

National Probation Directorate

Policy and Procedures for Asbestos Containing Material (ACM) in Buildings

This document is intended to act as a guide to all parties involved in the management, occupation and maintenance of National Probation Service (NPS) buildings and to provide guidance on managing the risks from asbestos containing materials in all NPS buildings. It sets out policy and procedures for the routine management of ACM and for situations where ACM may be disturbed by works taking place within buildings.

Contents

Preface

Information for Employees	4
Summary of responsibilities	5

Part 1: Policy

Introduction	6
General Policy Statement	8
Policy categorised by building and type of product	10

Part 2: Management of asbestos in buildings

National Probation Directorate responsibilities	15
National Probation Service responsibilities	15
Facilities Management Contractor responsibilities	16
Introduction to the asbestos survey information	16
Using the asbestos survey information	17
Unplanned disturbance of asbestos containing materials	18
Planned disturbance of asbestos containing materials	19

Part 3: Procedures for work affecting ACM

General requirements	20
Procedures for planning projects	20
Removal or disturbance of ACM	20
Licensed and non licensed Work	23
Construction (Design and Management) Regulations 1994	23

Part 4: Monitoring and review

National Probation Directorate	25
NPS Arrangements	25
FM Contractor	25

Part 5: Premises Survey and Information

The Asbestos Register	26
Types of Survey	26

Appendices

1	Asbestos: Its uses and applications	29
2	Asbestos: The health hazards and occupational groups at risk.	31
3	Bulk sampling strategy for surveys	33
4	Asbestos risk assessment criteria	36
5	Flow chart for projects where ACM may be disturbed	37
6	Asbestos Incident Report Proforma	38
7	HSE Local Authority Circular LAC/373 – MMMF	39
8	Examples of licensed/ non-licensed work with ACM	42
9	Reference Documentation	46

DOCUMENT HISTORY

Project Title:	Project Executive:	Project Manager:	Date:
Asbestos Policy	Head of Estates	Health and Safety Manager NPD Estates	01 October 2003

Version	Date	Author	Reason for Change
1.0	03/10/2003	Bill Wood Health and Safety Manager NPD Estates	First National Issue

This document may be found in: 'F' Drive NPD Shared/NESTS_Project/Project Records/5 Implement/APFM/Asbestos Policy V0.6.doc

Preface

Information for employees

What is Asbestos and where can it be found?

Asbestos is a naturally occurring mineral fibre. There are three main types; Chrysotile, Amosite, and Crocidolite usually called white brown and blue asbestos respectively. However they cannot be identified just by their colour. Although its use is now banned by law asbestos was commonly used as a building material for its flame retardant and insulating properties. It is particularly common in buildings constructed before 1980 and was used in fire doors, ceiling tiles, internal walls and panels.

How does Asbestos get in to the body and what effect can it have?

Although the body will get rid of most of the larger fibres that can enter the nose and the mouth, tiny fibres can pass in to the lower parts of the lungs. They can stay there for a number of years and in some cases can work their way through the lung lining. The body naturally gets rid of any fibres that might be taken in with food and water. Asbestos fibres cannot be absorbed through your skin.

Exposure to fibres can lead to lung cancer, fibrosis of the lung or result in asbestosis or mesothelioma, which is a growth in the lining of the chest wall or abdomen. It is now thought that repeated low level exposures such as could occur during routine repair work may also lead to asbestos induced cancers.

Asbestos was also used for many years in a wide range of manufacturing including brake linings in cars. Consequently there is a background level of asbestos in most towns and cities around the country. It is highly unlikely that this level of environmental exposure poses any significant risk to the general population or that repeated very low levels, which are normally found in offices and other building, pose any risk to those working within them.

What is the risk from the Asbestos in my office or the building where I work?

As long as asbestos is intact it will not release significant level of fibre. Disturbing asbestos in any way, such as damage or removal, is far more likely to generate the release of fibres. Therefore unless the asbestos can be easily removed it is often safest to leave it in situ.

What should I do if the Asbestos containing material is damaged?

If any material containing asbestos becomes damaged it is possible that fibres can be released in to the atmosphere. The room containing the damaged material should be vacated, the door sealed and any windows closed. It should be reported immediately to the Facilities Management Contractor. Personnel should not enter the room until the appropriate testing and/or maintenance has been undertaken and they have been advised that it is safe to do so.

What is the risk to my health?

The risk to your health from a single exposure to asbestos is very small. In order to detect the physiological changes that could be caused by exposure to asbestos it would be necessary to undergo regular X-Ray examination. Repeated X-ray examination would pose a more significant risk to your health than the risk associated with exposure to small quantities of asbestos. It is therefore unnecessary to undergo any health monitoring or screening.

If you are exposed to asbestos you may wish to have this recorded in your Personnel file, occupational health record or your GP's notes.

How can I find out if there is asbestos in my building?

Asbestos registers should be held for all owned and leased buildings and to ensure that this requirement is met NPD are commissioning full asbestos surveys of all buildings. Ask your Premises Manager or Health and Safety Advisor to show you the register and explain it to you.

Summary of responsibilities

LOCAL AREA PROBATION STAFF

Ensure you know where the ACM is in the Premises (this should be identified in an Asbestos register on site)

If the ACM is inadvertently damaged **evacuate the affected area and prevent access to it.**

Show contractors the asbestos register before they commence work.

Inspect the ACM on a quarterly basis for signs of damage or deterioration.

Report any signs of damage or deterioration to the Helpdesk. Prevent access to the affected area.

Ensure the asbestos register is up to date.

A specialist contractor will be engaged to encapsulate or remove the damaged ACM. (NB The NPD/contractor will arrange this)

CONTRACTORS

Check the asbestos register before starting work.

Report any suspect or damaged materials to the local NPS manager and your manager.

Stop work if you think you may have disturbed ACM. Evacuate The area and prevent access to it.

Report any disturbance of ACM to The local NPS manager and your manager.

Notify NPD Estates without delay of any disturbance or damage to ACM.

Policy and procedures for Asbestos Containing Materials (ACM) in Buildings:

Part 1: Policy

1.1 Introduction

- 1.1.1 This document identifies how the National Probation Directorate shall manage the health risks to persons from asbestos containing material (ACM) in buildings under its management.
- 1.1.2 Asbestos is a naturally occurring silicate mineral composed of long thin crystalline fibres. The fibres have good tensile strength, flexibility, chemical resistance, heat resistance, thermal insulation and electrical insulation properties. Consequently asbestos has been widely used in many building materials. The period 1950 – 1999 covered the most extensive use of ACM in buildings. (Further information on uses and applications of ACM is contained at Appendix 1). Although the importation and manufacture of ACM was banned its use was allowed to continue in order to diminish stocks held. Although the use of asbestos in the construction or refurbishment of buildings is now illegal, many thousands of tonnes were used in the past and much of it is still in place.
- 1.1.3 The risk to health from asbestos occurs when fibres are released into the air and then inhaled. **Providing ACM are intact and in a position where they will not deteriorate or be damaged any risk to health will be diminished.** (Further information on the health hazards and occupational groups at risk is contained at Appendix 2).
- 1.1.4 Also for consideration within this policy, though more appropriate to contractors carrying out works in premises, is the use of Machine Made Mineral Fibres (MMMMF) and in particular a sub-set of MMMF, Machine Made Vitreous Fibres (MMVF). There are broadly two types of MMVF:
- Mineral Wools (glass and rock wool)
 - Refractory Ceramic Fibres

The former is largely used for building insulation e.g. lofts, and the latter is in specialist applications in industry and is unlikely to be found in Probation Service buildings.

Concerns were raised in the 1980s about the use of MMVF, in particular the exposure to householders installing mineral wool fibre loft insulation. Conclusions were reached that the public should not be concerned about working with or disturbing MMMF so long as they, where necessary, wore masks conforming to BS 6016 or BS 2091 and gloves to avoid skin irritation. Presently there is no clear evidence to indicate the carcinogenicity of mineral wools but, in view of some uncertainties it is prudent to assume that high exposure may pose a risk of lung cancer in workers therefore appropriate protection for those working with this material is essential.

A copy of the HSE LAC 37/3 regarding MMMF is included at Appendix 7 of this policy.

1.1.5 This document is presented in 5 parts as follows:

- **Part 1: Policy**

Part 1 contains the NPD General Policy Statement for managing risks from ACM and details the policy for specific types of buildings and product groups.

- **Part 2: Management of asbestos in buildings**

Part 2 identifies management responsibilities and details the arrangements for undertaking routine inspections of ACM and the procedures to follow when carrying out works that may affect ACM. An introduction to the use of the asbestos survey information is included and the procedures to follow should ACM be disturbed. In particular it is relevant to those who have day to day responsibility for buildings.

- **Part 3: Procedures for work affecting asbestos containing materials**

Part 3 provides information and guidance procedures where works are to take place that may disturb ACM. It is intended to be used by Designated Property Representatives, Premises Managers, Health and Safety Advisors and Union Safety representatives in Local Probation Areas. Contractors, Architects, Surveyors, Site Supervisors, Engineers and others planning or carrying out works to a building or to services within a building.

- **Part 4: Monitoring and review**

Part 4 identifies the arrangements for monitoring and reviewing the procedures in place for the management of ACM.

- **Part 5: Premises survey and information**

Part 5 contains the Asbestos Survey Information that relates to the specific premises where it is held. It is intended for use in connection with Parts 2 and 3. Although the importation, manufacture and installation of asbestos insulation board was stopped in the 1980s it cannot be guaranteed that some buildings constructed after this time will not contain ACM therefore all buildings will be surveyed to confirm this.

NB: Asbestos Survey Information refers to that information gathered in respect of ACM or suspected ACM in the course of surveying any building.

Asbestos Register refers to the locally held document at each building detailing the location and types of ACM or where suspected ACM, if in inaccessible places, has been found. The register will be updated periodically to indicate and work which has taken place to manage the ACM.

1.1.6 Asbestos Survey Information for all NPD premises will be held centrally in an NPD Asbestos Register and each FM Contractor will hold Asbestos Survey Information relevant to the Probation Divisions they manage. In addition, an Asbestos Register will be placed in each of the premises for referral by Local Probation Area management, Union safety representatives and visiting contractors. These three registers of information will be updated by the FM Contractor at all times to ensure they are always consistent.

1.1.7 If any further information regarding this document or ACM generally is required, contact either NPD Estates or the FM contractor.

