for laboratory identification, or by making a presumption based on the product type and its appearance etc.
4. it should also indicate locations of materials that have been identified as NOT containing asbestos i.e. as a result of sampling, analysis or because of the nature or age

This information must be held in a suitable form that is easily understood and can be accessed by all relevant personnel, and which can be updated as required. The procedures at Annex C have been provided as a guide to the survey process.

The types of asbestos surveys are identified in the ‘Methods for the determination of hazardous substances surveying, sampling and assessment of asbestos-containing materials’ MDHS 100 and have been reproduced below:

A Type 1 survey: Location and assessment survey (presumptive survey)

The purpose of the survey is to locate, as far as reasonably practicable, the presence and extent of any suspect ACMs in the building and assess their condition. This survey essentially defers the need to sample and analyse for asbestos (or the absence thereof) until a later time (e.g. prior to demolition or major refurbishment). The Duty Holder bears potential additional costs of management for some non-asbestos-containing materials. All areas should be accessed and inspected as far as reasonably practicable (e.g. above false ceilings and inside risers, service ducts, lift shafts, etc) or must be presumed to contain asbestos. Any material which can reasonably be expected to contain asbestos must be presumed to contain asbestos, and where it appears highly likely to contain asbestos, there should be a strong presumption that it does. All materials which are presumed to contain asbestos must be assessed.

This is a simple survey to help establish an Asbestos Management Plan (AMP).

Without sampling materials to confirm the presence of asbestos a Type 1 survey virtually assumes that all materials within a building contain asbestos. This means that even for non-ACMs a licensed contractor would have to be used because of the potential to exceed
the control limit and this would incur possibly unwarranted excessive costs and over precaution.

**Type 2: survey** Standard sampling, identification and assessment survey (sampling survey)

The purpose and procedures used in this survey are the same as for Type 1, except that representative samples are collected and analysed for the presence of asbestos. Samples from each type of suspect ACM found are collected and analysed to confirm or refute the surveyor's judgement. If the material sampled is found to contain asbestos, other similar homogeneous materials used in the same way in the building can be strongly presumed to contain asbestos. Less homogeneous materials will require a greater number of samples. The number should be sufficient for the surveyor to make an assessment of whether asbestos is or is not present. Sampling may take place simultaneously with the survey, or as in the case of some larger surveys, can be carried out as a separate exercise, after the Type 1 survey is complete.

A Type 2 survey is typically carried out on buildings with continued occupation but may apply in other circumstances where there may be the potential for a person to be exposed to asbestos fibres (e.g. building inspections). The only way to positively identify if a material contains asbestos is by sampling and analysis. By determining if a material contains asbestos it is then possible to identify how it will be managed. This is a more effective way of management, as materials confirmed by analysis as not containing asbestos do not need to be treated as ACMs.

The success and usefulness of a survey is dependent on the specification and planning carried out and the training, experience and diligence of the surveyor. When an area is not inspected, this must be recorded and presumed to contain asbestos until it can be proven that ACMs are not present. It is important that the surveyor has a good understanding of which products and materials are likely to contain asbestos and where ACMs are likely to be located. Experienced surveyors may discriminate between potential asbestos and non-asbestos-containing materials in situ. This initial judgement will be tested by sampling and analysis in a Type 2 survey, but previous experience is used to make a presumption in a Type 1 survey. The surveyor should have strong evidence to support a reasoned argument for presuming a material does not contain asbestos. The surveyor must also look out for evidence of asbestos debris released by previous work, or even during installation or removal work (e.g. over-spray from sprayed asbestos applications).

During both Type 1 and Type 2 surveys the materials are assessed using the Material Assessment Algorithm (Annex E) and as detailed in Methods for the Determination of Hazardous Substances Surveying, sampling and assessment of asbestos-containing materials (MDHS 100). This algorithm assigns scores based on the following criteria:

- **Product type** – ranging from asbestos-reinforced composite materials (i.e. low in asbestos content and bonded in a matrix of cement, resin, plastic etc.) to thermal insulation (i.e. high in asbestos content, high friability etc.)
- **Extent of damage/deterioration** – ranges from no damage/deterioration to high damage or de-lamination of materials (or quantity)
- **Surface treatment** – ranges from composite materials and encapsulated materials to unsealed lagging and sprays
- **Asbestos type** – it is necessary to decide which types of asbestos are present for the material assessment

Each criterion has an associated scoring mechanism and once the scores have been totalled for all criteria a material assessment can be derived, the higher the score the higher the management priority. A high score will not necessarily mean that an ACM in a particular area requires removal or encapsulation. The treatment of an ACM will depend upon the occupancy of the area, activities
carried out in the area, frequency of maintenance within the vicinity of the ACM etc. The prioritising of materials is the basis for putting together an AMP that will include, permits to work, removal works schedules etc. A Priority Assessment Algorithm is provided at Annex F.

**Type 3 survey:** Full access sampling and identification survey (pre-demolition / major refurbishment surveys)

This type of survey is used to locate and describe, as far as reasonably practicable, all ACMs in the building and may involve destructive inspection, as necessary, to gain access to all areas, including those that may be difficult to reach. A full sampling programme is undertaken to identify possible ACMs and estimates of the volume and surface area of ACMs made. The survey is designed to be used as a basis for tendering the removal of ACMs from the building prior to demolition or major refurbishment so the survey does not assess the condition of the asbestos, other than to note areas of damage or where additional asbestos debris may be expected to be present.

_This survey should only be used as a means to identify all ACMs in a building or asset in order that they can be removed prior to demolition works or significant alterations to the building. The Type 3 survey provides information for a suitable asbestos removal specification as it identifies quantities of asbestos requiring removal, items that may impede removal works, etc._

**Survey Planning**

Once the type of survey has been established, it is important to gather information and plan the survey. Survey planning should include the following five steps:

1. preliminary site meeting and walk-through
2. desk-top study to plan survey
3. survey plan (including details of sampling strategy, if appropriate)
4. risk assessment for the conduct of the survey; and
5. specification of the method for recording and presenting data

At some sites it may not be necessary or possible to include all of these steps (e.g. small premises, fire damaged premises and pre-purchase surveys etc).

**7.4 Asbestos Register**

It is the responsibility of the Duty Holder to ensure that an Asbestos Register is maintained as an integral part of the AMP. (Ref.JSP 375 Vol 2 Leaflet 54). The Asbestos Register would originally have been compiled and maintained by the EWC and passed over to the MMO at the end of the Property Management Contracts. The Asbestos Register should provided the most up to date record of all identified ACM, including details of where ACMs have previously been removed as part of other work activities.

