

FINAL DRAFT

Policy and Procedure for the Management of Asbestos Containing Materials

Within H.S.E. Premises

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Part A

1.0 INTRODUCTION

HSE own/manage/lease and have responsibility for buildings and infrastructure throughout the estates that contain Asbestos Containing Materials (ACM's).

There are legislative requirements that specifically relate to the management of activities in which employees may be exposed to airborne asbestos fibres. The relevant legislation is detailed elsewhere in this report and require employers to implement measures to manage Asbestos Containing Materials on/in their premises and protect employees and others from exposure to airborne asbestos fibres.

An effective asbestos management strategy is required to ensure that staff and others are not, in so far as is reasonably practicable, put at risk from exposure to airborne asbestos fibres. This management plan and its processes and procedures are intended to comply with the legislative requirements, effect good management of the ACM's and protect the health of all who frequent the buildings that the plan relates to.

2.0 ASBESTOS MANAGEMENT POLICY STATEMENT

The HSE is committed ment to safeguarding the Health & Safety of its employees and others who frequent their premises from all foreseeable risks. In relation to the risks associated with the presence of Asbestos Containing Materials (hereafter referred to as ACM's) the HSE commits to implementing the following measures to achieve, as a minimum, compliance with all legislative requirements and the application of best practice.

- ➤ Having all buildings in its ownership and/or control, constructed prior to year 2000, surveyed by a competent surveyor (referred to as management surveys) to determine the presence, location, type, nature, extent and condition of Asbestos Containing Materials (ACM's).
- Undertaking an assessment of the risks to health associated with each ACM's identified in all such buildings using a standard internationally recognized/accepted method.
- Compiling an asbestos register for each building surveyed which includes the location, type, nature, quantity, condition, accessibility, risks and remedial measures required (if any) for each ACM discovered in the management surveys.
- Implementing the remedial measures, if any, identified by the management surveys and listed in the building asbestos registers in a timely manner and prioritized on the basis of the measured risks.
- Making available to all employees, and others as necessary, the results of the surveys and risk assessments so that they understand the risks and the precautions required to ensure the good health of all.
- Ensuring that ALL external contractors are made aware of the existence, locations, nature and extent of asbestos containing materials in buildings/structures where they are invited to tender to undertake works which may require interaction with the fabric of the building/structure.

- > Implementing strict control on all works planned/intended to be carried out in/on all buildings/premises where ACM's are known or suspected to exist.
- > Undertaking refurbishment/demolition surveys in advance of any/all building modifications so as to minimize the likelihood of disturbance of ACMs during the execution of the works.
- Where possible removing ACM's from buildings in advance of refurbishment/demolition works.
- Engaging only competent specialist contractors to work on/remove/dispose of ACM's
- > Engaging independent competent contractors/consultants to fulfill the role of Project Supervisors Design Process (P.S.D.P) in accordance with the Construction Regulations.
- > Engaging independent analysts to monitor the air quality during the execution of all works where ACM's are likely to be disturbed so as to ensure/demonstrate the effectiveness of the control measures used and that the fibre in air concentrations are compliant at all times.
- > A local Asbestos Register highlighting the presence of asbestos in a location will be maintained onsite by the Service manager responsible for the location
- > The provision of medical assessments which is managed through the occupational health function to employees who comply with the criteria for such assessments proscribed in the Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006. (S.I 386 of 2006).
- Making the results of all air quality monitoring available to employees.
- > Service Managers will ensure that documented annual inspections of the building surveys and updating of the building asbestos registers are undertaken to reflect any changes that occurred during the previous year.
- > Service Managers/ Estate Managers will ensure that Asbestos Awareness training is provided in accordance with Section 15 of this policy
- > Referring employees, who have, or are likely to have been exposed to airborne asbestos fibres, during the course of their work to Occupational Health.
- implement this policy and the

>	The HSE is committed to providing the resources necessary to required improvement plan for each building.
>	This Policy will be reviewed every three years.
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3.0 ASBESTOS MANAGEMENT PROCEDURES AND PLAN

The scope of the Management Plan covers all premises constructed prior to year 2000 in the HSE.

Effective management of asbestos containing materials is essential to protect the health of employees, contractors and others who frequent the buildings which contain ACM's ACM's in good condition do not pose a risk to health and can be left in place and managed.

NOTE: The terms ACM's (Asbestos Containing Materials) and asbestos are commonly interchanged although there is no equivalence between the two. Asbestos is a naturally occurring fibrous mineral which poses a significant risk to health. However ACM's are materials which contain asbestos fibres in various concentrations in a cement or other matrix. Releasing fibres from ACM's can require a great deal of energy depending on the nature and condition of the ACM. Friable ACM's can easily release fibres and must be carefully managed. However the more-dense ACM's such as roof sheets, side cladding, slates, concrete' pipes etc. do not release fibres easily. Drilling or cutting such materials will release fibres and these activities must be avoided.

To effectively manage ACM's their existence in buildings must be established together with their quantity, location, nature, type and condition. This information is essential to develop and implement an effective management system.

The diagram below illustrates the elements of the management process and the sequence of their implementation.