1.1.8 Property Divisions are managed by the following FM contractors:

Approved Premises	-	AWG Facilities Services
North Division	-	MITIE Managed Services
East Division	-	AWG Facilities Services
West Division	-	MITIE Managed Services

1.2 General policy statement

1.2.1 NPD acknowledges and accepts its responsibilities under the Health and Safety at Work Act 1974, the Control of Asbestos at Work Regulations 1985 as amended in 2002 and all other associated legislation

1.2.2 To control the risks from ACM to employees, building users, contractors and others the following measures have been or will be adopted:

- **Asbestos Surveys**

- Surveys of all approved premises constructed prior to 1985 will be conducted before the end of October 2003 and Asbestos registers established for all such premises. All remaining premises will be programmed for surveys before the end of 2004.
- Asbestos Survey Information from all premises, will be maintained by the appointed FM contractor and a summary register will be held by NPD. The register which will be held at the premises to which it refers will be maintained by the FM Contractor in the course of its property management function.
- Periodically, between 6-12 months or as determined by the risk identified in the register, ACM shall be re-assessed by arrangements put in place by the NPD and executed and managed by the FM Contractor. Such arrangements will also be in accordance with the agreed national programme for buildings inspections. Re-assessments of ACM shall also take place whenever information is obtained that suggests the presence of hitherto unknown ACM or that suggests there ACM has been damaged or the integrity of the encapsulation has deteriorated
- Information from the Asbestos Register, which will be held at the premises, shall be available to NPS staff, designated Health and Safety Advisors, Union Safety Representatives, Consultants appointed to undertake projects, contractors tendering for or carrying out works and any other persons that may be undertaking work that may affect ACM.
- Where building or engineering works are due to be undertaken in premises, the appropriate procedures, defined in part 3 of this document, shall be followed. Prior to any works taking place there shall be an assumption, unless clear evidence is available to the contrary, that ACM will exist within any building.

- **Contractors and Consultants**

- Contractors or consultants appointed to undertake remedial work or removal of ACM shall be competent and have, where appropriate, (see Appendix 8) a Licence issued by the Health and Safety Executive. Consultants who undertake testing, sampling and monitoring shall be UKAS accredited. The FM Contractor shall maintain a list of approved asbestos contractors and consultants and such information shall be made available on request.

NB: Contractors appointed to remove asbestos must not themselves carry out sampling. Sampling will only be carried out by consultants appointed by the FM Contractor or the NPD.

- Prior to the commencement of any works the FM Contractor will provide a full method statement relating to the works taking place. The method statement will be issued in sufficient time, where practicable, to allow appropriate consultation to take place in accordance with the consultation process below and with Local Probation Area Health and Safety Advisors and Union Safety representatives.

- **Management of Asbestos**

- NPD shall ensure that competent asbestos advisers shall be available, through the FM Contractors, to provide an advisory service for all NPS Premises. This includes the provision for taking of bulk samples and arranging for analysis by an accredited Laboratory. Requests for advice on asbestos management should be submitted through Local Probation Area Health and Safety Advisors to the NPD Estates or FM Contractor.
- Where existing installations include ACM which is sound, in good condition and not subject to abrasion, environmental wear, deterioration or damage due to its location, the material shall be left undisturbed and its condition monitored, by the FM Contractor, at appropriate intervals identified in the Asbestos Register.
- Where existing installations include ACM which is damaged, deteriorating or inadequately sealed, it shall be repaired and/or sealed and encapsulated provided the repair will be durable and not subject to further damage or disturbance. Where the balance of costs of removal compared to the ongoing costs of maintenance show that it is reasonable to remove the ACM rather than repair and retain it this shall be the preferred option.
- The term “encapsulation”, is defined as follows:
 - a method of control of asbestos fibres in which the surface of asbestos containing material (ACM) is penetrated by or covered with a liquid coating prepared for that purpose. Since encapsulation, as defined, is qualified by the use of a product intended for the purpose of encapsulation, the application of paint to a surface would not qualify as encapsulation. The integrity of encapsulation becomes deficient when it is worn or damaged or when it no longer sticks to the ACM and begins to bubble or peel.

- Where existing installations include ACM which is disturbed, damaged, deteriorating or inadequately sealed and repair, as stated above, is not practicable, it shall be removed by licensed contractors and replaced with a non asbestos material.
- Disturbance or damage includes, but is not limited to, an activity that:
 - Renders the ACM to a condition in which the asbestos is no longer bound to its matrix;
 - Disturbs or dislodges the ACM from the surface on which it is supported or adhered to;
 - Any other activity that causes asbestos fibres to be released.
- The Asbestos Register shall be held and maintained in every NPS establishment where ACM is known or suspected to be present. The information shall be provided to consultants, maintenance staff, contractors and any other persons planning or undertaking work on the premises that may disturb ACM.
- **Consultation**
 - At all times any matters relating to the control and management of ACM in any NPS premises will be communicated by the FM Contractor to the NPD without delay either:
 - On discovery of ACM not previously listed in existing Survey Information
or,
 - Where existing ACM is found to be in a deteriorating condition
or,
 - Where any intrusive works are to take place in buildings where ACM is present.
 - NPD will at all times consult directly with Probation Areas to advise on any works relating to or requiring the removal of ACM. Any work on or removal of ACM will be routinely reported by the NPD Health and Safety Manager to the NPD Health and Safety Forum.
 - Local Probation Areas must ensure appropriate consultation in good time with staff and Union Safety Representatives on matters relating to or requiring the removal, sealing or encapsulation of ACM.
 - All consultation and information dissemination must take place before work on or removal of ACM commences unless waiver is granted by the HSE for immediate removal. In the event that immediate removal is granted by the HSE information will be disseminated by the fastest possible means.

1.3 Policy categorised by building and type of product

New Buildings:

- 1.3.1 It is a legislated requirement and standard policy that no material or equipment containing asbestos shall be specified in any new or existing building. Under the Asbestos (Prohibitions) Regulations the use of blue and brown asbestos was banned from 1985 and the use of white asbestos was banned from 1999. Since November 1999 no ACM, with the exception of a few specialist applications, should have been used in the United Kingdom. There is currently no ban on the use of MMMF's.

Existing Buildings:

- 1.3.2 ACM in existing buildings shall be managed according to their risk assessment rating as stated in the Asbestos Survey Information. The rating has been determined in accordance with the risk criteria in Appendix 4. ACM will generally be left in place if the risk assessment score is 10 or below. Materials rated above 10 are considered to present an unacceptable risk and consideration shall be given to either treating the ACM to lower the risk or to undertake planned removal. However, where the balance of costs of removal compared to the ongoing costs of maintenance show that it is reasonable to remove the ACM rather than repair and retain it, this shall be the preferred option. The more common types of ACM found in NPS premises and the policy for managing them is set out below.

- **Sprayed applications**

Surfaces finished with sprayed applications containing asbestos shall be:

- Sealed or encapsulated if in good condition but removed in a situation where damage by impact, abrasion, vibration or air movement is likely.
- Left alone if in good condition and unlikely to be damaged as above.
- Removed if damaged or inadequately sealed and it is not reasonably practicable to reseal or encapsulate. If left in position, its location shall be marked on the Asbestos Survey Information.
- Standard warning notices shall be attached to all ACM and in areas where general access is not available i.e. within a ceiling void warning notices shall be displayed in a prominent position.

- **Insulation and lagging**

Where Asbestos-containing insulation material is in an existing installation it shall be:

- Left alone if in good condition, adequately sealed and unlikely to be damaged.
- Removed if damaged, inadequately sealed or impact damage and/or abrasion is likely.
- If left in position, its location shall be marked on the Asbestos Survey Information.

- Standard warning notices shall be attached where general access is not available i.e. boiler room, ducting etc. In addition insulation that is not an ACM but has the appearance of an ACM shall be positively identified by an appropriate notice.

- **Insulation boards, e.g. ceiling tiles and wall boards etc:**

Where existing installations containing asbestos are sound and undamaged, or there is no evidence of dust release and the material is not subject to abrasion, impact or deterioration, it shall be:

- Left undisturbed and recorded in the Asbestos Register.

Where condition has deteriorated it shall be:

- Sealed or encapsulated if damage is minor or impact damage is likely.
- Removed if damage is significant and it is not reasonably practicable to reseal or encapsulate.
- Standard warning notices shall be attached to all ACM and in areas where general access is not available i.e. within a ceiling void warning notices shall be displayed in a prominent position.

- **Ropes and gaskets**

Where asbestos ropes and gaskets are contained in equipment it shall be:

- Left in place if in good condition and not releasing fibres.
- Removed and replaced with a non-asbestos product during routine and maintenance servicing when it is necessary to disturb.
- Removed and replaced with a non-asbestos product if damaged or fibre release is evident.
- If left in position it shall be recorded in the Asbestos Register. Warning notices shall be attached to equipment.

- **Asbestos cement products**

Where asbestos cement products are contained within the building they shall be:

- Left undisturbed if in good condition and not releasing fibres.
- Sealed if damage is minor.
- Removed if significantly damaged and replaced with non-asbestos material.

Where asbestos cement products have been used externally they shall be:

- Removed if damage is significant or material is friable or loose and capable of releasing fibre.
- If left in position it shall be recorded in the Asbestos Register.
- Standard warning notices shall be attached to all ACM and in areas where general access is not available i.e. within a ceiling void warning notices shall be displayed in a prominent position.

▪ **Floor tiles, roof felts, DPC**

Where PVC floor tiles and bituminous materials contain asbestos they shall be:

- Left undisturbed if in good condition and they are suitable for their intended purpose.
- Removed, if they are extensively damaged.
- If left in position it shall be recorded in the Asbestos Register. Warning notices shall not be attached.

▪ **Artex textured coatings**

Artex was a textured coating commonly used in many buildings. These shall be:

- Left undisturbed if in good condition and not releasing fibres.
- Sealed if damage is minor.
- Removed if significantly damaged and replaced with non-asbestos material.
- Removed if damage is significant or material is friable or loose and capable of releasing fibre.
- If left in position it shall be recorded in the Asbestos Register.
- Standard warning notices shall be attached to all ACM and in areas where general access is not available i.e. within a ceiling void warning notices shall be displayed in a prominent position.

Leased, rented and shared buildings

- 1.3.3 Property acquired on full repairing lease is to be treated, as NPD owned property.
- 1.3.4 Property acquired on non-repairing leases, i.e. Landlords Responsibility, will be surveyed for ACM by the FM contractor and any ACM discovered will be reported to the landlord for remedial action where appropriate. A copy of the Asbestos Survey Information will be provided to the Landlord by the NPD.
- 1.3.5 Liaison with the Landlord regarding the management of ACM will be conducted by the FM Contractor who shall keep NPD and the Local Probation Area informed of all developments.
- 1.3.6 NPD owned property let on other types of lease is to be treated, as NPD owned property. If the presence of ACM is known, it shall be brought to the tenant's attention.
- 1.3.7 Where the NPS occupy premises under charitable trust provision or other sharing arrangements, the local Probation Area shall have responsibility as the employer of any probation staff accommodated at such premises to ensure that statutory compliance is met with regard to all aspects of health and safety including awareness of the existence and the management of ACM within such premises. If advice is required then Probation Areas should seek this from NPD Estates and not the FM Contractor.

Acquisition and Disposals

- 1.3.8 In the process of acquiring new premises, an asbestos survey (Type 2) will be carried out at the earliest opportunity and certainly before exchange of contracts, to ascertain the nature and extent of all asbestos materials present. In the event that friable asbestos materials (insulation board, insulation, sprayed coating, *etc.*) are identified it may be assumed that these materials will need to be removed or managed during the period of NPS occupation. The cost of such removal works or ongoing management should therefore be reflected in the purchase price, and serious consideration given to their removal ahead of NPS occupation.
- 1.3.9 In the event that NPS disposes of a property or leases it for any period to another party, the Asbestos Register for the premises will be transferred formally to the new controller of the premises. Records will be kept of such transfers, including acknowledgement of receipt and understanding by the new premises controller.