The Asbestos Registers may also contain information about materials that are suspected of containing asbestos, but that have been confirmed, by analysis NOT to contain asbestos. This information should be retained within the register so that any future concerns about these materials can be addressed without the need for further sampling (unless a Type 3 survey is to be completed).

All Asbestos Registers are to contain the same level and extent of information as shown in Annex D. The MMO is to review the Register annually to ensure that the information that it contains is both accurate and sufficient.

**7.5 Provision of information to Emergency Services**
The Fire Services, in particular, need to be made aware that there are ACMs in the premises so that they can take the appropriate precautions in an event of a fire or other emergency.

The Fire Services are the most likely of the emergency services to disturb ACMs or come into contact with disturbed asbestos. Each establishment shall contact the Fire Service locally to see what information they require and in what format.

Where a Regional Prime Contract is in operation on an establishment the DE DDEM, on behalf of the Duty Holder, will ensure that this is done. For establishments outside of the scope of the Regional Prime Contracts the MOD manager responsible for the MMO will undertake the above duty. If the Fire Service responds with any particular requirements, appropriate arrangements are to be put in place and the details shall be recorded in the AMP by the MMO.

7.6 Inspection Programme

All known ACMs, and any substance presumed to contain an ACM, shall be inspected by the MMO at pre-determined regular intervals to ensure that the asbestos management procedures remain effective.

The required period between inspections will vary. Those ACMs that are prone to damage and those that are known to be damaged or deteriorating must be inspected more frequently than those which are less exposed or are in a good condition. In any event the period between inspections must not exceed 12 months;

Full details regarding the inspections, their scope and frequency are to be recorded in the AMP by the MMO. The Asbestos Register is to be kept updated, by the MMO, with full details of the condition and status of the ACMs.

7.7 Action to be taken following a Survey/Inspection of known or presumed ACMs

If the ACM is in good condition, intact and non-friable and suitable warning notices are posted, the required action is to monitor and manage:

- Where a Regional Prime Contract is in operation on an establishment the DE DDEM as a duty holder is to ensure that regular monitoring of the ACM is undertaken. For establishments outside of the scope of the Regional Prime Contracts the MOD manager responsible for the MMO will undertake the above duty
- The MMO will undertake regular inspections at intervals not exceeding 12 months
- The CO/HoE, through the Building Occupier, is to monitor the condition of the ACM and notify the SER of any deterioration or change

If the ACM is showing minor signs of deterioration, breaking away or damage to the protective cover (if one exists) the damaged parts are to be temporarily sealed until a permanent repair can be affected by a suitable contractor:

- The CO/HoE, through the Building Occupier, is to notify the SER of any such damage.
- Where a Regional Prime Contract is in operation on an establishment the DE DDEM is to authorise the remedial work, within the limit of their delegation, and ensure that the MMO carries out the work. For establishments outside of the scope of the Regional Prime Contracts the MOD manager responsible for the MMO will undertake the above duty. The appropriate person will ensure that only suitable contractors are used to carry out the work.
- The MMO to instruct a suitable contractor to carry out the necessary remedial work and to ensure that it is effectively carried out. This will include any monitoring that may be required to ensure that area is clear of asbestos fibres. After work is completed, the MMO will undertake further inspections to ensure that the remedial works have proven effective.
If the ACM is extensively damaged or deteriorated, the person in charge of the building is to ensure the affected area is cleared and isolated. If an activity has caused the damage, the person in charge of that activity is to clear all persons away from the area and notify the SER and/or MMO accordingly. If necessary, the damaged ACM is to be removed by a suitably competent contractor:

- Where a Regional Prime Contract is in operation on an establishment the DE DDEM is to authorise the remedial work, within the limit of their delegation, and ensure that the MMO carries out the work. For establishments outside of the scope of the Regional Prime Contracts the MOD manager responsible for the MMO will undertake the above duty. The appropriate person will ensure that only suitable contractors are used to carry out the work.
- If the Building Occupier and CO/HoE are not aware of this damage, DE DDEM or appropriate MOD Manager is to ensure that they are notified.
- The MMO is to give a professional opinion on what remedial actions are required and to arrange for suitably competent contractors to carry out the required work. MMO will also ensure that, where required, 14 days notice is given to HSE. In the interim, before remedial works are completed, the MMO will ensure the area is suitably isolated with appropriate warning signs being posted.
- Where required, the Building Occupier, on the authority of CO/HoE will ensure that the area is cleared of MOD personnel.

In all of the scenarios mentioned above, the AMP must be properly updated to contain the relevant information.

7.8 Action to be taken when there is a risk that asbestos fibres have been released into the atmosphere

In any circumstance where there is an accidental uncontrolled release of asbestos into the workplace, measures, including emergency procedures, shall be put in place to limit exposure and the risks to health. The procedures must include suitable arrangements to clear personnel from the affected area and to ensure that the area is properly isolated. This is to prevent possible spreading of the asbestos fibres and to ensure no unauthorised access to the area.

Such procedures shall be included in the AMP. Before starting work in the vicinity of known ACMs, those carrying out the work shall include the procedures in any work instructions, method statement or safety plan.

If there has been a significant fire involving ACMs, it is very likely that significant amounts of asbestos will have been released into the atmosphere. The AMP must include suitable arrangements for ensuring that relevant organisations, such as the Local Authority, the Accident and Emergency Services and the HSE, are informed so that suitable emergency measures can be taken, should such a release occur. Where a Regional Prime Contract is in operation on an establishment the DE DDEM, on behalf of Duty Holder, shall ensure that all relevant organisations are identified for each establishment. For establishments outside of the scope of the Regional Prime Contracts the MOD manager responsible for the MMO will undertake the above duty.

7.9 Air Monitoring following a release of asbestos fibres to the atmosphere

Where it is suspected that asbestos fibres have been released into the atmosphere, the MMO will arrange for competent persons to carry out air monitoring and ensure no unauthorised persons enter the area.

The Associated ACoP ‘Work with materials containing Asbestos L143’ identifies that there are exceptions from some requirements such as circumstances when a possible release of fibres into the atmosphere need not be monitored. The ACoP identifies that air monitoring will be appropriate unless the risk of exposure to asbestos will be sporadic and of low intensity.
Précis of Reg 3(2). (CAR 2006)

a) the exposure of employees to asbestos is sporadic and of low intensity;
b) it is clear from the risk assessment that the exposure of any employee to asbestos will not exceed the control limit; and
c) the work involves –
   i) short, non-continuous maintenance activities,
   ii) removal of materials in which the asbestos fibres are firmly linked in a matrix,
   iii) encapsulation or sealing of ACMs which are in good condition, or
   iv) air monitoring and control, and the collection and analysis of samples to ascertain whether a specific material contains asbestos.