Identification of ACMs (asbestos register) Monitoring Assessment of effectiveness of the Risk from any ACMs asbestos managemen (asbestos register) plan Identification Arrangements of measures to ensure any risk from exposure for dealing with any to ACMs are emergencies controlled

HSE's Asbestos Management Process

The Management Process

The following are the elements to be implemented throughout the HSE to achieve effective management of ACM's

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Identification of ACM's

To determine the presence of ACM's in a building an asbestos management survey must be undertaken. This survey will determine the location, quantity, type and condition of the ACM's in the building together with the risks associated with all ACM's identified in the surveys.

Such surveys must only be undertaken by professional competent surveyors who are included in the HSE's approved surveyors list.

Where a large number of surveys are required to be undertaken priority should be given to the oldest occupied buildings. Other factors such as, previous refurbishments, occupancy/use of building, likelihood of future disturbance for maintenance or refurbishment can also help to decide on priorities.

These surveys must be undertaken in accordance with UK Health and Safety Executive Technical Standard Hazardous Substance Guide (HSG) 264 – 'Asbestos: The Survey Guide' and must include a material and priority assessment of all ACM's.

Types of Survey

There are different types of asbestos surveys. The first asbestos survey of a building is usually a Management Survey. These surveys will identify the presence, location, quantities, nature and condition of ACM's present in each building surveyed. This information is then used to develop a management plan for the building.

However if a building constructed prior to the year 2000 is to be renovated/reconstructed or demolished then a refurbishment/demolition survey must be undertaken before any work commences. This is a more detailed and intrusive survey than the management survey. The refurbishment/demolition survey must be undertaken regardless of the presence or absence of management survey(s) for the building

Management Surveys

A management survey is required for every building constructed prior to year 2000. These surveys are carried out during the normal occupation and use of the building to identify the location, nature, type, quantity and condition of the ACM's present. These surveys are required to ensure effective management of the ACMs in situ. A plan to have these surveys carried out must be prepared by the Service Managers.

If a large number of surveys are required to be done they can be undertaken over a period of time with priority given to older occupied buildings. These surveys must only be undertaken by a specialist contractor on the HSE's approved contractor list. Management surveys must be undertaken in accordance with the UK's HSE Hazardous Substance Guide (HSG) 264 second edition.

Management surveys must be repeated at intervals determined by the quantity, nature and risks associated with the ACM's in the building. The maximum period between surveys should not exceed 3 years. Annual inspections and review of each survey are required to be carried out by the appointed competent surveyor.

Management surveys will often involve minor intrusive work and some disturbance of the building fabric. The extent of intrusion will vary between premises and depend on what is reasonably practicable for individual properties, i.e. it will depend on factors such as the type of building, the nature of construction, accessibility etc.

Each Management survey will produce the following;

- (a) The location of each ACM discovered
- (b) Photographs of each item either confirmed or presumed to contain asbestos
- (c) The quantities, type, nature, and condition of all ACM discovered.
- (d) The risk associated with each ACM
- (e) Recommended remedial measures, if any, required to manage the ACM's in good condition and prevent fibre release
- (f) Drawings of the locations of ACM's
- (g) An asbestos register summarising all of the above data.

In addition to the above surveyors should be requested to provide a separate list of all of the recommended actions/remedial measures identified for each building surveyed. This list which should ideally be separate from the main report can, if required, be the basis for a corrective action database for each building.

Re-Inspections

All items that have been positively identified will undergo regular, on-going re-inspections at 12 monthly intervals (minimum) from the date of the last inspection/survey.

The purpose of undertaking the re-inspection is to ensure that Material and Priority Assessments are still current i.e. that the material has not deteriorated in any way and that the use of the building has not changed. Any change to either criterion will result in the overall Risk Assessment being invalid and therefore a new assessment will be required. This will in turn be recorded.

Survey Method

The surveyor will take bulk samples for analysis to confirm the presence of asbestos and determine which fibre type(s) are present. The fibre type will attract different scores in the risk assessments. Some sampling will require minor disturbance of the building fabric. Where this gives rise to minor debris the surveyor is required to clean such debris as they progress through the survey. Surveyors must provide a risk assessment and method statement (RAMS) in advance of undertaking the work.

The surveyor is allowed to make presumptions about the presence of ACM's and avoid having to take a sample of every ACM in the premises. There are two levels of presumption;

Strongly Presumed

This conclusion can be reached through visual inspection by an experienced competent surveyor. An example of where this might be done is where laboratory analysis has confirmed the presence of asbestos in a similar construction material.

Presumed

This is essentially a default situation where the surveyor presumes the material contains asbestos in the absence of evidence to confirm that it is asbestos free.

There are situations where the surveyor must presume that the material contains asbestos. An example of this is where materials cannot be accessed for sampling.

The survey reports will identify where such presumptions have been made by the surveyor.

To ensure maximum access to all parts of the building to be surveyed the surveyor must make arrangements in advance with the relevant maintenance person / key-holder to be present during the survey.