Part 2: Management of asbestos in buildings

2.1 Management Responsibilities

2.1.1 Managing the risks from ACM in NPS premises requires responsibilities being placed on a number of duty-holders. These include the following:

- **National Probation Directorate**

The NPD shall ensure, through the Head of Estates, suitable arrangements are in place for:

- Setting policy for ACM management and developing procedures with Local Probation Areas, Trade Unions and others for effective implementation, coordination and cooperation on health and safety matters .
- Managing the initiation of asbestos surveys for all NPS premises or obtaining of Asbestos Registers for other buildings in which NPS employees work and providing this information to the Local Area Chief Officer.
- Confirming the existence of Asbestos Registers in all NPS premises and implementation of re-inspections in accordance with the recommended periodicity.
- Maintaining a Central Asbestos Register, which is a collection of all the premises Asbestos Survey Information.
- Providing advice and information on ACM to Probation Areas on the undertaking of project specific inspections on site.
- Ensuring that the NPD Health and Safety Forum has an oversight of this policy and involvement in any changes to the policy.

- **Local Probation Areas**

Chief Officers, exercising their duty of care shall ensure suitable arrangements are in place for implementing the procedures contained within this document. In particular this shall include:

- Appointing a responsible person to ensure local management of ACM on their behalf if the duty is not to be personally undertaken. This will usually be the Health and Safety Advisor.
- Consultation with and provision of information to employees and the Trades Unions through the Union Safety Representatives.
- Ensuring any person undertaking work in the establishment which may disturb ACM has checked and understood the Asbestos Survey Information contained in the Asbestos Register and is aware of their responsibility to avoid disturbing the material.
- Informing the NPD Estates on any amendments considered necessary to the Asbestos Register.

- Seeking advice from the NPD Estates with regard to the provision of further advice or reassurance on the management of ACM.
- Isolating any area adjacent to any ACM or suspected ACM if they appear to have been disturbed or damaged, informing Local Area Health and Safety Advisors and Union Safety Representatives, and seeking advice from the NPD Estates.
- Ensuring that employees working in the premises of other organisations are suitably protected from exposure to ACM through the establishment of effective mechanisms to coordinate and cooperate on health and safety matters.

- **FM Contractors**

FM Contractors will carry out most of the responsibilities of the NPD and the NPS with regard to the identification and management of asbestos and for production and maintenance of the Asbestos Registers.

FM Contractors, Project managers, Contract Administrators or those responsible for organising or carrying out works in buildings, which may affect the fabric of the structure or equipment within it, should have regard to the possibility of disturbing ACM. In particular they should:

- Arranging for the sampling and testing, if necessary by UKAS accredited consultants.
- Comply with requirements contained within part 3 of this document and summarised in the quick reference chart in Appendix 5.
- Consider at the initial outset of any project or works the possibility of disturbing ACM which must be addressed in a method statement relative to the works to be carried out.

The FM Contractors will also hold a central register of Asbestos Surveys in their own Property Management Systems which shall prompt the Contractor when re-inspections are due.

2.2 Introduction to the Asbestos Survey Information

- 2.2.1 To manage the risk from ACM in building, it is necessary, first of all, to identify where it is present. (See Part 5 for information on types of survey).
- 2.2.2 Some premises, under the previous management of Local Probation Areas have had asbestos surveys conducted and the appointed FM Contractors, using UKAS accredited consultants, will review existing registers to ascertain their currency and to ensure that they comply with the standards laid down in Part 5 of this document. Where they do not comply, their validity or quality is questionable or they are not current new surveys will be commissioned.
- 2.2.3 Surveys to identify ACM commenced in October 2002, on 16 pilot sites throughout Approved Premises. Surveys of the remainder of the whole Estate will continue until completion no later than December 2004. The Asbestos Register will be based upon information outlined in Part 5 of this document.

2.2.4 Entries in the Asbestos Register include a quantified risk assessment. This has been undertaken by applying numeric values to the following factors

- Type of product (plastics, cement, insulation or boarding)
- Condition (good, fair, poor)
- State (sealed, unsealed, friable)
- Treatment (left alone, sealed, removed)
- Location of the ACM and the potential for damage or deterioration

See Appendix 4 for specific assessment matrix.

2.2.5 Consultants conducting Asbestos surveys must also take into account the following contributory factors to assessment of the condition of ACM and its future maintenance:

- Location (rooms, corridors, external, etc)
- Frequency of use (High, Medium, Low)
- Vulnerability to damage (likely, some risk, unlikely)
- Deterioration due to environmental conditions

2.2.6 Based on the assessment, priority can be given to controlling risks where scores are highest. The quantified risk assessment scores exceeding 10 should have proposals in place to reduce the rating by encapsulation or removal of the ACM. These criteria are intended as a guideline for NPD to enable the determination of the need for immediate treatment or removal of ACM.

2.2.7 Where assessment scores are 10 and below, the ACM should generally be left in place and monitored by visual inspection on a periodic basis (no more than every 6-12 months) or as advised by the consultants and noted in the Asbestos Register, This will be implemented by NPD to ensure the risk has not increased.

2.2.8 Confirmation that products contain asbestos material can only be verified by sampling and analysis. In the course of surveying NPS premises sampling and analysis will be conducted and this shall be recorded on the survey information. Unless confirmed otherwise in the survey information any material identified on the visual surveys as potential ACM will be assumed to contain asbestos.

2.2.9 Sampling and analysis will be carried out in accordance with the requirements for the Type 2 Survey and with ISO 17025. Where however, areas cannot be easily accessed they will be assumed to contain ACM and may, if a likelihood of future access is required, be subjected to a Type 3 Survey.

2.3 Using the Asbestos Survey Information

2.3.1 Periodically (no more than every 6-12 months), and in accordance with the records contained in the Asbestos Register, the condition of materials identified as ACM will be visually inspected by the FM Contractor, using appropriately qualified consultants, to determine whether its risk rating has changed. Particular attention shall be paid to those items reaching higher scores, 9 and above, on the Asbestos Register.

2.3.2 When assessing the condition and treatment of asbestos materials, it is the release of fibres into the air, which requires careful consideration. Fibre release may arise when:

- The material is being disturbed (for example if it is in a prominent position and prone to accidental damage).
- The surface of the material is damaged, frayed or scratched.
- The surface sealant is peeling or breaking off.
- The material is becoming detached from its base (this is a particular problem with pipe and boiler lagging and sprayed coatings).
- Coverings designed to protect the asbestos are missing, removed or damaged.
- There is asbestos dust or debris in the immediate surrounding area to ACM.
- Moisture or water damage is causing breakdown of the material.
- Vandalism or damage by pests occurs.
- Vibration or environmental wear

2.3.3 Further consideration that may effect the risk assessment would be any significant changes in the use of facilities. This may alter the rating for vulnerability and/or the frequency of use.

2.3.4 All staff and others who may cause any significant disturbance of ACM whilst carrying out their work should be familiar with the Asbestos Register. They should avoid disturbing ACM and be trained in the steps to take to avoid releasing asbestos fibres. Where this likelihood exists the NPD will adopt a policy of asbestos removal as the preferred course of action.

2.3.5 Others who may undertake work on premises, such as electricians, computer installers, fire and burglar alarm installers, plumbers, building maintenance workers, etc., must be provided with information before commencing any work. They should be advised on the limitations of the survey and requested to inform on any findings, which they consider require amendment to the Asbestos Register, i.e. discovery of suspect material not previously shown. If in doubt, FM Contractor shall be contacted for further advice or assistance as a matter of urgency. It will be the responsibility of the FM Contractors to ensure that all tradespersons working in probation premises are adequately trained in awareness of asbestos. Local Area Probation Boards should be aware of their duty of care under the HASAW Regulations and ensure that any contractors working within premises under their jurisdiction are made aware of the Asbestos Register, work in accordance with an agreed method statement and conduct their work in a safe manner.

2.3.6 Where it is necessary that disturbance of ACM identified in the survey will take place as a consequence of proposed work, the appropriate procedure defined in part 3.3 shall be followed.

2.3.7 In using the Asbestos Survey Information, should it be identified that it is necessary to add or amend information, the Local Probation Area Representative should immediately inform the FM Contractor, the Local Area Health and Safety Advisor, and the Union Safety Representative. The Asbestos Report Form at Appendix 6 should be used for this purpose.

2.4 Unplanned Disturbance of ACM

2.41 In situations where suspect or known ACM has been disturbed or damaged to the extent that it may be releasing fibres, the location should be secured to prevent access if possible or alternatively the immediate area isolated and the FM Contractor notified via their helpdesk without delay. Advice on securing/isolation of areas where ACM has been disturbed or damaged will be provided by the FM Contractor. In such cases, unplanned disturbance of asbestos should be reported, in the first instance to the FM Contractor via the helpdesk and by phone to the Local Area Health and Safety Advisor, and followed up by an Asbestos Report form as contained at Appendix 6.

- 2.4.2 The FM Contractor shall notify the NPD Estates and the Local Probation Area as soon as possible advising the extent of the problem and the necessary action to be taken in light of any increased risk. If necessary, arrangements will be made for removal and environmental clean of the affected area.
- 2.4.3 Where staff or others may have been exposed to asbestos fibres they shall be informed at the earliest opportunity and given full information about the level of risk to themselves.

2.5 Planned Disturbance of ACM

- 2.5.1 Planned disturbance of ACM may be necessary when undertaking projects such as building works, installing and maintaining services, carrying out refurbishment work etc. Part 3 of this document should be followed in these situations.
- 2.5.2 Costs for planned disturbance of ACM shall be borne by the project and therefore need to be taken into account at the initial planning stage and included in the project budget.

Part 3: Procedures for works affecting ACM

3.1 General Requirements

- 3.1.1 In all buildings, it shall be assumed, unless there is evidence to the contrary, that ACM will be present. The FM Contractor shall ensure that when any intrusive works are to take place in any premises that a copy of the Asbestos Register is made available on-site for the attending operative or sub-contractor. FM Contractors shall ensure that attending tradespersons are required to confirm by signature that they have read and understood the Asbestos Register.
- 3.1.2 Where there is no Asbestos Register available then any major works, refurbishments or demolition will be preceded by a Type 3 Asbestos Survey to ascertain the presence and location of ACM. For minor works which do not require intrusion, other than drilling to pass cabling or services, the operative or sub-contractor shall be provided with a risk assessment by the FM Contractor who will prepare a method statement for safe conduct of the works. Where the premises in which the works are to be carried out are not wholly unoccupied for the period of the works, the Health and Safety Advisor of the Local Probation Area and the Union Safety Representative shall be permitted access to the risk assessments and method statement to satisfy themselves that all due care is to be taken in accordance with the CAWR.
- 3.1.3 The costs associated with disturbance to or removal of ACM can be significant and therefore early identification and costing is essential when planning any project. Advice and guidance can be obtained from the FM Contractor or the NPD Estates.
- 3.1.4 Projects budgets shall include all costs associated with work to ACM.