The MMO is to keep records of any air monitoring that has been carried out. Records of the following are required by the regulations and must be kept for 5 years or for 40 years if health monitoring is required. The sampling records shall be cross referenced in the Asbestos Management Plan.

The record should contain:

- the name and address of the employer
- the site address
- the date(s) the air monitoring took place
- the type of work being done (e.g., removal of asbestos insulation) and, where relevant, its exact location
- the type of sample, i.e. personal, clearance etc.
- the location of any static sampler
- the date and time of sampling, the sample duration and the flow rate
- if a personal sample; the employee’s name, task being performed and the category of RPE being worn
- the length of time for which individuals are exposed
- the measured fibre concentration
- the fibre type if known, and
- the names or organisations of the sampler and analyst and the sampling and analysis method used.

Sampling shall be undertaken following remedial work to ensure an area is clear before the area is put into use. The MMO is responsible for ensuring that the requirements of this section are met. Guidance on the retention of records is to be found in JSP 375 vol. 2 Leaflet 55

7.10 Health records and medical surveillance

Where it has been identified that a person has been exposed to asbestos fibres, the employer must keep a health record. The health record must be kept for 40 years in a safe place and should contain at least the following information:

- the individuals personal details and National Insurance Number
• a record of the exposure
• a record of any previous exposure to asbestos; and
• dates of medical examinations

The health record is not a medical confidential record.

See also JSP 375 Vol. 2 Leaflet 5 Annex A - Management of Hazardous Substances inc. Lead & Asbestos

7.11 Action to be taken when a building is being acquired or disposed of.

7.11.1 Acquisition of Premises

When premises are surveyed with a view to the MOD acquiring them (normally via Defence Estates Land Management Services (LMS)), the survey is to incorporate details regarding the availability of an Asbestos Management Plan (including the Asbestos Register). Given the variation in the standards employed in the execution of asbestos survey reports and in the compilation of Asbestos Management Plans, the accuracy of these documents is not to be wholly relied upon. If an AMP is not available, or the reliability of the AMP is in any doubt, a suitable asbestos survey of the premises must be commissioned. The asbestos survey is to be carried out by a competent person and written permission obtained from the vendor before any samples are taken.

The existing owner or leaseholder must ensure that all relevant information is passed on to the new occupier

When the premises have been acquired, the appointed CO/HoE, as Duty Holder, has the responsibility to ensure that a suitable and sufficient asbestos risk assessment has been carried out and that a suitable AMP is implemented in order to manage the risk of exposure to asbestos.

The CO/HoE will know how the premises are to be utilised and the activities that will be carried out within the premises. This must be taken into consideration when carrying out the asbestos risk assessment and implementing an effective AMP. Other information to take into consideration will include the acquisition and occupation timetable along with the associated costs. In the event that work involving ACMs is required to be undertaken during the period of MOD occupancy, any through-life cost assessment must include for the safe removal of known ACMs. This does not imply that all ACMs have to be removed.

The AMP, as previously stated, will include:

• a programme for monitoring and managing the identified ACMs
• an up to date Asbestos Register
• procedures to follow should there be an uncontrolled release of asbestos into the atmosphere

Where the acquired premises will be managed under the Regional Prime Contract responsibilities and arrangements will be the same as for premises already owned by MOD.

If it is decided to manage the premises outside of the RPC, responsibilities and arrangements will be managed by the appropriate MMO.

7.11.2 Disposal of Premises
When premises are being disposed of, the Duty Holder responsible for the site is to 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, and of the location of the current up to date Asbestos Register for the premises. This would normally be by the issue of the AMP and the associated Asbestos Register. DE LMS Disposal Section assumes full responsibility for sites declared surplus to requirements and accepted by DE from the Client TLB.

Further details for the disposal of premises are contained in the DE Site Closure Guide DMG 12

7.12 The Display of Warning Notices

Warning notices are mandatory on hazardous waste and packages containing ACMs. Warning notices are to be displayed as a reminder to those who may have to break into or disturb asbestos insulation or ACMs in areas where asbestos is known to exist and which could be readily damaged. The notices are to be located where they will be readily visible to anyone likely to damage the ACMs. However, the location and type of notice is to be carefully considered to avoid causing any unnecessary concern to the building occupants or visitors. Persons who normally occupy areas where the ACM is known to exist must be notified of its existence.

A record of the location of all ACM warning notices displayed shall be maintained within the AMP. This is to enable anyone carrying out monitoring activities to identify if any warning notice has been tampered with.

7.13 Contractors engaged to work with ACMs

All work with ACMs must be carried out by a licensed contractor unless it is exempt from licensing. For an explanation of this exemption, refer to Section 6 (Annex B).

For overseas locations, outside of UK Territorial waters, UK licensed contractors may not be available. In order to avoid excessive costs involved with engaging contractors from the UK, a suitably competent local contractor may be engaged to carry out the works. To be deemed competent, a contractor must be able to demonstrate the skills and experience as laid down in the ACOP.

Where an establishment is undertaking maintenance work in accordance with procedures that are different to the RPC, the CO/HoE shall ensure that the organisation appointed as the MMO only appoints suitably competent contractors.

For Core Works, and other discrete projects, the organisation appointed Principal Contractor shall have the responsibility to select and appoint suitably competent contractors. To be considered suitable, a contractor must be able to demonstrate their ability to carry out works with ACMs in accordance with statutory requirements. This must include producing:

- a valid licence issued by HSE. (see above for overseas contracts)
- suitable certification for the persons who will carry out the work
- written procedures and safe systems of work for carrying out the work
- documentary evidence of experience on similar works
- a suitable written plan of work detailing how the work is to be carried out

When assessing the suitability of a contractor, consideration must be given to any enforcement action against that contractor. This must include any pending court cases. If the contractor can demonstrate
that they have taken suitable action in accordance with the conditions of any enforcement action, they can still be considered to be suitable, if the other criteria are satisfied.
Annex A – Asbestos Containing Materials

Uses and likely occurrence of asbestos in buildings

Asbestos in various forms has been used in building construction for some considerable time. Listed below are the most likely areas where asbestos will be found in building construction, this is not an exhaustive list, the most up to date guidance (HSE etc.) should be consulted for further detail:

1 Asbestos-Cement Products
   - roof and wall cladding systems
   - rain water gutters and downpipes
   - flat roof decking tiles and troughed sections
   - flue pipes and cold water cisterns
   - roof slates, wall sidings and shingles
   - fascia and soffit boards
   - window boards and cill sections

2 Thermoplastic and Vinyl Floor Tiles
   - floors in domestic, industrial, commercial and institutional buildings.

3 Asbestos-Reinforced Roofing Felts
   - built-up roof weathering systems

4 Asbestos Insulating Board
   - industrial wall and roof linings to provide fire protection and condensation control
   - internal partitions which may be providing fire protection
   - duct and pipe covers, and other applications where board needs to resist changing temperatures
   - suspended ceilings, either screwed up to metal grids or as lay-in panels in exposed grid systems
   - fire door conversion
   - soffit, porch and canopy linings and other semi-exposed areas
   - electrical switch rooms, backing to cable racks

5 Sprayed Asbestos Coatings and Insulation
   - fire protection, acoustic control and condensation control on structural surfaces in buildings (girders, roofs, ceiling areas and sometimes walls)
- thermal insulation to pipes and storage vessels
- decorative ceiling or wall coatings e.g. Artex

6 Asbestos Cloth
- fire blankets
- insulation to electrical fuse carriers

7 Asbestos Gaskets and Ropes
- heating boilers
- chiller plant
- pipeline gaskets
- internal combustion engines (generators)
- fire resisting seals to dumb waiters and incinerators
- seals to fuseboards and fuse-switches

8 General
- brake linings, clutch plates
- dust accumulation on structures that contain, or have contained, asbestos
- packing in window frames
- asbestos lining paper on notice boards
- brakes on winches, cranes and power presses
- heaters, cupboards, fume cupboards, ovens
Annex B – Legislation

Regulations

Regulations governing the control of asbestos have been introduced under a number of Acts of Parliament. The principle of these regulations is to match precautions to the proven level of risk. The employer has a duty to employees engaged in works with the potential to expose them to any form of asbestos and these responsibilities are extended to include any person(s) who may be affected by the work activity.

The regulations most likely to be relevant to maintaining the MOD Estate are listed in Annex H.

A précis of some of the main regulations is given below.

1. The Control of Asbestos Regulations 2006

These regulations revoke and replace the Control of Asbestos at Work Regulations 2002 and revoke and re-enact, with modifications, the Asbestos (Licensing) Regulations 1983 as amended by the Asbestos (Prohibitions) Regulations 1992 as amended by the Asbestos (Prohibitions) (Amendment) Regulations 1999 & 2003.

The Control of Asbestos at Work Regulations 2002 are replaced by Part 2 of the new Regulations, The Asbestos (Licensing) Regulations are re-enacted in Regulation 8, and the Asbestos (Prohibitions) Regulations are re-enacted by Part 3.

The Regulations still apply when any work with asbestos or with any product containing asbestos is carried out by the employer. The Regulations require that employees’ exposure to asbestos be prevented or reduced to the lowest levels reasonably practicable. They also set down new control limits of 0.1 fibres per cubic centimetre of air averaged over a continuous period of 4 hours at, or above, which employees must not be exposed unless they are wearing suitable respiratory protective equipment which complies with the Personal Protective Equipment at Work Regulation or of a type approved by the HSE. Short term exposures must be strictly controlled and worker exposure should not exceed 0.6 fibres per cm³ of air averaged over any continuous 10 minute period using respiratory protective equipment if exposure cannot be reduced sufficiently using other means.


Under the Regulations, employers shall not carry out work which is liable to expose their employees to asbestos unless they have made a suitable and sufficient assessment of the risk created by that exposure and the steps needed to be taken to meet the requirements of the regulations. Where the risk assessment has determined that exposure to asbestos may exceed the control limit, the employer shall keep a copy of the significant findings of the risk assessment at those premises for such time as, the work to which the assessment relates is being carried out.

Asbestos removal work must be undertaken by a licensed contractor unless it is exempt from licensing (any decision on whether particular work is licensable is based on the risk). Where the work is deemed to be exempt from licensing the requirement is for a competent contractor to undertake the work.
Work is only exempt from licensing if:

- the exposure of employees to asbestos fibres is sporadic and of low intensity (exposure cannot be considered to be sporadic and of low intensity if the concentration of asbestos in the air is liable to exceed 0.6 fibres per cm$^3$ measured over 10 minutes); and

- it is clear from the risk assessment that the exposure of any employee to asbestos will not exceed the control limit; and

- the work involves:
  
  i. short, non-continuous maintenance activities. Work can only be considered as short, non-continuous maintenance activities if any one person carries out work with these materials for less than one hour in a seven-day period. The total time spent by all workers on the work should not exceed a total of two hours.

  ii. removal of materials in which the asbestos fibres are firmly linked in a matrix. Such materials include: asbestos cement; textured decorative coatings and paints which contain asbestos; articles of bitumen, plastic, resin or rubber which contain asbestos where their thermal or acoustic properties are incidental to their main purpose (e.g. vinyl floor tiles, electric cables, roofing felt) and other insulation products which may be used at high temperatures but have no insulation purposes, for example gaskets, washers, ropes and seals.

  iii. encapsulation or sealing of asbestos-containing materials which are in good condition, or

  iv. air monitoring and control, and the collection and analysis of samples to find out if a specific material contains asbestos.

Under the Asbestos Regulations, anyone carrying out work on asbestos insulation, asbestos coating or asbestos insulating board (AIB) needs a license issued by HSE unless they meet one of the exemptions above.

Where work on ACMs is licensable the employer must also notify the enforcing authority in writing at least 14 days before commencing work, measure the amount of asbestos in the air at the workplace, post warning signs in work areas, provide health surveillance and maintenance of health records.

The duties imposed on employers to protect their employees are extended to cover, so far as is reasonably practicable, anyone else who may be affected by their work, including visitors to the workplace and members of the public. There is also a specific requirement that the spread of asbestos from any place where work is carried out is reduced to the lowest levels reasonably practicable. In addition, emphasis is placed on adequate information, instruction and training for employees.

The duty to manage asbestos in non domestic premises requires persons with repair and maintenance responsibilities for premises to ensure that ACMs within those premises are properly managed, and that information about the location and condition of the materials is passed on to those likely to disturb them. Employers are to prepare procedures, provide information and establish warning systems to deal with an emergency in the workplace related to the use of asbestos in a work process or the removal or repair of ACMs.