Note: It is possible that a management survey may not identify the presence of all asbestos containing materials in a building. There may be some ACM's in discrete locations not accessible during the survey. This is because the management survey is largely a non-intrusive survey. The refurb/demolition survey, which must be carried out prior to reconstruction or demolition of buildings constructed prior to year 2000 is a much more intrusive survey and is intended to conclusively determine the presence or absence of ACM's.

Refurbishment/Demolition Surveys

A refurbishment/demolition survey must be undertaken when a building (or part of it) is to be upgraded, refurbished or demolished unless the building is certified asbestos free. In the absence of such certification it must be presumed that there are ACM's present. These surveys must be done in the early planning stage of any proposed modifications of a buildings constructed prior to year 2000. The results of such surveys may, and often do, significantly influence the cost of planned refurbishments and may be a significant influencer in whether such projects will proceed or not.

These surveys are very intrusive often requiring removal of construction materials to facilitate access to discrete areas that are normally not accessible. These surveys are intended to definitely identify the presence, location, nature and quantity of ACM's present in the building or relevant part of it intended for modification or demolition.

All ACM's identified in the survey must be removed by a specialist contractor in advance of the refurbishment or demolition works commencing. This is essential to prevent the contamination by asbestos of all of the construction materials during refurbishment/demolition works and the potential release of asbestos fibres during the works.

It is not unusual in a larger premises that a mixture of survey types will be required e.g. a boiler house due for demolition will require a refurbishment demolition survey, while offices at the same site or even in the same building requires a management survey. As time progresses refurbishment surveys may be required in individual rooms or floors which are scheduled to be upgraded.



4.0 ROLES & RESPONSIBILITIES

Chief Executive Officer (CEO)

The CEO has overarching responsibility to ensure, so far as is reasonably practicable the safety, health and welfare at work of all employees and others affected by the HSE activities by:

- Ensuring the development of and compliance with this Policy
- Delegating operational responsibility for the day-to-day discharge of statutory duties under the Safety, Health and Welfare at Work, 2005 to the Executive Management Team, Senior Management Team, Extended Senior Management Team, Senior Managers and Line Managers for all matters within their control

Service Managers/ Responsible Persons

Management responsibility is outlined in the Corporate Safety Statement, and each site specific safety statement. This includes the duty for the management of Asbestos within each of their premises. The management of Asbestos containing materials should be included in site specific safety statements and risk assessments.

Service managers with responsibility for the premises must ensure that the Asbestos risk assessment is undertaken and an asbestos register is maintained for all relevant buildings within their area of responsibility.

The Estates Dept. can assist in ensuring that a competent surveyor, PSDP, and independent monitoring company (s) is procured. The Service Manager must ensure that any surveys or assessments completed are brought to the attention of relevant staff. Service Managers are responsible for the local implementation of this policy and procedures.

Service Managers should ensure the following

- An up to date Asbestos Register is available on site
- ➤ Locations where ACM is present are highlighted on the sites Risk Register and the risk reviewed regularly
- ➤ All necessary ACM control measures are implemented
- > Training is in place for line managers/maintenance personnel and other responsible persons likely to be exposed to Asbestos containing material to ensure Asbestos awareness
- ➤ Refresher Training is also available on HSE Land and this must be enforced/ encouraged through the Service Managers. The necessary checks on the condition of ACM's are undertaken and recorded in the register.

Line management are required to keep appropriate records for their area of responsibility.

Project Manager (Estates Maintenance / Service)

Consult with the Asbestos register for the site.

Communication of the survey to all relevant person but in particular to the Service Manager/Responsible Person.

Ensure that a Refurbishment and Demolition survey is undertaken ahead of refurbishment and demolition works.

Act as the main point of contact for any contracted works commissioned and ensure that they are provided with all asbestos information.

Ensure an Independent competent PSDP is appointed (Asbestos is a "Particular Risk" under the Construction Regulations)

Ensure the asbestos register is updated following any asbestos works (surveys and remedial works).

Ensure the Safety File for the building is updated following works or surveys

Buildings / Maintenance Manager / Facilities Manager/ (note titles may change in different areas)

This role must be agreed by the service manager. The Buildings & Facilities Maintenance Manager undertakes key responsibilities on behalf of the Service Manager/ Estates Manager in the areas of facilities management and safety co-ordination. With regard to asbestos these responsibilities are carried through as operational responsibility for the asbestos management system, including monitoring compliance with this policy & procedures, legislation, codes of practice and guidelines.