3.2 Procedures for Planning Projects

- 3.2.1 When considering any building, refurbishment, demolition, maintenance, cabling or engineering work in buildings the Asbestos Register shall be checked to identify the area(s) where disturbance of ACM is likely. Regard shall be made to service runs for water, electricity, gas, telephones, IT cabling etc. that extend outside the immediate working area.
- 3.2.2 A summarised flow diagram of the procedures is contained at Appendix 5, as a quick reference.
- 3.2.3 In many situations, such as refurbishments or IT cabling schemes, it is possible to modify designs to avoid disturbing ACM. This is advisable as disturbance or removal may significantly increase risk and cost. An inspection for ACM is therefore best undertaken at the preliminary stages of the scheme.

3.3 Removal or disturbance of ACM

- 3.3.1 The most appropriate means of managing ACM is removal. Where this can be reasonably achieved with regard to risk of release of fibres, effects on persons and cost. Alternatively the ACM should be left in place and undisturbed however, if ACM is present and there is no practicable alternative but to remove or disturb it, then the FM Contractor will seek NPD approval to employ appropriately licensed and qualified contractors to carry out such works.
- 3.3.2 Due to the risks associated with ACM it is generally good practice to undertake work on it at the time when the minimum number of people will be on site. Where possible premises

should not be in general occupation and works should be planned ahead to accommodate this. Such events will be risk assessed by the FM Contractor or their appointed consultant and consultation will be undertaken with the Local Probation Area Health and Safety Advisor and Union Safety Representatives.

- 3.3.3 There may however, be a need on some projects for work on ACM to take place whilst the premises are in occupation. In these circumstances the FM Contractor will consult with the premises manager or other designated person, the Local Probation Area Health and Safety Advisor to consider the method of working, the risks to occupants and the necessary precautions required. In any event, the general area where work on ACM is being carried out will be cordoned off and the asbestos contaminated area will be fully sealed. Any persons entering the sealed area will be required to wear appropriate protective equipment. A written risk assessment will be prepared by the FM Contractor in consultation with the Area Health and Safety Advisor and Union Safety Representatives.
- 3.3.4 The licensed contractor appointed by the FM to undertake any work on ACM will control access to any ACM area and no other persons will be permitted entry unless they have a valid reason for doing so, are authorised and are wearing the appropriate personal protective equipment.
- 3.3.5 Where it is reasonably practicable the general area of the work will be cordoned off and the specific area where the asbestos removal work is to take place will be fully sealed. Any persons entering the sealed area will be required to wear appropriate protective equipment. Asbestos removal work that is part of a larger project should be undertaken as preparatory work before the main works commence. Preparatory work may not always be possible, particularly on larger projects, where ACM may be subject to phasing requirements or be integral to the main project works. In these circumstances, appropriate information and instruction should be contained in the contract documents and the tender phase health and safety plan, if the CDM Regulations apply (see 3.6).
- 3.3.6 Depending on the type of ACM, i.e. if it is **asbestos insulation, sprayed coating, asbestos insulation board or artex textured coatings**, it will be necessary to appoint an HSE Licensed Contractor. Work on these materials will need to be undertaken under controlled conditions. The Licensed Contractor is legally required to submit an ASB5 notification to the HSE and allow at least 14 days before commencing work on site. This period needs to be allowed for in programming the works.
- 3.3.7 It should be recognised that the 14 day notification period applies to all work carried out under the Asbestos (Licensing) Regulations. It is essential therefore to ensure thorough planning of work at the design stage to ensure ACM are not overlooked, as this could disrupt work being undertaken and consequently delay re-occupation of the building. Only in exceptional circumstances, emergencies where there is an immediate risk to health, would a waiver of the 14 day notification be permitted by the Health and Safety Executive. (Waivers) will not be granted where asbestos is discovered that might reasonably have been found by survey prior to commencement of works, unless written evidence is provided of overwhelming extra cost, distress to vulnerable individuals, or similar.
- 3.3.8 The FM Contractor will maintain a list of contractors suitable for undertaking work on ACM in NPS premises. Such list will be submitted to the NPD Estates for review and approval.
- 3.3.9 The NPD Estates Team will ensure that project management is provided either through the FM Contractors or through other means for work on ACM and to consider and advise on

method statements prepared by contractors undertaking work. Method Statements should be based on the hazards and risks associated with the works and include the following:

- Methods for protecting building occupants if present.
- Means for suppressing fibres in air (e.g. damping).
- Means of segregating working areas.
- Plans showing the layout of sealed work area enclosures (if used).
- Transit routes between work areas and waste disposal.
- Type of personal protective equipment required.
- Location and type of operative de-contamination unit and hygiene facilities.
- On site handling and storage.
- Equipment type and capacities.
- Disposal arrangements.
- Site specific items (e.g. monitoring, cleaning, etc.).
- Labelling of ACM

Full consultation will be maintained at all times with the Local Area Health and Safety Advisor and Union Safety Representatives.

- 3.3.10 In considering the health and safety risks associated with the works, regard shall be made to the need for monitoring. Appropriate information shall be included on who is appointed to undertake enclosure integrity checks prior to removal work commencing, reassurance testing during the works (this may not be required if the work is of a relatively short period e.g. 30 minutes, such that tests may be of no practical value) and the arrangements for undertaking clearance tests following completion of the works.
- 3.3.11 Following any work on ACM under fully controlled conditions, it is a legal requirement to have an independent UKAS accredited consultant undertake a visual inspection and air clearance test. On NPD projects the Consultant should be appointed directly by the FM Contractor or NPD and NOT via the Asbestos Removal Contractor.
- 3.3.12 A clearance certificate should always be issued by the independent Consultant, to the FM Contractor who will be acting as the client on behalf of the NPD. The FM Contractor will then issue a copy of the clearance certificate to the nominated person at the premises and the Local Area Health and Safety Advisor prior to reoccupation of the area. The certificate will also be copied to the NPD immediately after issue of the same.
- 3.3.13 In all cases it is recommended that the independent consultant carrying out the monitoring and clearance testing is the same person.

3.4 Reinstatement

- 3.4.1 As previously stated, the main use of ACM was for its fire retardant properties therefore, it is essential that, after any ACM removals works have been carried out, reinstatement of the area, post clearance, shall be carried out using at all time non AC materials with an equivalent fire rating. Such reinstatement must be carried out as soon as is practicable after the removal has been completed

3.5 Licensed and non licensed work

- 3.5.1 As required by the Asbestos (Licensing) Regulations 1983 (as amended 1998), work on **asbestos insulation, coating and asbestos insulation board** shall be undertaken only by an HSE Licensed Contractor.
- 3.5.2 Work with **asbestos cement** and with materials such as **bitumen, plastic, resins or rubber which contain asbestos**, are materials that may be removed and worked on by any competent contractor, a licence is not required. These materials do not pose the same risks as those in 3.5.1, as asbestos fibres are tightly bound into the material and are unlikely to become airborne in significant concentrations. The requirements of 3.5.4 apply to these materials. The FM Contractor will be required to ensure that such tradespersons carrying out works of this nature have received appropriate levels of training and that adequate risk assessments and method statements are in place prior to work commencing.
- 3.5.3 Asbestos products which are used at high temperatures but have no insulation purpose i.e. gaskets, washers, ropes, seals etc., are materials which may be worked on by any competent contractor. Technicians and engineers who undertake work on equipment with these products should have suitable knowledge and experience in controlling the risks. The requirements of 3.5.4 apply to these materials.
- 3.5.4 All work on ACM, is subject to the Control of Asbestos at Work Regulations 1987 (as amended 2002). These regulations require identification of asbestos type, assessment and planning of work on ACM to reduce health and safety risks and place requirements on those in control of works. It should be recognised that, all ACM are designated as 'Special Waste' and notification is required to be given to the Environment Agency for transfer and disposal. Further advice may be obtained from the FM Contractor.
- 3.5.5 The Asbestos (Prohibitions) Regulations 1992 (as amended 2002) specifically ban the use of second hand ACM. Any ACM removed must therefore be disposed of as 'Special Waste'. The licensed contractor carrying out removals of ACM shall be required to notify the local Waste Regulatory Authority as the producer of the waste. The waste will be transported by a licensed carrier to a licensed transfer station or disposal site. Failure to follow this procedure fully is likely to result in prosecution by the Environment Agency.
- 3.5.6 To assist in determining whether work on ACM shall necessitate the use of an HSE Licensed Contractor, examples are provided at Appendix 8, and advice may be obtained from the FM Contractor or NPD Estates.

3.6 Construction (Design and Management) Regulations 1994

- 3.6.1 The Construction (Design & Management) Regulations 1994 (as amended 2000) (CDM) are intended to reduce the health and safety risks associated with construction activities. Irrespective of the size of the project, the designer has a duty to avoid foreseeable risks to the health and safety of any person at work carrying out construction work. This duty of the CDM Regulations will always apply, and hence under this legislation any person undertaking 'design' should always consider the risks from exposure to ACM.

- 3.6.2 Where building or alteration work as identified below is to be undertaken, the full requirements of the CDM Regulations will apply:
- If the duration of the project will last for more than 30 working days,
or,
 - If 5 or more people will be on site at any one time,
or,
 - If the project will involve more than 500 person-days of work,
or,
 - If the project involves any demolition work
- 3.6.3 The general procedures identified in 3.2 and 3.3 will apply equally to projects, which are subject to the CDM Regulations. It should be noted that if the ACM is removed as preparatory works for a project, this work will be subject to the CDM Regulations as it is considered to be part of the main project i.e. Notification to the HSE and the requirement to produce a health and safety plan will apply to this element of the work.
- 3.6.4 Where work to ACM is not undertaken as preparatory works, the risks associated with asbestos, relevant information and instruction shall be included in the pre-tender Health and Safety Plan for the main contract for the works.
- 3.6.5 In situations where ACM is not planned to be disturbed as part of the project, but they are within the area of the proposed works, it is necessary to include appropriate information and advice in the pre-tender Health and Safety Plan.
- 3.6.6 If no asbestos is thought to be present, a statement should be included confirming this with relevant information explaining the actions that have been taken in the design process.
- 3.6.7 Instructions to the contractor shall also be included, defining the course of action if suspected ACM is encountered during the course of the work, as follows:
- Report immediately to the Contract Administrator/Project Manager any suspected ACM discovered whilst carrying out the works. Avoid disturbing such materials and cease work in the affected area. No further work shall be carried out on such materials unless instructed by the Contract Administrator/Project Manager. If any part of the premises remains occupied during the course of the works, including areas outside of the cordoned area, the Local Probation Area Health and Safety Advisor shall be included in such communication.
 - The Contract Administrator/Project Manager must consult with the FM Contractor to determine the appropriate course of action. The FM Contractor will immediately submit a report to the NPD Estates recommending action to be taken and seeking approval to proceed.
- 3.6.8 On completion of the works, information on ACM including method statements, clearance certificates must be passed to the FM Contractor for use in updating the Asbestos Register. Such documents will be archived and retained in a safe place of storage for a period of 40 years. A statement will be included in the project Health and Safety File on the extent of asbestos related work and the information held on the Asbestos Register.

Part 4: Monitoring and review

4.1 National Probation Directorate

- 4.1.1 NPD Estates, shall ensure that all probation premises are surveyed and that Asbestos Registers are established and maintained and made available by the FM Contractor as specified.
- 4.1.2 Arrangements will be made to ensure that monitoring and reviews of asbestos management in premises is overseen by the NPD Health and Safety Forum and conducted in accordance with legislated requirements and a full audit trail is maintained of such monitoring.
- 4.1.3 Divisional Facilities Managers will routinely check the presence and currency of Asbestos Registers on visits to premises.