The Regulations require mandatory information, instruction and training for anyone liable to be exposed to asbestos fibres at work. This includes maintenance workers and others including supervisors who may come into contact with or who may disturb asbestos (e.g. cable installers) as well as those involved in asbestos removal work. The regulations require employers to ensure that those who are liable to be exposed to ACMs are aware of the hazards, risk, safety precautions and
emergency procedures in order to safeguard themselves and others. Training shall be provided at regular intervals and in a manner appropriate to the nature and degree of risk.

2. **The Control of Asbestos in the Air Regulations 1990**

The Control of Asbestos in the Air Regulations 1990 implement the emission limit of 0.1mg/m³ of asbestos to the air by industrial installations. The Regulations also include further general provisions to prevent significant environmental pollution from activities involving the working of products containing asbestos and the demolition and removal of materials containing asbestos. Any person undertaking the demolition of buildings, structures and installations containing asbestos and the removal from them of asbestos or materials containing asbestos involving the release of asbestos fibres or dust into the air shall ensure that no significant environmental pollution is caused.

3. **The Hazardous Waste (England and Wales) Regulations 2005**

The Hazardous Waste (England and Wales) Regulations 2005 have replaced The Special Waste Regulations 1996 and the Special Waste (Amendment) Regulations 2001 which update The Control of Pollution (Special Waste) Regulations 1980 which established the requirement for additional controls over wastes which are particularly difficult or dangerous to dispose of. The regulations allowed for tighter controls over the transport of wastes and require a consignment note procedure to be carried out before the waste is moved. There is no longer a requirement to pre-notify consignments to the EA, but there is a new a requirement to **Notify Premises** where HazWaste is produced. Consignment notes are still used to fulfil the Duty of Care.
DESK TOP STUDY - IDENTIFICATION OF RISK POSED BY MATERIALS IN RELATION TO BUILDING AGE

Was the building constructed post 1999?

Yes

ACMs should not be present in building fabric, check with architects/contractors. Document evidence to confirm asbestos is not present

No

Was the building constructed/refurbished post 1985?

Yes

ACMs should be limited to white asbestos. Check with architects/contractors or records to confirm materials used

No

Continue with procedure 2

There is a high probability that ACMs are present within these buildings. It is also unlikely that information as to building materials used will be available. Continue with procedure 3
DESKTOP STUDY - BUILDINGS CONSTRUCTED BETWEEN 1985 AND 1999

Is the building used as offices or for non-sedentary activities?

- Offices
- Non Sedentary Activities

MMO to undertake visual assessment of potential asbestos materials

Is there strong evidence to show that there are no ACMs present?

- Yes
- No

Document findings of the visual assessment to demonstrate that ACMs are unlikely to be found in the premises.

Undertake Type 2 survey before any intrusive work is undertaken.

Label possible ACMs with suitable warning labels.
Develop suitable procedures to prevent unauthorised work on these materials.

Programme bulk sampling
Annex C – Procedure 2a

BUILDINGS CONSTRUCTED/REFURBISHED BETWEEN 1985 AND 1999

Continued from Procedure 2. MMO to undertake visual assessment of potential asbestos materials

Is there strong evidence to show that there are no ACMs present?

Yes → Document findings of the visual assessment to demonstrate that ACMs not present. Undertake Type 2 survey before any intrusive work is undertaken.

No

Is it possible for building occupants, office cleaners to disturb ACMs?

No → Label possible ACMs with suitable warning labels. Develop procedures to prevent unauthorised work on these materials. Treat all suspected ACMs as asbestos until confirmed by analysis; and Prepare an Asbestos Management Plan

Yes

Label suspected ACMs with suitable warning labels and record details. Treat all ACMs as asbestos until confirmed by analysis. Undertake Type 2 survey to identify ACMs Prepare and implement Asbestos Management Plan Develop suitable procedures to prevent unauthorised work on these materials.
BUILDINGS CONSTRUCTED/REFURBISHED PRIOR TO 1985

These buildings will be considered higher risk/priority as they are more likely to contain asbestos

Non sedentary activities

Is the building used for non sedentary activities or offices?

 MMO to undertake visual assessment of potential asbestos materials

Has the visual assessment identified potential ACMs

No

Document findings of the visual assessment to record that ACMs not recognised to be present

Undertake Type 2 Survey

Due to potential for a large number of persons to be affected, arrange for necessary survey (Type 2) Undertake an asbestos risk assessment. Prepare and implement an Asbestos Management Plan

Yes

Label all potential ACMs with appropriate warning signs. Inform all persons of hazards and update building risk assessment

Restrict all work that could disturb ACMs

Commission a Type 2 asbestos survey. Prepare and implement an Asbestos Management Plan

Monitor condition in accordance with AMP (If ACM in good condition leave in situ if not encapsulate or remove)

Non sedentary activities
Annex C – Procedure 4

ASSESSING THE PRESENCE OF ACMs PRIOR TO REFURBISHMENT OR DEMOLITION WORK

Is there strong evidence to show that there are ACMs present?

- No
  - Is there evidence in the form of an asbestos survey undertaken in accordance with MDHS 100
  - Yes
    - Undertake a Type 3 asbestos survey.
  - No
    - Proceed to Procedure 5

- Yes
  - Has survey identified any ACMs?
    - No
      - Proceed with caution with work being planned
    - Yes
      - Proceed to Procedure 5
COMMISSIONING ASBESTOS REMOVAL WORK
(Normally undertaken by MMO)

Following the production of a Type 3 Asbestos Survey method statement and risk assessment for asbestos removal is produced

Is the ACM liable to be disturbed during refurbishment/demolition?

Yes

Appoint Licensed Asbestos Contractor to remove asbestos. Provide contractor with survey report and all relevant information

Contractor to submit 14 days notification to HSE before commencing removal work

On completion of asbestos removal, undertake clearance procedures and update Asbestos Register and AMP.