The Facilities / Buildings / Maintenance manager for each premises and site will:

- Assist with the implementation of Asbestos Surveys and maintain an ACM register.
- Ensure the ACM labelling system (see Appendix 9) is implemented and maintained in place with the assistance of the appropriate staff (this may be the Asbestos Surveyor).
- Advise that ACM is progressively eliminated by removing whilst carrying out refurbishment works and other alterations
- Ensure that the presence and condition of ACM is monitored through annual (or more frequent) inspections. Thus identifying damage to ACM; wear and tear; areas where ACM have been worked on or removed by others or where the risk has changed.
- Where damage is found advise the Service Manager that necessary measures are required to minimise the risk of exposure. (See Appendix 6 for Emergency measures following inadvertent exposure).
- Ensure that the asbestos register is consulted and necessary warning labels as required and discussed with local maintenance or Estates are in place before conducting any work or allowing contractors etc. to commence work (whether the work directly involves ACM or not)
- Ensure that a refurbishment survey is carried out in areas prior to work which may disturb or be adjacent to previously unidentified ACM
- Ensure that the relevant Health Service Executive Staff are also notified prior to any work on ACM
- Ensure that all work involving ACM is carried out in accordance with the relevant legislation and guidelines and appropriate notification is provided to the Health and Safety Authority.
- Ensure that a Risk Assessment and Method Statement (RAMS) are issued for any work that could involve ACM.
- Ensure that the various checklists in Appendix 13 are completed.

All Staff

Staff are responsible for ensuring that any work that may disturb or damage asbestos containing materials is avoided.

All staff must ensure that the HSE asbestos management procedures are abided by, when work cannot be completed without disturbing asbestos.

Staff are responsible for reporting to their supervisor or manager, any material suspected to contain asbestos, and where the material has been disturbed or damaged, or where staff are likely to undertake work which may affect such material.

Primary examples of staff who may be directly involved in tasks which have potential to disturb asbestos are Maintenance staff / IT Staff / Contractors / Service Suppliers and particular awareness should be paid where the risk of exposure may occur.

Communication

The details of the Policy / Procedures and Guidelines must be communicated widely

- This policy & procedures must be made available to all relevant staff/ contractors by the relevant Service Manager.
- The contents of the asbestos register must be brought to the attention of relevant staff on a regular basis e.g. building maintenance staff, IT staff etc.
- Communication with the site for removal works especially in occupied or staff areas.
- Asbestos should be an agenda item on all site/estates/maintenance H&S committee meetings.

Estates Department

The Estates Department will assist the Service Manager, if requested, to identify the presence of Asbestos containing material (ACM) in premises through the implementation of an asbestos survey programme.

Estates will facilitate surveys of premises, the responsible persons to include risk assessment as considered appropriate for the premises. This may be an Asbestos Management Survey or Asbestos Refurbishment Survey.

Estates will provide a panel of competent surveyors, contractors and analysts (including engagement as PSDP) to assist in the safe management of asbestos related activities as required.

Engagement of Other External Contractors

When engaging other (non- asbestos) contractors to undertake works in buildings where there are known or suspected ACM's those contractors must be provided with all of the information available about the locations, type and extent of the ACM's. The asbestos management survey and the asbestos register must be made available to all such contractors in advance of tendering for the works as tenders may be influenced by the presence of the ACM's.

All contractors and their employees engaged to work in these circumstances must have successfully undergone asbestos awareness training in the previous 12 months and have the required documentation to demonstrate this.

Occupational Health

Employees who are or believe they have been exposed to asbestos fibres in their workplace are referred to Occupational Health for assessment

5.0 THE ASBESTOS REGISTER

The Asbestos Register is included in the management survey report and is a summary of the findings of the survey. A copy of this Register must be kept in the Maintenance Department or other suitable location. The information in the register must be brought to the attention of all employees and contractors who might come into contact with the ACM's during the execution of their work. Employees must be trained in how to check the register to see if there are ACM's present in the area where they are required to work on the building fabric. This should become a standard procedure for all maintenance employees. Contractors must be informed of the potential and/or actual presence of ACM's in areas where they are required to undertake works.

The information contained in the asbestos register for the building must be kept updated. These registers must be updated following the execution of any works on the ACM's in the building which materially change the status of any of the ACM's. The register must also be updated following each annual review. See Appendix 4 for an example of an Asbestos Register.

6.0 ASSESSMENT OF THE RISKS

All Management Surveys will include an assessment of the risks associated with each ACM identified

These risk assessments must be done in accordance with the UK's Hazardous Substance Guides (HSG) 227 and 264

These assessments comprise two distinct elements;

- A material assessment and
- > A priority assessment

Material Assessments

This is an assessment of the condition of each asbestos containing material identified in the management survey. It assesses the possibility/likelihood of fibre release.

This assessment includes the following elements;

- Product type
- Extent of damage/deterioration
- Surface type/treatment
- Asbestos type

Each of these elements are scored and the scores are then summed up to provide an overall score for the material. The maximum attainable score is 12 which is an indication of a very high risk material.

However this is only one part of the overall risk assessment and of itself does not give an accurate measure of the risk to health. ACM's with a score of 12 which are located in a secure unoccupied building are not a risk to health. This is why the Priority Assessment must also be completed for each ACM so as to arrive at the real risk to health posed by the ACM's

Priority Assessments

The Priority Assessment addresses the environment in which the ACM exists and its potential impact on health. The priority assessments includes such factors as;

- > The occupancy level
- Activity levels,
- > Likelihood of disturbance of the ACM's,
- Accessibility of the ACM's,
- Exposure potential,
- Maintenance activities etc.

Each of these elements are scored and these scores are combined with the scores from the material assessment to give the overall Risk score for the material.