4.2 Local Probation Areas

- 4.2.1 Probation Area staff should check the presence and currency of Asbestos Registers at each premise at least once per quarter. This should be carried out in conjunction with the local premises Health and Safety inspection programme. If no register is held on site the NPD Estates must be informed without delay.
- 4.2.2 The Policy on managing ACM shall be contained within the Property Management Contract Guide for premises.
- 4.2.3 Probation Areas shall have arrangements in place to monitor and review the management and implementation of this policy within the premises under their control. These should be identified in the Area Health and Safety Policy. Probation Areas will need to ensure they have a policy of informing staff and consulting with Union Safety Representatives on any changing information and the level of risk with regard to the Asbestos Register.

4.3 FM Contractor

- 4.3.1 The FM Contractor, acting on behalf of the NPD, shall ensure that an Asbestos Register is maintained of all the Asbestos Survey Information held for NPS Premises. The FM Contractor will, in consultation with the NPD determine the most appropriate means of storage and dissemination of the Asbestos Survey information .
- 4.3.2 The FM Contractor will monitor and review arrangements for asbestos management in accordance with the information contained within the Asbestos Register on premises during visits in the course of their work.

Part 5: Premises survey and information

5.1 The Asbestos Register

- 5.1.1 The Asbestos Register should contain the asbestos survey information that is specific to the premises on which it is held.
- 5.1.2 The survey information should consist of:
- A 1:2500 scale Site Plan which identifies the buildings
 - A 1:200 scale layout plans for all buildings that identify unique block letters and room numbers.
 - Survey data sheets which must be cross referenced with the plans referred to above and,
 - Supporting photographs to identify specific elements on the survey.
 - The Risk Assessment matrix and individual risk assessments relative to any identified ACM.
 - Recommendations for each identified risk within the premise and supporting statements of action taken to contain or remove the ACM.
 - Correspondence that is specific to the premises on which it is held e.g. sample certificates, clearance certificates, project works correspondence.
- 5.1.3 The Asbestos Register is intended to provide an on-site information source to enable the responsible person to determine events that have taken place that affect ACM.

5.2 Types of Survey

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

The purpose of the survey is to locate, as far as is reasonably practicable, the presence and extent of any suspect ACM 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 materials. All areas should be accessed and inspected as far as is reasonably practicable (e.g. above accessible false ceilings, inside risers, service ducts etc, or must be presumed to contain asbestos if not inspected. 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 form of inspection is predominately utilised for the purpose of pre-acquisition or for feasibility uses prior to any planned works to broadly assess the potential, quantities and budget figures for asbestos materials. This inspection will not normally identify all asbestos present as many applications can be concealed by nature of their location, which are not accessible without intrusive means.

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

The purpose and procedures used in this survey are the same as a Type 1, except that representative samples are collected and analysed for the presence of asbestos. The number of samples should be sufficient to make an assessment of whether asbestos is or is not present in accordance with DETR guidance. Samples from each type of ACM found are collected and analysed to confirm or refute the presence of ACM. If the material sampled is found to contain asbestos, other similar homogenous materials used in the same way in the building can be strongly presumed to contain asbestos. Less homogenous 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 in accordance with DETR guidance. Sampling may take place simultaneously with the survey, or in the case of some larger surveys, can be carried out as a separate exercise, after the Type 1 survey has been completed. The Type 2 survey is likely to provide sufficient information for the day to day maintenance and repair of a building.

This form of inspection is predominately used to conform to the legislative requirement of managing asbestos in buildings. It inspects, samples, quantifies, reports and recommends on accessible asbestos products identified that will usually be deemed accessible by day-to-day occupation i.e. that any employer would have to manage as part of the regulations. This inspection will not normally identify all asbestos present as many applications can be concealed by nature of their location, which are not accessible without intrusive means. As such it should not be utilised for any refurbishment, renovation or demolition projects, unless used as a pre-cursor prior to the required intrusive investigation.

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

This type of survey is used to locate and describe, as far as is 'reasonably practicable', all ACM 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 ACM and estimates of the volume and surface area of the ACM made. The survey is designed to be used as a basis for tendering the removal of ACM 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 form of inspection is to be utilised prior to any planned refurbishment, renovation or demolition whether it be a whole site, building or parts thereof. It is a requirement under the Construction (Design & Management) 1994 Regulations and as part of the 'building controllers' responsibility in accordance with the CAWR regulations. This inspection may not

identify all asbestos materials even though it is intrusive in nature, as asbestos applications are known to exist in parts of any given building that are inaccessible without demolition and as such are not possible to identify within any survey. This inspection is intrusive by its nature to gain the required access to parts of the building, therefore damage to décor, fixtures and fittings, but not limited to these parts may be disturbed during the investigation.

Type 3 Surveys may only be carried out with the building unoccupied or outside of normal working hours when suitable arrangements must be made for reinstatement or repair of the parts of the building to be opened up.

Asbestos: Its uses and applications

Introduction

Asbestos is a naturally occurring fibrous mineral, which has good resistance to heat and chemicals and is mechanically very strong. Asbestos fibres are easily processed and can be readily mixed with other materials such as cement based, plastics and bituminous products.

The 3 main types of asbestos that have been widely used in buildings are:

Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos

It should be recognised that asbestos cannot be reliably identified by general appearance or colour and there is no simple test to identify different types of asbestos. The only method is by sampling and (laboratory) testing, which should always be undertaken by a competent person (in the employ of a UKAS accredited laboratory or consultant). Note UKAS accreditation extends to both sampling (to ensure the reliability and representation of samples) and testing (to determine the asbestos content) of asbestos materials. **Note:** Accreditation for sampling and accreditation for testing are distinct and separate and it is necessary to ensure that consultants employed in these activities hold the appropriate accreditation.

Potential for Fibre Release

The potential for fibres to be released into the air from different types of ACM can be broadly identified as follows:

High	Sprayed coatings / loose fill Lagging and packing Asbestos Insulation Board Ropes and gaskets Millboard and paper Asbestos Cement Floor tiles, mastic and roof felt Decorative paints and plasters
↑ ↓ Low	

It should be stressed that potential or fibre release is what determines risk; and, that this potential is in largest part determined by the type of material, not the fibre type (i.e. blue, brown, white).

Typical locations for the most common application and uses of ACM are as follows:

Common Applications and Uses of ACM in Buildings

Roof and Exterior Envelope

Roof sheets and tiles	Guttering and down pipes
Wall cladding	Soffit boards
Panel to window unit	Roofing felt and coating to metal wall cladding
Rope seals to metal glazing	Roof lights
Mastic to timber frame/external timber panelled walls	

Boiler, Vessels and Pipework

Lagging on boiler, pipework, calorifier etc	Paper lining under non-asbestos pipe lagging
Gasket in pipe and vessel joints	Rope seal on boiler access hatch and between cast iron boiler sections
Paper lining inside steel boiler casing	Boiler flue

Ceilings

Spray coating to ceiling, walls, beams/columns	Loose asbestos in ceiling/floor cavity
Tiles, boards, slats, canopies and firebreaks above ceilings	Textured coatings (Artex) and paints

Interior Walls/Panels

Loose asbestos inside partition walls	Partition walls
Panel to window unit	Panel lining to lift shaft
Panelling to vertical and horizontal beams	Panel behind electrical equipment
Panel on access hatch to service riser	Panel lining service riser and floor
Panel behind/under heater	Panel on or inside, fire door
Sink panel	

Flooring Materials

Floor tiles, linoleum and paper backing	Lining to suspend floor
-----------------------------------------	-------------------------

Air handling systems

Lagging	Gaskets and rope seals
Anti-vibration gaiter	

Other

Fire blanket	Water tank
Brake/clutch lining	Toilet cisterns
Ovens	Fume cupboards and other laboratory apparatus
Blackboards	Hot cupboards
Fryers	Insulation board and paper in electric storage heaters

Asbestos: The health hazards and occupational groups at risk

Introduction

Disturbing asbestos can release very small fibrous particles which, when airborne, can be breathed in. The fibres are not necessarily visible to the naked eye.

Due to their small fibrous nature, the body's respiratory defence mechanism does not filter out all the fibres. Fibres may enter the lower parts of the lung where they may persist for years. It is recognised the more fibres that are breathed in, the greater the risk to health, though it is now thought possible that repeated low exposures, such as those which could occur during routine repair work, may also lead to cancers. Breathing fibres over a period of time can eventually lead to the following diseases:-

Asbestosis

This is scarring of the lung which reduces the lungs elasticity and leads to breathlessness. It is caused by a proportion of asbestos fibres inhaled reaching the deep lung and resulting in a thickening of the alveoli wall.

Bronchial Carcinoma

This is a cancer developed in the lung. It is indistinguishable from lung cancers caused by cigarette smoking and other agents.

Mesothelioma

This is a cancer which develops in the lining of the chest wall or abdominal cavity. It is linked to exposure to crocidolite, amosite and chrysotile asbestos fibres.

All the above asbestos related diseases are irreversible and may progress, even after cessation of exposure. A latent period of between 15 – 60 years is generally the norm. In the 1990's approximately 2000 – 3000 people died every year from asbestos related diseases. This is a consequence of exposure to asbestos in the 1960's/1970's and the long latency period.

Occupational Groups at Risk

The main groups of workers currently at risk are:

Demolition contractors	Roofing contractors
Construction contractors	Heating and ventilation engineers
Telecommunications engineers	Fire and burglar alarm installers
General maintenance staff, computer installers	Building surveyors
Electricians	Painters and Decorators
Joiners	Plumbers
Gas Fitters	Plasterers

Control Limits and Clearance Limits

Whilst there is no known safe level of exposure to asbestos, the Health and Safety Executive have set Maximum Exposure Limits as follows:

- Chrysotile 0.3 fibres/millilitre of air in a 4 hour period.
- Other types 0.2 fibres/millilitre of air in a 4 hour period.

Where persons undertaking work with ACM are likely to be exposed to levels exceeding these limits, it is a statutory requirement to wear appropriate respiratory protective equipment. It is however advisable for all work on ACM, to use an appropriate respirator.

Where disturbance to asbestos containing material has taken place under controlled conditions, a level of 0.01 fibres per millilitre of air should be confirmed prior to re-occupancy.

Bulk sampling strategy for surveys

General

From 01.04.2003 NPD survey information shall include the taking of bulk samples to verify, or not as the case may be, the presence of asbestos.

Surveyors undertaking surveys shall be competent and qualified to the British Institute of Occupational Hygiene Certificate P402 or to a similar standard.

The following criteria shall be used as a guideline for surveyors when undertaking asbestos surveys in NPS premises:

Asbestos spray coated structural elements

Consideration will be given to possible layering, repair patches or variations in materials.

The number of features such as beams and openings in flat ceilings or the complexity of structural elements in ceiling or other voids will affect the number of samples necessary.
Sample Size: Approx 3–5cm².

Frequency: Two samples usually sufficient per distinctly different element.

Asbestos lagging

This is often variable in composition. Consideration to layering, repairs, patching, partial stripping that may have left elbows and fittings lagged, as well as variations in materials beneath surface re-coating. There may be metal mesh reinforcement within the material that must be cut through.