No

Asbestos Management Plan to be amended accordingly.
Annex D - Sample Asbestos Register Sheet

<table>
<thead>
<tr>
<th>SITE:</th>
<th>ADDRESS:</th>
<th>PAGE No:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LOCATION (indicate full extent): e.g. ceiling tiles in room number.</th>
<th>SAMPLE REF:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>QUANTITY/VOLUME</th>
<th>% ASBESTOS CONTENT (if known)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GOOD</td>
</tr>
<tr>
<td></td>
<td>FAIR (minor repair needed)</td>
</tr>
<tr>
<td></td>
<td>POOR (fallen debris/major damage)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRIABILITY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW (Asbestos Cement product)</td>
</tr>
<tr>
<td>MEDIUM (Pipework insulation)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMENTS</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>RECOMMENDATION:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>DETAILS OF DRAWINGS /SKETCHS/PHOTOS:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>OTHER INFORMATION</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date of next review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date asbestos removed</td>
</tr>
<tr>
<td>Name of Contractor undertaking removal</td>
</tr>
</tbody>
</table>

This is not a required format, but is indicative of the level and extent of information required. This Register may be maintained in electronic form, but a hard copy of the current register must be available for inspection.
## Annex E – Material Assessment Algorithm

### Sample Variable

<table>
<thead>
<tr>
<th>Sample Variable</th>
<th>Score</th>
<th>Examples of Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Type (or debris from product)</td>
<td>1</td>
<td>Asbestos reinforced composites (plastics, resins, mastics, roofing, felts, vinyl floor tiles, semi-rigid paints or decorative finishes, asbestos cement etc)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Asbestos insulating board, mill boards, other low density insulation boards, asbestos textiles, gaskets, ropes and oven textiles, asbestos paper and felt.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Thermal insulation (pipe and boiler lagging) sprayed asbestos, loose asbestos, asbestos mattresses and packing</td>
</tr>
<tr>
<td>Extent of damage/deterioration</td>
<td>0</td>
<td>Good condition: no visible damage.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Low damage: a few scratches or surface marks; broken edges on boards, tiles etc.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris.</td>
</tr>
<tr>
<td>Surface treatment</td>
<td>0</td>
<td>Composite materials containing asbestos: reinforced plastics, resins, vinyl tiles</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Enclosed sprays and lagging, asbestos insulating board [AIB] (with exposed face painted or encapsulated), asbestos cement sheets etc.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Unsealed AIB, or encapsulated lagging and sprays</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Unsealed lagging and sprays</td>
</tr>
<tr>
<td>Asbestos Type</td>
<td>1</td>
<td>Chrysotile (white)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Amphibole asbestos excluding crocidolite (mainly brown)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Crocidolite (blue)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:

- **Score 10 or over**: High potential to release fibres if disturbed
- **Score 7 - 9**: Medium potential to release fibres if disturbed
- **Score 5 - 6**: Low potential to release fibres if disturbed
- **Score 4 or less**: Very low potential to release fibres if disturbed
# Annex F – Priority Assessment Algorithm

<table>
<thead>
<tr>
<th>Assessment Factor</th>
<th>Score</th>
<th>Examples of score variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normal Occupant Activity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main type of activity in area</td>
<td>0</td>
<td>Rare disturbance activity (e.g. little used store room)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Low disturbance activity (e.g. office type activity)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Periodic disturbance (e.g. industrial or vehicular activity which may contact ACMs)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>High levels of disturbance (e.g. fire door with asbestos insulating board sheet in constant use)</td>
</tr>
<tr>
<td>Secondary activities for area</td>
<td></td>
<td>As above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>As above</td>
</tr>
<tr>
<td><strong>Likelihood of Disturbance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>0</td>
<td>Outdoors</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Large rooms or well ventilated areas</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Rooms up to 100m²</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Confined spaces</td>
</tr>
<tr>
<td>Accessibility</td>
<td>0</td>
<td>Usually inaccessible or unlikely to be disturbed</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Occasionally likely to be disturbed</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Easily disturbed</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Routinely disturbed</td>
</tr>
<tr>
<td>Extent/amount</td>
<td>0</td>
<td>Small amounts or items (e.g. strings, gaskets)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>10m² or 10m pipe run</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>&gt;10m² to 50m² or 10m to 50m pipe run</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>&gt;50m² or 50m pipe run</td>
</tr>
<tr>
<td><strong>Human Exposure Potential</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Occupants</td>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1 to 3</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4 to 10</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10 and above</td>
</tr>
<tr>
<td>Frequency of use of area</td>
<td>0</td>
<td>Infrequent</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Monthly</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Weekly</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Daily</td>
</tr>
<tr>
<td>Average time area is in use</td>
<td>0</td>
<td>&lt;1 hour</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>&gt;1 hour &lt; 3 hours</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>&gt;3 hours &lt; 6 hours</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>&gt;6 hours</td>
</tr>
<tr>
<td><strong>Maintenance Activity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of maintenance activity</td>
<td>0</td>
<td>Minor disturbance (e.g. possibility of contact when gaining access)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Low disturbance (e.g. changing light bulbs in asbestos insulating board ceiling)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Medium disturbance (e.g. lifting 1 or 2 asbestos insulating board ceiling tiles to access a valve)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>High levels of disturbance (e.g. removing a number of asbestos insulating board ceiling tiles to replace a valve or for re-cabling)</td>
</tr>
<tr>
<td>Frequency of maintenance activity</td>
<td>0</td>
<td>ACM unlikely to be disturbed for maintenance</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>≤1 per year</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>&gt;1 per year</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>&gt;1 per month</td>
</tr>
</tbody>
</table>

(2002 HSE HSG 227)

The following are the suite documents that make up the process 'Coherent Asbestos Management on the Defence Estate'. (The references to Annexes A1 to C refer to the annexes in the Coherence Document and not to annexes within this PG).

Annex A1  Roles and Responsibilities
Annex A2  Organisational Arrangements
Annex B1  HoE Site Management Arrangements
Annex B2  MMO Site Management Arrangements
Annex B3  DE Site Management Arrangements
Annex B4  3rd Party Site Management Arrangements
Annex C   List of Type 2 Surveys
Annex D   Asbestos Action Plan Examples
           Asbestos Register Example

These annexes are attached separately to this PG.
Annex H – Template for an Asbestos Management Plan

This template is not a definitive document and is provided for guidance purposes only. Before use the template must be made specific to the using organisation’s management arrangements.

ASBESTOS MANAGEMENT PLAN (AMP) – For …..add site name……………….

References:

a) Control of Asbestos at Work Regulations 2006

Overview

This document contains the Asbestos Management Plan (AMP) for the Ministry of Defence (MoD) Establishment …add site name………………., implemented to comply with Regulation 4 of the Control of Asbestos Regulations 2006 (CAR 2006).

The Duty Holder is the Head of Establishment (..Named individual..); who is responsible for the Asbestos Management Plan, both in its preparation and implementation on this establishment. Other duty holders’ who have responsibilities are the …Title or post of other Duty Holders…. Details of their responsibilities are given in Annex A

It is intended that this Document be reviewed at regular intervals, in accordance with Regulation 4 of CAR 2006. (Guidance on Regulations 4 can be found in L127 The Management of Asbestos in Non-Domestic Premises. Approved Code of Practice and guidance (Reference B)

1. Introduction

This AMP for …add site name……………… is drawn up in accordance with and must be read in conjunction with the Control of Asbestos Work Regulations 2006 (Reference A) and Defence Estates Practitioner Guide PG 02/ 07 (Reference C)

Where there is a conflict between this AMP and a statutory requirement the latter is to be followed and the person who has signed this AMP is to be advised immediately.