These scores are then divided into the following risk groups;

Risk ScoreRisk Level18 or moreHigh Risk12 – 17Medium Risk11 or lessLow Risk

This risk level will determine what actions, if any, are required to reduce the risk to a minimum.

The details of the scoring systems for both the material assessment and priority assessment are included as Appendix 5.

Identification of Risk Control Measures

Where a survey confirms the presence of ACM's it will also recommend what actions, if any, are required to be implemented to minimise the risk associated with the ACM's. Estates and/or local building maintenance managers are required to implement the required actions. Such actions may include one or more of the following:

- ➤ Label or colour code the ACM
- Protect / enclose the ACM
- Seal / encapsulate the ACM
- > Remove the ACM
- > Implement regular inspection and record the findings

The details of these control measures are included in Appendix 15

Asbestos surveyors should be required to compile a list of the actions required to be implemented in each building surveyed. This should be additional to the standard survey report and register and can be used to establish a local corrective action database. This database will be very useful in tracking the implementation of the required actions.

7.0 FORMAT OF ASBESTOS MANAGEMENT REPORTS

The report format is something that should be discussed and agreed with the contractor in advance of the survey(s) commencing. Because the survey companies are accredited to international management systems there will be limitations to options they can provide in the report format. They are bound by the terms of their accreditation and cannot, for example, provide soft copies of reports that can be modified in any way. Reports will usually be provided electronically in PDF format.

The report should initially be issued as an 'interim' report which must be reviewed to ensure that there are no errors. Potential errors relate to such things as incorrect descriptions of rooms or other spaces, errors in drawings, incorrect page numbers, missing pages etc. Reviews of reports should be carried out by a competent person together with the maintenance manager and some maintenance employees as they have detailed knowledge of the buildings and can help spot obvious errors and/or omissions.

Following Receipt of a Management Survey Report

The following sequence is required to be implemented;

- Review the survey report locally with the maintenance manager and maintenance employees
- Agree changes that are required with the survey company (Such changes can relate to obvious errors in the report like incorrect descriptions of locations, incorrect numbering of rooms/spaces, missing pages etc.)
- > Have the final report released
- Make the report available to maintenance and other relevant employees
- Make the report available to contractors as required
- > Draft a list of the actions required, if any, based on the recommendations in the report
- > Prioritise the list of actions based on the risk levels and prepare an implementation plan
- > Implement the actions based on the agreed priorities
- > Update the register to reflect the changes that have been made

It is good practice to locally establish a database of corrective actions arising from each survey report. The surveyor should be required to provide a list of the corrective actions to enable the assembly of the database. The database should indicate who is responsible for implementing each action and the anticipated completion dates for each. The database should be reviewed monthly.

Management survey reports must be repeated at intervals not exceeding 3 years and annual inspections must be carried out to ensure that the ACM's have not deteriorated to the point where they present an increased risk.

8.0 INCIDENTS/ EMERGENCIES

It is essential to prepare for incidents/emergencies that can arise in premises where ACM exist. This section only addresses unplanned incidents involving ACM's as it is assumed that all sites have emergency plans to address such things as fire, flooding, power outages etc. some of which may have impacts on or implications for ACM's.

The type of asbestos related incidents that arise relate to the inadvertent disturbance of ACM's and possible release of asbestos fibres. This can be caused by contractors or maintenance staff undertaking various types of works.

Prevention is Best

Before maintenance employees or contractors undertake any work in a building known to contain ACM's they must first check the building register and satisfy themselves that the proposed work area is free of ACM's OR plan the implementation of their work in a way that avoids disturbance of the ACM's. Alternative cable and/or pipe routes etc. should be considered in advance of the works so as to avoid interaction with known ACM's.

Reporting and Recording Incidents

All incidents resulting in the inadvertent disturbance of ACM's must be reported and recorded on the National Incident Management System (NIMS). These incidents should be investigated to determine the cause and what measures are required to prevent a re-occurrence. All incidents resulting in the potential asbestos fibre release must be investigated thoroughly using HSE Incident Management Framework.

If employees were or may have been exposed to asbestos fibre they must be referred to Occupational Health for medical assessment. Contractors, including asbestos removal contractors are responsible for dealing with such incidents involving their own employees unless alternative arrangements are specifically agreed in advance.

These records are confidential to each member of staff and be kept in a controlled location. Each employee will have access to their own records upon request.

Emergency Response Kits

To be efficient and effective in dealing with such incidents sites are recommended to have emergency response kits and to practice responding to such incidents. The need to have response kits on any site should be determined by risk assessments. The contents of these kits are listed in Appendix 3. This is not intended to be an exhaustive contents list and other items may be identified as necessary to be effective. Suitable and sufficient training will be provided as deemed necessary in a risk assessment.

9.0 FIBRE IN AIR MONITORING

The measurement of airborne asbestos fibre is essential to demonstrate that asbestos removal contractors are implementing the correct removal procedures and are not releasing asbestos fibres beyond their work area. Airborne fibre measurements are also very useful in reassurance or background monitoring to demonstrate that the ambient air quality in enclosed occupied spaces are fully compliant with the required standards. The need for background sampling should be determined by risk assessments.