Sample size: Standard 20 mm dia. core to full depth of material.

Frequency: In general, two per continuous run of pipe plus two from elbows/fittings in that run and in addition to this:

- One sample for long runs in excess of 20 metres.
- Two samples per lagged item of equipment (e.g. boiler, calorifier, boxed flue).

Asbestos insulation board (AIB)

Found in a variety of applications including ceilings, ceiling voids, walls, cladding to structural elements, panels behind and adjacent to heaters etc. Also found as the backing, core or lining of numerous items and products, especially doors. It may be on the surface or hidden within these products or structural elements. Several types and densities found, usually homogeneous throughout.

Consideration will be given to partial replacements using similar-looking, non-asbestos material within large areas such as tiled or boarded ceilings, beams and walls.

Heating appliances often contain all types of AIB, as may the surrounding structure if built in.

Sample size: Approx. 3 to 5 cm²

Frequency: Samples to be taken of every different tile/board type. Inspection of the hidden side of the material may reveal trade markings.

One sample, per large sheet, per room or 25m², provided it is representative of the whole.

Where tiles/boards appear to be the same in a number of rooms, samples to be taken at the rate of one for every four rooms (e.g. one sample per 200 m²) taken from near the edge, over a batten. Repeat this per floor level and at changes of building age/style.

Asbestos Ropes and Yarns

Appearance of coarse grey rope or sash cord. These may be covered by fillers or fire cement or between metal parts of heating apparatus. Disturbing the filler may affect the performance of the appliance. Frequently used in heaters and boilers of all sizes. Has been found in the flue joints of now redundant "Bunnie"-type incinerators. Checks will be made for debris.

Sample Size: A few strands are sufficient.

Frequency: One per example.

Asbestos Cloth

Found in cavity fire-stops, gaskets flexible joints in air ducts, fire blankets, tradesman's tools such as joint wiping cloth, aprons and gloves, or laboratory equipment. Oven door seals (kitchens and labs) and in storage heaters. Also found as a very friable woven sleeving for heat 'protection' on stage lighting cables. Compressible strap-like packing between structural steel and/or pre-cast concrete beams (eg "CLASP" system).

Sample size: 3 – 5 cm²

Frequency : A small sample per sheet or item will be sufficient.

Millboard and Paper

May be found anywhere within a structure. The board may be attached to timber studwork or used for patching but the paper may be part of a structural 'system', within a cavity to support MMMF insulation or provide reduced Surface Spread of Flame. Paper of thin card-like material may be found under floor coverings.

Sample Size: 3 – 5 cm²

Frequency: One small sample per representative item will be sufficient.

Asbestos Cement

Found in many forms such as flat and corrugated sheets, fluted or flat cladding and fascia panels ("Eternit"), coloured infill panels ("Eternit"), permanent shuttering in ducts, roof 'slates', roof lights, pipes, terminals, fittings, water tanks, planters, window boxes, flues, gutters, 'slate' cills, panel & fascia planks, wall cappings, laboratory bench mats, fume cupboard decks and flat roof walk-way tiles.

Sample size: 3 – 5 cm²

Frequency: Two should be sufficient for a roof, 'run' of guttering or number of panels, one for elements

Bitumen Products

May be found in felt roofing, damp proof course, gutter linings and flashings.

Sample size: 3 – 5 cm²

Frequency: Two for areas up to 100m² on roofs or a single sample on DPC.

Textured Coatings e.g. 'Artex' etc

These were normally mixed on site and probably non-uniform. They may have a 'Stippled' or patterned finish or an even, rough-cast appearance. Found on walls and ceilings as a decoration or for sound deadening.

Sample size: 3 – 5 cm²

Frequency: Two to three samples should be taken from different areas of the ceiling or coated areas.

Thermoplastic floor tiles

It is most unlikely that tiles of a soft, flexible nature will contain asbestos. Dense, brittle tiles, often in dark colours, are most likely to contain varying densities of asbestos.

Sample size: 3 – 5 cm²

Frequency: One sample from one tile of each colour used in each room or location where they are laid. Reduce if many rooms have same tile consistency.

Asbestos Risk Assessment Criteria

The Risk Matrix below takes into account the type and condition of the ACM however in all cases the surveyor must also assign a score relative to the location of the ACM. Of [1] if likely to be disturbed by environmental conditions, of [2] if accidental interference is likely or [3] if deliberate damage is likely. The final total must reflect this additional risk.

ASBESTOS CONTAINING MATERIALS (ACM) MATERIAL HAZARD ASSESSMENT MATRIX					
Asbestos Content:		Chrysotile, Amosite or Crocidolite [2]			
Material Type:		Plastic [1]	Cement [2]	Board [3]	Insulation [4]
Condition	Surface				
	Sealed [1]	5	6	7	8
Good [1]	Unsealed [2]	6	7	8	9
	*Friable [3]	7	8	9	10
	Sealed [1]	6	7	8	9
Fair [2]	Unsealed [2]	7	8	9	10
	*Friable [3]	8	9	10	11
	Sealed [1]	7	8	9	10
Poor [3]	Unsealed [2]	8	9	10	11
	*Friable [3]	9	10	11	12

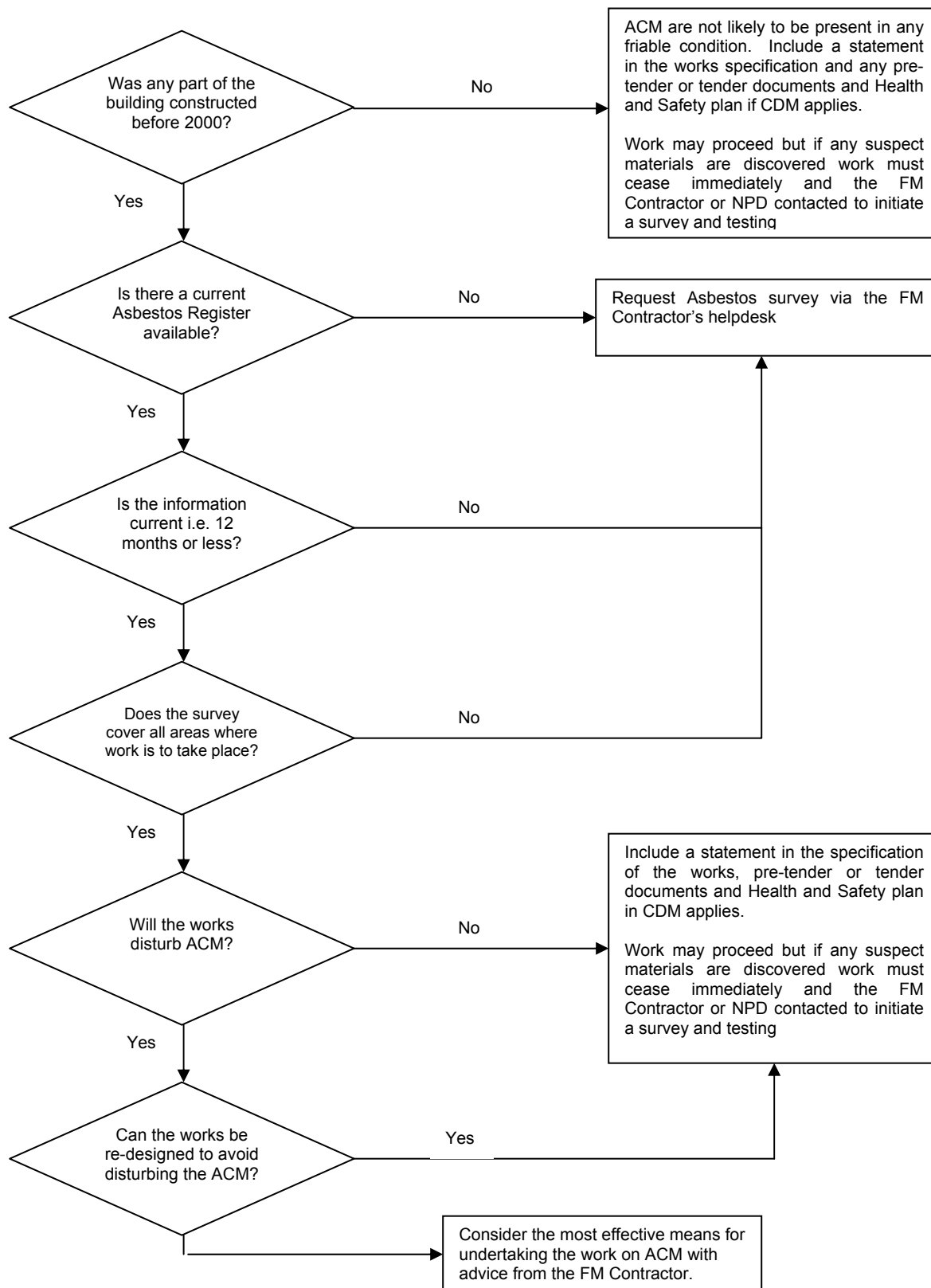
KEY and action guidelines:

Hazard Rating	Low Hazard	Medium Hazard	High Hazard	Immediate Hazard
Scores and typical examples	Scores 5 and 6 e.g. good condition, sealed Asbestos plastic or Cement sheet.	Scores 7, e.g. good condition and sealed Asbestos Insulation Board and 8 e.g. poor condition unsealed Asbestos Cement sheet.	Scores 9, e.g.: Poor condition, friable, Asbestos Cement, and 10, e.g. poor condition, friable Asbestos Insulation Board.	Scores 11 and 12. E.g. Poor condition, friable insulation.
Action Guidelines	Safe in normal circumstances, label materials and inspect quarterly ⁽¹⁾ for deterioration.	Improve condition and/or surface treatment of material by encapsulating or sealing or protect if reasonably practicable within 28 days of notification, label and reassess with quarterly ⁽¹⁾ reassurance inspections	Action required: improve condition and surface treatment of material by encapsulating or sealing within 21 days of notification. If rating cannot be reduced, remove material within six months or at first reasonable opportunity.	Immediate Action Required: affected area to be sealed off promptly and material removed within 6 weeks or sealed and encapsulated and removed at first reasonable opportunity.

* Friable material is that which can easily be crumbled therefore, although friable material may be in good condition i.e. undamaged, it may be in an exposed position which may allow damage to occur. Location is a factor which must be considered when assessing the risk.

⁽¹⁾ Quarterly inspections will be conducted by Area Health and Safety advisors as part of their routine inspections of premises. Annual or six monthly inspections will be conducted by the FM Contractor in accordance with recommendations in the Asbestos Register.

Flow Process for Projects where ACM may be disturbed



Asbestos Report Form

This report may be used to report damage to labelled asbestos material or any material which might be suspected to contain asbestos. It may also be used to request a survey of any material, whether damaged or not, which might be suspected to contain asbestos.