In the event of an emergency the asbestos duty holder will be informed immediately.

2. Background

During 200?, Asbestos Surveys were carried out on all buildings at …add site name……….. The work entailed:
3. Responsibilities

The Responsible Person on site for managing the Asbestos Register on behalf of the Head of Establishment and the risk associated with Asbestos Containing Material at …add site name……… is the …add post holder title….  

The Asbestos Register for …add site name……… is held and managed on a day to day basis by …add individual…… located at …add location on site………. The contact details are:

Address: add address

Phone: add phone number

The Asbestos Register will be updated following both planned and reactive inspections updates and completion of remedial actions. The Asbestos Register will be made readily available from …add individual….  

Named individual (as above)………. duties in relation to ACMs are as follows:

a. Hold, maintain and update the Asbestos Register for …add site name………………
b. Carry out the inspection of ACMs at …add site name………………. at the frequency recommended by the risk assessment in the register.

c. Review the risk assessment in the Asbestos Register to ensure it is current and appropriate.

d. Be the Subject Matter Expert for Asbestos issues for …add site name…………

e. Receive and act upon requests for advice and emergency repair to ACMs.

f. Advice the Head of Establishment of any issues involving Asbestos

g. Ensure that there is sufficient labelling on site for asbestos management.

h. The prioritisation of remedial actions is undertaken by combining the information from the Material Risk Assessment from the Survey Material Assessments with an assessment of the risk of exposure to asbestos fibres

4. Labelling

At …add site name……………….. all ACMs in buildings or installations on the site as identified in the Asbestos Register will, where appropriate, be labelled in accordance with the guidance provided in Reference C. Labels will be checked as part of the inspection detailed in 3 above.

At …add site name……………….. All ACMs in Housing will be referred to …add individual name……………….. This policy has been agreed with DE Ops Housing. Delete if not applicable.

5. Training

The minimum level of training/qualification required within… (insert name of organisation) for work in connection with asbestos is detailed in PG 02/07 …add post holder title …is trained /qualified to ………………………..level/will obtain training/qualification to ………………………..level by ………………………. Mr ……………………….. is qualified to …………… level/will obtain qualification to ……………..level by ………………………..

6. Dissemination of Information

All details of ACMs within …add site name………………. are entered on the site IT management system (insert name of IT management system). When a works order is raised the specific location, type, extent and condition of an ACM is identified in the order.

The (Names and title of those notified……, have been formally advised of the details of this Plan and the need to contact … named individual …… before carrying out any work which may impact on an ACM. When contacting …named individual………….. they will need to provide details or carry out a joint site visit to establish the location, type, extent and condition any ACM which may be affected by proposed works.

Mr …………….will liaise closely with … insert name of contact person ……to ensure they are fully aware of this Plan and the arrangements to manage ACMs at …site name…………….. He will provide a brief where any changes to building custodians or other key staff occurs.

Details/copies of communication with other parties are held in the Asbestos Register.

7. Monitoring and Review

This Asbestos Management Plan will be reviewed every 6 months to ensure it is being complied with and that it accurately reflects the current staffing situation.

Circumstances that may trigger a review are typically (but not exclusively):

- Incident of accidental exposure to Asbestos on-site
- Significant non-compliance with maintenance of ACM Record
- Changes to the relevant legislation
- Any other situation which the Duty Holder deems appropriate
The Review will use the defined Performance Indicators and such other information as deemed appropriate to assess:

- Degree of compliance with Safe Working Systems
- Attainment of specific schedules within defined timescales
- Proactive identification of system weaknesses
- Non-compliance records and Improvement Plans from previous Reviews

The prioritising of remedial actions is undertaken by combining the Material Risk Assessment from the Survey Material Assessments with an assessment of the risk of exposing building users to any asbestos fibres.

This latter assessment is the Priority Risk Assessment, hence the final risk assessment takes into account both the condition of the material and the context in which it is located.

8. Emergency Planning

The emergency procedures are as follows;

Disturbance of Asbestos Containing Materials by personnel:

If a person working suspects that ACM may be present or causes damage to ACMs he is to cease work immediately, if possible, close off the room/building/area and report his suspicions immediately to the MMO.

The MMO is to immediately notify ..enter name of person or post to be notified. who will notify the CO/HoE, or his representative and give guidance on what immediate measures need to be taken to ensure the safety of personnel. In all cases the initial advice will be:

- Evacuate the immediate location
- Ensure that the details are taken of anyone that may have been exposed to the ACM.
- Close/fence off the location and post warning signs.

The Duty Holder will discuss with the MMO what further measures need to be taken and will advise the HoE, or his representative accordingly.

All new discoveries or accidental damage to ACMs are to be recorded in the Asbestos Register and risk assessments reviewed.

Action to be taken when there is a risk that asbestos dust has been released into the atmosphere

Where it is suspected that asbestos dust has been released into the open atmosphere or there has been a significant fire involving ACMs, the Duty Holder will notify the Establishments Health and Safety Adviser and the Health and Safety Executive (HSE). In addition the Environmental Support Team will be consulted. The Duty Holder in consultation with the MMO will keep the HoE informed of the situation.

Air monitoring will be undertaken except where is not a requirement as identified by the HSE as listed below:

- Where exposures are known to be well below the recommended control limit.
- Where work is intermittent or of short duration and adequate information is available to enable the appropriate personal protective equipment (PPE) to be provided.
- Where such a high standard of PPE is provided for the predicted exposure that no foreseeable measurement results could indicate a need for a higher level of protection.
In the event of an emergency; the emergency services will be provided with information from the asbestos register of the location of asbestos in the area they are to be working. This information will be made available by .....named individual...... The .....insert post holder title..... will ensure that on behalf of the Duty Holder, this information is passed to the Fire Service. The local Fire Service has been contacted on ...... insert date..... to establish their requirement. The information was passed to the Fire Service on .... Insert date..... in the format they requested.

Further reading

a) Health and Safety at Work etc. Act 1974
b) Management of Health and Safety at Work Regulations 1999
c) Workplace (Health, Safety and Welfare) Regulations 1992
d) Construction Design and Management Regulations 2007
f) HSG 227: A comprehensive guide to managing asbestos in premises
g) HSG 210: Asbestos Essentials Task Manual
h) HSG 213: Introduction to Asbestos Essentials
i) MDHS 100: Surveying, Sampling and Assessment of Asbestos-Containing Materials

APPROVAL AND AUTHORISATION

TITLE ASBESTOS MANAGEMENT PLAN FOR ..............................................