Background/Ambient air Monitoring

The background fibre in air concentration may be measured in occupied buildings where ACM's are known to exist where this is recommended by the surveyor and the risk assessment requires it. The risk assessment undertaken by the surveyor will decide where such monitoring should be undertaken and the frequency of such monitoring. These details should be agreed with and implemented by an independent competent consultant.

Details of Fibre Air Monitoring are contained in Appendix 7.

All such sample results should comply with a concentration of <0.01f/ml. Where higher concentrations are measured the reason for this should be investigated.

10.0 EMPLOYEE TRAINING

Appropriate training of different groups of employees is essential to effectively achieve the implementation of the asbestos management processes and procedures.

A number of different groups of employees can be identified including senior managers, line managers, maintenance employees and other relevant employees all of which require training relative to their roles and responsibilities within HSE.

Senior managers must be familiar with their responsibilities under the law and how their decisions influence the effective implementation of this management system. Making adequate resources available annually is essential for progress in reducing risk and in time achieving asbestos free facilities throughout the Estates.

Line managers have a very important pro-active role in the implementation of the processes and procedures detailed in this document. In addition to protecting the health of those who report to them line managers are essential in the control of contractors engaged to undertake asbestos works. To be effective in this they must be trained in the legal requirements and the practical details of executing asbestos removal works.

Training must also be provided to contractors engaged to work for HSE. This must include a site induction, recognition of alarms, how to respond in an emergency and HSE health and Safety rules and requirements.

Refresher Training

Refresher training must be undertaken as appropriate. Any new starters or others identified as requiring training and / or additional training must be provided with the training identified at the earliest available opportunity. A basic asbestos safety awareness/ refresher training program is provided on HSELanD for Estates staff, Maintenance Officers their staff and service managers and others where appropriate.

Training Records

Records of all training are required to be collated in detail and retained for a period of 40 years. Records must include a copy of the training slides/handbook and all other documents provided by the trainer. The signed attendance sheets together with the assessments of the training must also be retained. Any training certificates received are held centrally. These records are treated as confidential to each member of staff and are kept in a controlled location. Each employee will, however, have access to their own records upon request.

Employees who are likely to be required to undertake works that may bring them into contact with ACM's are required to be adequately trained to, in the first instance, avoid disturbing ACM's, understand the risks associated with ACM's and how to protect themselves and how to respond in the event of potential fibre release.

Details of the training requirements of different employees are contained in Appendix 8. The requirements of Appendix 8 should form the contents of the asbestos training programme for employees

11.0 CONSULTATION WITH EMPLOYEES AND EMPLOYEE REPRESENTATIVES

Employees required to be informed about the location, condition and risks associated with the presence of ACM's in their workplace. Adequate training must be provided to relevant employees – employee training is addressed separately in this document.

When planning to undertake asbestos removal works in buildings that are occupied the employees should be informed of the plan and how the proposed works might impinge on their daily activities. The works may require some employees to enter or exit their workplace differently to normal or to temporarily move their workstation for the duration of the works. Employees should be informed of the nature and likely duration of the works and of the precautions implemented to protect their health and safety throughout the execution of the work.

The process of having detailed inspections and disturbed air sampling undertaken and repeated if necessary to ensure that the workplace is safe prior to being certified for re-occupation should be explained to the employees and/or their representatives

It is good practice to give employees and/or their safety representatives an opportunity to express any concerns they may have about the works.

12.0 ASBESTOS REMOVAL WORKS

Having had the management surveys and the risk assessments completed and all remedial actions identified the next stage is to identify those ACM's that are required to be removed and disposed.

The decision to remove ACM's can often be very simple where the level of risk is unacceptable and the remedial measures available cannot reduce the risk to an acceptable level.

In other situations where a building is scheduled to be renovated or demolished then the ACM's present will have to be removed where possible in advance of such works being implemented.

If there are large amounts of ACM's in a building to be demolished and they are not removed in advance then all of the rubble arising from the demolition may be so contaminated that it all has to be disposed of as asbestos waste.

Asbestos removal works should only be undertaken by contractors on the Supply.gov (LGOPC) panel of asbestos removal contractors. In the exceptional (emergency) case where this platform is not used a risk assessment must be prepared and must include detailed competency checks of the contractor proposed

With some minor exceptions a Project Supervisor Design Process (PSDP) must be appointed. This is necessary as asbestos, because of its special risks, is included in Schedule 1 of the construction Regulations.

The appointment of the PSDP must be done in writing and must be accepted in writing for the appointment to be compliant with the Regulations.

The PSDP will provide the Preliminary Health and Safety Plan for the works, make necessary notifications and open a safety file for the works. The appointment of a PSDP for the asbestos portion of the works where there is already a PSDP in place must be communicated and agreed with the PSDP for the project.

The successful tenderer for the execution of the works must accept appointment as Project Supervisor Construction Stage of the project (PSCS). This appointment must also be made and accepted in writing.

The PSCS must notify the Health and Safety Authority (HSA) of the works 14 days before the scheduled commencement of works. If the works need, for some reason, to be carried out at short notice then the PSCS must seek a waiver from the HSA to enable work to proceed sooner than the 14 day notification period.