From: <i>[Insert Premises Address]</i>	To: *AWG FS/MITIE Managed Services <i>Submit by facsimile or e-mail, details will be in relevant Contract Guide</i> <small>*Delete as appropriate</small>
Copies to: NPD Estates. Local Area Health and Safety Advisor and Union Safety Representatives	Fax No: 020 7217 0712 Fax No:
Property Reference No (UPRN) if known:	
Property address if different from above:	
Room No/location of Damage:	
Details of damage being reported: <i>(Include indication of risk i.e. location in regular use; likelihood of damaged ACM or suspected ACM deteriorating further)</i>	
Details of how damage occurred:	
Report submitted by:	Date:

Health & Safety Executive / Local Authorities Enforcement Liaison Committee (HELA)**Local Authority Circular**

Subject: Hazardous Substances
Open Government Status: Open
Revised: March 2000

LAC Number: 37/3
Keywords: Machine-Made Mineral Fibres
Review date: March 2005

To: Directors of Environmental Health/ Chief Environmental Health Officers of London, Metropolitan, District and Unitary Authorities and Chief Executives of County Councils.

For the attention of: Environmental Services / Trading Standards / Fire Authorities / Other

This circular gives advice to local authority enforcement officers

MACHINE-MADE MINERAL FIBRES (MMMMF)**INTRODUCTION**

1 This local authority circular supplements the advice given in two HSE publications viz. Guidance Note EH46 (Rev) "Man-Made Mineral Fibres" (now more commonly known as machine-made mineral fibres) and an Information Document entitled "Refractory Ceramic Fibre Hazards and Identification" (OC 267/3) which are available from HSE's Helpline. It also draws attention to current developments on MMMF.

TYPES OF MMMF

2 Details of the various types of MMMF are given in Guidance Note EH46 (Rev). However, some additional information on types and the uses made of MMMF, are set out in the [Appendix](#) to this circular.

CLASSIFICATION AND LABELLING OF MMMF

3 Member States of the European Community have agreed that some forms of MMMF should be classified as carcinogens under the terms of the Dangerous Substances Directive. European Commission Directive 97/69/EC gives effect to this agreement. The Chemicals (Hazard Information and Packaging for Supply) (Amendment) Regulations 1998 (CHIP 98) implemented this Directive in Great Britain.

4 The Directive deals only with machine-made **vitreous** (silicate) fibres (MMVF), which are a subset of MMMF, and then only those which are of random orientation. All these fibres are classified for irritancy, but classification for carcinogenicity applies only to fibres of <6mm diameter - coarser fibres are not respirable.

5 Two broad subdivisions of MMVF have been made based on their chemical composition. These are:

(1) mineral wools: MMVF with random orientation with alkaline oxide and alkaline earth oxide ($\text{Na}_2\text{O}+\text{K}_2\text{O}+\text{CaO}+\text{MgO}+\text{BaO}$) content greater than 18%; and

(2) refractory ceramic fibres and special purpose fibres: MMVF with random orientation with alkaline oxide and alkaline earth oxide ($\text{Na}_2\text{O}+\text{K}_2\text{O}+\text{CaO}+\text{MgO}+\text{BaO}$) content less than 18%.

6 Mineral wools (glass wool and rock wool) are used in a range of insulation applications in both buildings and appliances. Refractory ceramic fibres are used in specialised applications in industry where very high temperatures are encountered, e.g. some furnace and kiln insulation.

7 Alternative classifications are possible for mineral wools. If evidence is available from specified tests indicating certain types of effect, then classification as a category 3 carcinogen will not be necessary. However, on a precautionary basis, if satisfactory data are not available for a specific mineral wool product it must be classified as carcinogen of category 3.

8 Refractory ceramic fibres are classified as category 2 carcinogens. A precautionary approach has been used to apply the same classification to other random-oriented fibres with composition similar to RCF, which are identified in the Directive and in CHIP by the name "special purpose fibres"; these should not be confused with superfine mineral wools, which are also known as "special purpose fibres".

9 In addition to any carcinogenicity classification, all MMVF covered by the Directive is classified as 'irritant'. This does not reflect a persistent, chemical irritancy but draws attention to the transient effects of the fibres on the skin.

REFRACTORY CERAMIC FIBRES

10 Refractory Ceramic Fibre (RCF) describes a family of synthetic vitreous fibres that have a range of compositions and uses. The largest single use of RCF is for furnace linings and related applications. The uses and recognition of RCF is given in a booklet produced by the European Ceramic Fibre Industry Association (ECFIA) entitled 'Recognition and control of exposure to refractory ceramic fibres' which is available from ECFIA by contacting the website on www.ecfia.org.

11 Respirable RCFs are classified as category 2 carcinogens (see [paragraphs 3 - 9](#)), which takes into account observations from recent studies involving laboratory animals that suggest these fibres may have potential to cause lung cancer or mesothelioma in humans. This classification, which became effective in January 1999, does not represent a ban on use. However it does mean that any work with RCF is subject to stringent controls.

12 HSE is currently checking that suppliers are labelling RCF and products containing RCF correctly. HSE is also checking that users review COSHH assessments where RCF is used or is present, comply with the COSHH Carcinogens ACOP and employ effective control measures where exposure to RCFs is unavoidable.

LOFT INSULATION

13 In the past, there has been some concern about the possible risk to householders arising from the presence of mineral wools in loft insulation. In 1987, the DoE undertook work to collect data to establish the extent of householders' exposure to MMMF from this source, and

it then asked the Department of Health's Committee on the Carcinogenicity in Food, Consumer Products and the Environment (COC) to review the evidence. On completion of the COC's work, the Secretary of State for the Environment made a statement in the House of Commons and issued a Press Release dated 1 December 1987 recording the COC's assessment of the risk to health from MMMF loft insulation, DIY installation and subsequent disturbance. As a result of the COC's work, the DoE Press Release was able to reassure householders that they need not be concerned about the presence of MMMF in their lofts, about installing it themselves or about doing DIY work in lofts insulated with MMMF. However, it recommended use of an appropriate mask for installation work, i.e. one conforming to BS 6016 or BS 2091, and the use of gloves when handling the material to avoid skin irritation.

14 HSE has undertaken studies to determine fibre levels arising from the presence of MMMF loft insulation in UK dwellings. The results from these studies were also assessed by the COC who again concluded that the MMMF in the lofts of dwellings presented no significant risk to householders.

15 More recently, the COC has reviewed epidemiological data from a study involving workers at several factories producing mineral wools and experimental data from animal studies designed to assess the carcinogenic potential of these types of MMMF. Overall, the COC concluded that there was no clear evidence to indicate the carcinogenicity of mineral wools but, in view of some uncertainties, recommended that it would be prudent to assume high exposures might pose a risk of lung cancer in workers. Consequently, the views given in the 1987 Press Release and associated recommendations still seem valid today.

APPROVED METHODS

16 HSC has approved the method of measurement and calculation for determining the fibre concentrations of MMMF and this is reproduced in Appendix 1 of revised Guidance Note EH46 (as well as in Part 3 - Technical Supplement of HSE publication EH 40/2000 - Occupational Exposure Limits 2000). The Approved Method contains the essential elements in HSE's priced publication MDHS 59 "Man-made mineral fibre: Airborne number concentration by phase-contrast light microscopy" (available from HSE Books) and refers to quality assurance procedures. An external quality assurance scheme, the UK MMMF counting scheme, is now in place, and laboratories carrying out MMMF counting according to this method are recommended to participate in it. This scheme, like the Regular Interlaboratory Counting Exchange (RICE) scheme for asbestos is administered by the Institute of Occupational Medicine, 8 Roxburgh Place, Edinburgh EH8 9SU, telephone 0131-667-5131.

CURRENT RESEARCH

17 Europe-wide epidemiological studies of workers involved in the production of MMMFs are ongoing. To date, these have not provided any clear evidence for the carcinogenicity of MMMFs in the workplace. A great deal of research effort worldwide is being directed to designing laboratory tests predictive of potential toxicity and carcinogenicity of MMMFs, and many of these focus on the characteristics of fibres that make them more or less persistent in the lungs. This research has already had an impact in the way MMMFs are regulated, as described in the the EU criteria for exoneration of mineral wools from carcinogenicity classification (see [paragraphs 3 - 9](#)). The research is ongoing, and it can be expected that it

will have further impact on the regulatory control of MMMFs in the future. Information will be given to enforcement officers as and when it becomes available.

APPENDIX

Type	Some Uses
MMMF	
Glass	Reinforced plastics and cements Heat resistant textiles insulation
Mineral wools Refractory Ceramic Fibres	Thermal insulation High temperature insulation - power stations - furnace linings - gas turbines
Special purpose 'superfine' fibres	manufacture of special papers, e.g. filter papers

Examples of Licensed/ Non licensed Work with ACM

General

All ACM present a hazard however the risks to health, if they are disturbed, is essentially dependent on the type of material. The most common types of materials in NPS buildings fall into the categories of asbestos insulation board (AIB) or asbestos cement (AC).

With few exceptions any disturbance to or removal of AIB must be undertaken by a Licensed Contractor and requires notification to the Health and Safety Executive.

Work on ACM which does not require the use of a Licensed Contractor and does not require notification to the Health and Safety Executive do fall within the scope of the Control of Asbestos at Work Regulations and appropriate controls must be taken when carrying out work. For this reason the NPD will always require the use of suitably competent and licensed contractors when any work involving ACM is to be carried out.

It is essential to determine which category ACM are and the following is intended for guidance. The Contractor's Survey Team in their surveys and inspections will advise on the category of materials and appointing of suitable contractors for working on it.

Asbestos Insulation Board (AIB)

Generally work with AIB should only be undertaken by a Licensed Contractor.

Typical uses of Asbestos Insulation Board products include:

Porch ceilings and linings.	Canopies and soffits
Ceilings (suspended & adhered insulation board/tiles)	Behind radiators and in airing cupboards.
Sound deadening panels (tiles and sheets)	Stud partitions
Fold-aside room dividers	Pin-boards
Kitchen and toilet ceilings	Integral garage ceilings
Service duct coverings	Fire protection to steelwork and other fire resisting constructions

Asbestos cement (AC)

Generally work with AC may be undertaken by any competent person and a Licence is not a legal requirement.

Typical uses of Asbestos Cement products include:

Corrugated roofing sheets and lightweight walkway deck tiles.	Cladding for garages and outbuildings/warehouse-type construction
Roofing accessories and fittings, eg ridge cappings, eaves fillers, verge covers	Flat partitioning sheets, fire protective coverings/stud walls and ceilings/stair soffits.
Flue pipes, rainwater pipes, sewer pipes, soil stacks and terminals, water tanks and troughs	Roofing and wall hanging tiles and slates

Blackboards, fire door facings, cupboard linings, fume cupboards, switchgear & controls	Steel frame fire protection & service ducts, ironing boards, heat pads, kitchen equipment parts
Framed infill panels, sandwich constructions	

If there is any doubt in distinguishing AIB from AC a bulk density shall be calculated by an Analytical Laboratory. In a dry state a density greater than 1 tonne per cubic metre would categorise a material as asbestos cement.

Typical Non-Licensed Tasks

The following guidance has been provided to demonstrate the tasks that may be undertaken by any competent person (ie not necessarily a HSE Licensed Contractor). A method statement should always be prepared before commencing work in accordance with the Control of Asbestos at Work Regulations. It is a requirement, before allowing any work to commence, to forward a copy of the method statement prepared by those undertaking the work, to the NPD Estates.

Areas where work is to take place should be separated and sealed off to prevent general access.

ACM are categorised as a Special Waste Material, and subject to specific requirements of transportation and disposal. This should be covered on the Method Statement, if appropriate. Further advice will be provided by the FM Contractor .