ISSUE NUMBER ..........................

DATED .............................

THE CONTENT AND FORMAT OF THIS ASBESTOS MANAGEMENT PLAN ARE AGREED AND AUTHORISED BY:

HEAD OF ESTABLISHMENT (DUTYHOLDER):

Name Signature Date
Appendix A

Key duties to be carried out; please note that further information is available in PG02/07

Head of Establishment (HoE)

The Head of Establishment is responsible for the preparation, review, and maintenance of the AMP.

i) Ensure that an AMP is prepared and implemented for the establishment.

ii) Ensure that the contents of the AMP, and associated procedures are communicated to all contractors and building users, who may through their normal work activity have cause to disturb any ACM contained within buildings and facilities over which he exercises control.

iii) Ensure that the AMP is reviewed at regular intervals.

iv) Ensure that the effectiveness of the AMP is monitored.

v) Ensure that any organisation undertaking work related to the AMP has suitable competence and training.

vi) Ensure that all works on ACMs will be carried in accordance with the requirements of CAR 2006 and The Hazardous Waste Regulations 2005.

vii) Ensure that the contents of the AMP and associated procedures are communicated to all building users and Hosts.

viii) Ensure that an AMP is implemented in those areas for which he is responsible

ix) Receive reports and advice from visiting workers / contractors, with regard to ACMs, and act accordingly

x) Be responsible for the provision and maintenance of the record of ACM for all buildings and facilities over which he exercises control.

Other Duty Holders e.g. DE DDEM, MMO etc

The ...................... is responsible for the advising the Duty Holder on the preparation, review, and maintenance of the AMP, and will:

i) Ensure that an AMP has been prepared and implemented in those areas for which he has responsibility for maintenance and provide the Duty Holder with advice on the suitability of information provide by other duty holders for inclusion in the AMP.

ii) Ensure that the contents of the AMP and associated procedures are communicated to all contractors and building users who may through their normal work activity have cause to disturb any ACM contained within buildings and facilities over which he occupies, and / or has a responsibility for maintenance.

iii) Provide copies of the AMP, on request, to other interested parties (e.g. PFI IPTLs)

iv) Ensure that the AMP is reviewed at regular intervals.

v) Ensure that the effectiveness of the AMP is monitored.

vi) Ensure that any organisation undertaking some or all of the work related to the AMP has suitable competence and training.

vii) Ensure that all works on ACMs will be carried in accordance with the requirements of CAR 2006 and The Hazardous Waste Regulations 2005.

viii) Ensure that the contents of the AMP, and associated procedures are communicated to all MMO building users and MMO Hosts.

ix) Ensure that an AMP is implemented in those areas for which he is responsible

x) Ensure that surveys to identify and record ACMs are undertaken

xi) Receive reports and advice from visiting workers / contractors, with regard to ACMs, and act accordingly
xii) Be responsible for the provision and maintenance of the record of ACMs for all MMO assets for which he has a maintenance responsibility.

**Maintenance Management Organisation**

The Maintenance Management Organisation (MMO) is responsible for ensuring the health and safety of their employees and those of their subcontractors. The MMO is to ensure that they are made aware of the hazards and the impact of their activities on the health and safety of themselves or others.

The MMO is responsible for consulting the record of ACM for the Establishment, and monitoring the compliance of his staff and his supply chain contractors with the AMP and relevant health and safety legislation.

The MMO is also responsible for making recommendations to …*insert title..* and the Duty Holder regarding any action required on asbestos related issues, including the immediate action required following discovery of, or damage or degradation to ACM.

The structure of the AMP provides the framework to achieve this duty with respect to ACMs. The MMO will therefore additionally:

i) Ensure that all works, under their contract, are procured in accordance with the AMP Safe Working System, requiring a risk assessment and method statement for all works undertaken with ACMs

ii) Where work is to be undertaken on, or near, any ACM, ensure that the method statement / risk assessment is specified by a competent person, in accordance with CAR 2006

iii) Ensure that any work on ACM, under their control, is supervised and undertaken by suitably competent and trained persons, in accordance with CAR 2006

iv) Ensure that all works under their control are undertaken on site in accordance with the relevant AMP Safe Working System

v) Ensure that any suspected exposure is dealt with in accordance with emergency procedures.
Appendix B

List of completed Level 2 surveys

<table>
<thead>
<tr>
<th>Asset No</th>
<th>Building Name</th>
<th>Report Reference</th>
<th>Conducted by</th>
<th>Asbestos Identified</th>
</tr>
</thead>
</table>
Annex I – References

Further information may be found in the following documents:

**Ministry of Defence**
JSP 375 – MOD Health and Safety Handbook
JSP 418 - Environmental Manual

**Statutory documents**
The Control of Asbestos at Work Regulations 2006: SI2002 No. 2739
The Control of Asbestos in the Air Regulations 1990: SI 1990 No.566
The Control of Asbestos Regulations (Northern Ireland) 2007 SRNI 2007 No.31
The Control of Asbestos in Water Regulations (Northern Ireland) 1995 SRNI 1995 No.93
The Control of Asbestos in Water (Amendment) Regulations (Northern Ireland) 1996 SRNI 1996 No.602
Personal Protective Equipment Regulations 2002: SI 2002 No.1144

**Health & Safety Executive Guidance**
EH10 Asbestos: exposure limits and measurement of airborne dust concentrations. Rev. ed. 1995
L127 The Management of asbestos in non-domestic premises, 2006 ISBN 0 7176 6209 8
L143 Approved Code of Practice Work with Materials Containing Asbestos, 2006 ISBN 0 7176 6206 3
HSG 189/2 Working with asbestos cement 1999 ISBN 0 7176 1667 3
HSG 210 Asbestos Essentials, 2003 ISBN 0 7176 1887 0
HSG 227 A comprehensive guide to managing asbestos in premises, 2002
HSG 248 Asbestos: The analysts’ guide for sampling, analysis and clearance procedures, 2005 ISBN 0 7176 2875 2
MDHS 100 Methods for the Determination of Hazardous Substances Surveying, sampling and
assessment of asbestos-containing materials

**Other**
Asbestos Use in Buildings. Published by the Loss Prevention council
British Occupational Hygiene Society, Suite 2, Georgian House, Great Northern Road, Derby DE1 1LT