When notifying the HSA the PSCS must provide a Risk Assessment and Method Statement (RAMS) for review and acceptance by the Authority.

Before work commences a pre-mobilisation meeting between the contractor, PSDP, and HSE representatives must take place as per the requirements of the Supervision/Management of Asbestos Works in Appendix 10.

All of the other requirements in Appendix 10. must also be complied with.

The HSE (or the Design Team on behalf of the HSE) will always engage an independent certified analytical company to undertake fibre in air measurements during the execution of the work.

This is required to ensure that the removal contractor employs working methods that do not generate unacceptable fibre in air concentrations.

This analyst will also undertake clearance tests and issue the relevant certificates before the work area can be re-occupied.

Supervision / Management of Asbestos Removal Works

Effective management of ALL works involving interaction with ACM's is essential to protect the health of HSE employees, contractors and others who may be in the vicinity of the works and/or frequent or use the premises where the works are being undertaken.

The approach to be adopted when undertaking asbestos works for HSE is to design and implement the works in a manner that minimises the release of asbestos fibres either into the works area and especially surrounding areas.

All asbestos works carried out on behalf of HSE HES must only be undertaken by competent contracted employees. Such works should not be attempted by HSE employees.

The following are the requirements to be implemented with every contractor engaged by HSE to carry out any works involving interaction with ACM's including environmental cleaning works.

NOTE: The authorisation of contractors and the awarding of contracts are not addressed in this document.

Detailed planning and preparation in advance of the execution of all proposed works is essential and can often prevent problems arising during the execution of the works. The following paragraphs set out in detail the issues to be discussed with the contractor appointed to undertake asbestos works. Where a sub-contractor is engaged to undertake the works then both the main and sub-contractor must be involved in the pre-start and other discussions detailed below.

All relevant stakeholders must be advised in advance of works commencing. Employees must be informed of any impacts the works may have on how they enter/exit their work area and any impacts there may be on their normal work routine. A suitable mechanism must be established for doing this and addressing any queries or concerns employees and/or others may have.

Pre-Start Discussions

Pre-start discussions are required to be carried out with the contractor at various stages including prior to mobilisation and prior to works commencing. The details required to be discussed/agreed in these pre-start discussions and in Appendix 13.

Before Commencing Works

Checklists containing all of these elements are provided in Appendix 13

These checklists are required to be completed at the relevant stages of every asbestos removal project. This should be done by the contractor and the HSE's representative on the project which will usually be the appointed PSDP.

Monitoring the Works

The execution and progress of the works must be monitored to ensure that the works are being carried out in accordance with the agreed method statement and the work is progressing according to plan. Prior to work commencing the contractor should be informed about the frequency of the site visits intended by the client/ PSDP.

All site visits/inspections must be recorded and any issues arising discussed with the contractor.

Independent Supervision

HSE will engage an independent expert to address the following issues;

The selection and appointment of these independent experts cannot be done by the contractor. Such appointments can only be made by HSE. The appointed person then reports directly to HSE and cannot in any way be influenced by the contractor. This will eliminate difficulties that arose in the past relating to poor contractor performance leaving asbestos residues on pipes, walls etc.

Reviewing Contractors Performance

When the works are complete a review of how the works progressed and the contractor's performance should be undertaken. Details are provided in Appendix 13.

Engagement of Other External Contractors

When engaging other (non- asbestos) contractors to undertake works in buildings where there are known or suspected ACM's those contractors must be provided with all of the information available about the locations, type and extent of the ACM's. The asbestos management survey and the asbestos register must be made available to all such contractors in advance of tendering for the works as tenders may be influenced by the presence of the ACM's.

All contractors and their employees engaged to work in these circumstances must have successfully undergone asbestos awareness training in the previous 12 months and have the required documentation to demonstrate this.

Sub-Contractors

The main contractor may engage sub- contractor(s) to undertake asbestos related works where such work is a part of a larger contract. It is imperative that all sub-contractors are vetted and deemed competent to undertake the asbestos works. If the proposed sub-contractor is unknown to HSE, their competency must be assessed thoroughly and their experience in undertaking similar work to what is proposed must be reviewed. The quality of their method statement and risk assessment, together with the completed checklists, will provide a good indication of their knowledge and attention to detail. Sub-contractors insurance certificates must be reviewed to ensure there are no limitations or exclusions that might compromise cover in the event of an accident or something going wrong during the execution of the works.

The main contractor is responsible for any sub-contractors employed on the works however all sub-contractors must meet the HSE's minimum requirements of engagement before being allowed on site.

If there are doubts about the competency of any sub-contractor they must be resolved if possible or an alternative sub-contractor engaged to undertake the works.

Sanctions

The contractors must be made aware of any sanctions that may be implemented and the circumstances in with that might happen.

Sanctions can include one or more of the following

- > Removal of individuals from site
- > Termination of the works
- ➤ Removal of the contractor from the HSE's list of authorized contractors for a period of time or forever.