Type of work/ task Comments

Type of Work	Action to be taken
Demolition of Horsa Hut, Garage, Bike Shed etc (asbestos cement only, no internal AIB or lagging etc)	Hand demolition is preferable and removing sheets whole. However, remote methods are acceptable if access to heights are above 3 metres.
Removal of AC sheets, pipes and Gutters	Avoiding breaking, remove fixings carefully, handle with care – no chutes, use wet rags to clean holes/fastenings.
Drilling holes in AIB for pipes/cables (not overhead due to fibres in the immediate breathing zone)	Up to 5 holes with a max dia of 20 mm in board up to 6 mm thick - Use manual drill, use paste at entry/exit points, use wet rags to clean dust, protect inner edge of hole formed.
Removing an AIB ceiling tile or drilling holes overhead. (ie 60 cm x 60 cm)	Work overhead in the breathing zone presents a high risk. A mini enclosure and/or use of specialist equipment such as type H vacuum cleaner is needed if undertaken.
Drilling holes in AC for pipes/cables	Use adhesive tape and paste over at entry and exit points. Make holes larger to prevent abrasion. Use wet rags to clean dust.
Removing Bituminous Asbestos Roofing felts	Remove by dampening and gentle spraying. Pick up and clear debris as work proceeds. Use shovel as this is at length from the breathing zone. Do not burn debris.
Removal of asbestos containing floor tiles	Use a hammer to tap scraper between joints if firm. Check for paper backing and if present seek advice from FM Contractor. Use a shovel for larger areas. Do not sand.

Type of Work	Action to be taken
Removal of compressed gaskets and rope sash.	Dampen gaskets and ease off with scraper. For large strip down with significant numbers of gaskets use services of a Licensed Contractor or Shadow Vacuum facility with a type H filter.
Minor damage repair to AIB or AC. Use a wet rag to remove small bits of debris.	Spray or brush paint the damaged edge. Cover with non-ACM attached with adhesive.
Painting undamaged AIB	Never sand, check condition is sound. Use either a spray application or apply lightly with brush or roller.
Cleaning debris from AC gutters	Pour water into gutter to dampen. Remove debris with scoop or trowel. Place debris in waste container.

In the above examples reference has been made to the 'Asbestos Essentials Task Manual' published by the HSE. This publication contains a list of 25 task guidance sheets for non licensed works that may be used as the basis for a method statement under the Control of Asbestos at Work Regulations.

The examples above summarise key points for demonstration purposes and reference should be made to the above publication for the full requirements of safe working practices.

Reference documentation

ACTS OF PARLIAMENT, REGULATIONS, HSE PUBLICATIONS FOR WORK WITH ASBESTOS AND ASBESTOS CONTAINING MATERIALS

Acts of Parliament, Regulations and HSE publications for work with asbestos and asbestos containing materials include, but not exclusively to, those listed on the following pages. There are other regulations (not listed) that relate specifically to Wales, Scotland and Northern Ireland. This is not meant to be an exhaustive list, there are other pieces of legislation dealing with health and safety matters that has not been listed here that still applies to work with asbestos and should be considered at all times.

All Legislation, Approved Codes of Practice and Guidance Notes listed together with any subsequent amendments or revisions and any new relevant requirements should be considered before undertaking any work with asbestos or asbestos containing materials. The following list was last revised in December 2002.

ACTS

Health and Safety at Work, etc Act 1974	Environmental Protection Act 1990
Environment Act 1995	Water Industry Act 1991
Pollution Prevention and Control Act 1999	

REGULATIONS

1983/1649	Asbestos (Licensing) Regulations 1983
1998/3233	Asbestos (Licensing) (Amendment) Regulations 1998
1985/2042	Asbestos Products (Safety) Regulations 1985
1987/1979	Asbestos Products (Safety) (Amendment) Regulations 1985
1985/2042	Asbestos Products (Safety) Regulations 1985
1992/3067	Asbestos (Prohibitions) Regulation 1992
199/2373	Asbestos (Prohibitions) (Amendment) Regulation 1999
1996/2092	Carriage of Dangerous Goods (Classification, Packaging and Labelling) and Use of Transportable Pressure Receptacles Regulations 1996
1996/2089	Carriage of Dangerous Goods by Rail Regulations 1996
1996/2095	Carriage of Dangerous Goods by Road Regulations 1996
1996/2094	Carriage of Dangerous Goods by Road (Driver Training) Regulations 1996
2002/1689	Chemicals (Hazard Information and Packaging for Supply) Regulations 2002
1997/1713	Confined Spaces Regulations 1997
1994/3140	Construction (Design and Management) Regulations 1994
2000/2380	Construction (Design and Management) (Amendment) Regulations 2000
1996/1592	Construction (Health, Safety and Welfare) Regulations 1996
2000/227	Contaminated Land (England) Regulations 2000
1987/2115	Control of Asbestos at Work Regulations 1987
1992/3068	Control of Asbestos at Work (Amendment) Regulations 1992

ACTS OF PARLIAMENT, REGULATIONS, HSE PUBLICATIONS FOR WORK WITH ASBESTOS AND ASBESTOS CONTAINING MATERIALS

1998/3235	Control of Asbestos at Work (Amendment) Regulations 1998
2002/2675	Control of Asbestos at Work (Amendment) Regulations 2002
1990/556	Control of Asbestos in the Air Regulations 1990
1999/437	Control of Substances Hazardous to Health Regulations 1999
1992/588	Controlled Waste Regulations 1992
1988/819	Collection and Disposal of Waste Regulations 1988
1991/1624	Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991
1998/605	Controlled Waste (Registration of Carriers and Seizure of Vehicles) (Amendment) Regulations 1998
1999/1	Environmental Impact Assessment (Scotland) Regulations 1999
1991/2839	Environmental Protection (Duty of Care) Regulations 1991
1991/1472	Environmental Protection (Prescribed Processes and Substances) Regulations 1991
1996/1513	Health & Safety (Consultation with Employees) Regulations 1996
2002/655	Health and Safety (Fees) Regulations 2002
1996/341	Health and Safety (Safety Signs and Signals) Regulations 1996
1998/2307	Lifting Operations and Lifting Equipment Regulations 1998
1999/3242	Manual Handling Operations Regulations 1992
1989/1790	Noise at Work Regulations 1989
1992/2966	Personal Protective Equipment at Work Regulations 1992
2000/1973	Pollution Prevention and Control (England and Wales) Regulations 2000
1998/2306	Provision and Use of Work Equipment Regulations 1998
1995/3163	Reporting of Injuries, Diseases and Dangerous Occurrence Regulations 1995
1999/2978	Road Vehicles (Brake Linings Safety) Regulations 1999
1977/500	Safety Representatives and Safety Committees Regulations 1977
1996/972	Special Waste Regulations 1996 (Revised 1997)
1999/293	Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999
1989/1156	Trade Effluents (Prescribed Processes and Substances) Regulations 1989
1999/257	Transport of Dangerous Goods (Safety Advisors) Regulations 1999
1994/1056	Waste Management Licensing Regulations 1994
1998/1833	Working Time Regulations 1998
1999/3372	Working Time Regulations 1999
1992/3004	Workplace (Health, Safety and Welfare) Regulations 1992
0717624889	Management of Health and Safety at Work Regulations 1999

REFERENCE READING MATERIAL FOR WORKING WITH ASBESTOS

EH10	<i>Asbestos: Exposure Limits and Measurement of Airborne Dust Concentrations (1995)</i>
EH47	<i>The Provision, Use and Maintenance of Hygiene Facilities for Work with Asbestos Insulation and Coatings (2002)</i>
EH50	<i>Training Operatives and Supervisors for Work with Asbestos Insulation and Coatings (1988)</i>

EH51	<i>Enclosures Provided for Work with Asbestos Insulation, Coatings and Insulating Board</i> (1999, revised 2001 with amendments)
EH57	<i>The problems of asbestos removal at high temperatures</i> (1993)
MS13	<i>Asbestos: Medical Guidance Notes</i> (1999)
MDHS 39/4	<i>Asbestos fibres in air; Sampling and evaluation by Phase Contrast Microscopy (PCM) under the Control of Asbestos at Work Regulations</i> (1995) (second Impression)
MDHS 77	<i>Asbestos in Bulk Materials; Sampling and Identification by Polarised Light Microscopy (PLM)</i> (1994)
MDHS 87	<i>Fibres in Air; Guidance on the Discrimination Between Fibre Types in Samples of Airborne Dust on Filters Using Microscopy</i> (1999)
MDHS 100	<i>Surveying, Sampling and Assessment of Asbestos-containing Materials</i> (2000)
HSG 53	<i>The Selection, Use and Maintenance of Respiratory Protection Equipment ~ A Practical Guide</i> (rev 1998)
HSG 160	<i>The Carriage of Dangerous Goods Explained Part 1</i> 1996
HSG 161	<i>The Carriage of Dangerous Goods Explained Part 2</i> 1996
HSG 189/1	<i>Controlled Asbestos Stripping Techniques for Work Requiring a Licence</i> (second edition 1999)
HSG 189/2	<i>Working with Asbestos Cement</i> (second edition 1999)
HSG 210	<i>Asbestos Essentials: Task Manual</i> (2000)
HSG 213	<i>Introduction to Asbestos Essentials</i> (2000)
HSG 223	<i>A short guide to managing asbestos in premises</i> (2002)
HSG 227	<i>A comprehensive guide to managing asbestos in buildings</i> (2002)
IND(G)188	<i>Asbestos Alert for Building Maintenance, Repair and Refurbishment Workers</i> 1995
IND(G)233	<i>Managing Asbestos in Premises</i> (rev 2)
IND(G)255	<i>Asbestos Dust Kills; Keep Your Mask On</i> 1999
IND(G)288	<i>Selecting Respiratory Protective Equipment for Work with Asbestos</i> 1999
IND(G)289	<i>Working with Asbestos in Building</i> 1999
L11	<i>A Guide to the Asbestos (Licensing) Regulation 1983</i> (second edition, 1999)
L21	<i>Management of Health and Safety at Work: Management of Health and Safety at Work Regulations 1992: Approved Code of Practice</i>
L22	<i>Safe Use of Work Equipment: Provision and Use of Work Equipment Regulations 1992: Approved Code of Practice and Guidance</i>
L24	<i>Workplace Health Safety and Welfare: Workplace Health Safety and Welfare Regulations 1992: Approved Code of Practice and Guidance</i>
L25	<i>Personal Protective Equipment at Work: Personal Protective Equipment at Work Regulations 1992: Guidance on Regulations</i>
L27	<i>Work with asbestos which does not normally require a licence. Control of Asbestos at Work Regulations 2002</i> (fourth edition, 2002)
L28	<i>Work with Asbestos Insulation, Asbestos Coating and Asbestos Insulating Board. Control of Asbestos at Work Regulations 2002 Approved Code of Practice</i> (fourth edition, 2002)
L127	<i>The management of asbestos in non-domestic premises. Regulation 4 of the Control of Asbestos at Work Regulations 2002</i> (2002)
MISC155	Substitutes for Chrysotile (White) Asbestos
	Respiratory Protective Equipment; Legislative requirements and lists of HSE approved standards and type approved equipment (1995)