The application of any sanction must be proportionate to the failure that requires sanction and sanctions must always be applied consistently.

12.2 Records of Works

A project file is required to be established for all asbestos related works including environmental cleaning works undertaken on behalf of HSE. The following documents, reports, drawings etc. are required to be included in the project file and retained for a period of 40 years.

This project file must be assembled by the main contractor and passed over to the PSDP at the end of the project. Details of the requirements of the project file are provided in Appendix 13.

Note: not all of the following are relevant to all asbestos related works Contractor Method Statement (signed off by all asbestos removal workers and the HSE representative)

12.3 Disposal of Asbestos Wastes

All wastes arising from asbestos removal works including environmental cleaning works, irrespective of how small the quantity is, must be double bagged in heavy duty polythene bags and labelled Asbestos Waste.

These wastes must only be transferred to a licenced waste operator and disposed of in a facility authorised by the Environmental Protection Agency (EPA).

Proof of the quantities of waste disposed of and the facility where it was disposed must be provided by the waste disposal company. These records must be retained for a period of 40 years.

These waste disposal requirements must always be included in the tendering process.

13.0 RETENTION OF DOCUMENTS / RECORDS

All documentation relating to asbestos containing materials must be retained for at least 40 years.

14.0 INSPECTIONS AND REPORTING

ACM's are required to be inspected regularly to ensure they have not deteriorated or been interfered with increasing the risk of fibre release.

The frequency of inspections can vary greatly depending on their location and potential impact of fibre release.

Advice on the frequency of these inspections, if not stated in the asbestos management survey, should be sought from the building surveyor or other competent person.

All inspections must be recorded and filed in the asbestos management system.

15.0 PLANNING AND BUDGETING

All sites are required to prepare an action plan and budget to, in the first instance, have asbestos management surveys undertaken in all buildings constructed prior to year 2000.

If a large number of surveys are required to be done they can be undertaken over a period of time with priority given to older occupied buildings. These surveys must only be undertaken by a specialist contractor on the HSE's approved contractor list. Management surveys must be undertaken in accordance with the UK's HSE Hazardous Substance Guide (HSG) 264 second edition.

Annual budgets should include for implementation of remedial measures, up to and including removal of ACM's, as identified in the management surveys.

An example of an action plan is set out on the table below.

Table 1 - Action Plan Programme

Item		Minimum Timescale	Undertaken By
1.0	Set up an operational group per regional estates area with Service Management and Health & Safety representation with advice and support from local estates offices to identify actions arising from this policy	Q4 2022	Service Manager/ Estates/ National Health & Safety Function
2.0	Undertake management surveys of all premises constructed prior to year 2000 Ensure asbestos register is in place.	2022/25	Service Manager/ Estates / Maintenance
3.0	Ensure risk assessments are completed and brought to the attention of staff where staff are liable to exposure	Ongoing	Service Manager/ Estates / Maintenance
4.0	Undertake routine monitoring /inspections of identified ACM's in all properties	Annually	Service Manager/ Maintenance
5.0	Update the asbestos register and make available to staff, contractors and consultants, especially following any survey and/or remediation works	Ongoing	Estates / Maintenance
6.0	Ensure staff asbestos awareness training is up to date and further develop site induction training	Annually	Service Manager/ Estates / Maintenance
7.0	Notify occupants of the management survey results as they relate to their workplace	Ongoing	Service Manager / Maintenance
8.0	Ensure Management procedures are adhered to	Ongoing	Service Manager/ Maintenance
9.0	Plan remedial/removal works and prepare budgets	Annually	Service Manager/ Estates / Maintenance
10.0	Review Asbestos Management Plan	Bi-annually	Service Manager/Estates/ Maintenance
11.0	Review documents on the management of ACM's	Bi-annually	Service Manager/Estates/ Maintenance
12.0	Training and refresher training for noted personnel with this policy and procedures and	Ongoing	Service Manager/Estates/ Maintenance

those who plan and manage works	



PART B: PPPG Development Cycle

1.0 PURPOSE OF THIS POLICY AND PROCEDURES

The purpose of this policy and procedures is to provide a standard approach to the effective management of ACM's throughout HSE estates. To ensure, that where asbestos containing materials exist in HSE premises, they are identified and managed to the highest standards and when necessary removed and disposed in accordance with relevant legal requirements.

2.0 SCOPE

This policy and procedures applies to: All H.S.E. premises constructed prior to year 2000. It may also be adopted where relevant by Tusla given the existing Service Level Agreement which is in place between HSE Capital and Estates and TUSLA Estates.

In line with the HSE Code of Governance (2015) Section 38 and Section 39 organisations are to adopt this policy or develop a policy of their own which is consistent with this policy and provide an assurance to the HSE regarding same.

The engagement of Asbestos Surveyors, Asbestos Removal Contractors, Independent Analytical Companies and Asbestos Waste Contractors are addressed in this policy and procedures which are required to be complied with by all HSE staff involved in the engagement of such services.

OUT OF SCOPE

Contaminated soil/lands are excluded from this scope. Buildings constructed after the year 2000

3.0 KEY OBJECTIVES

The key objectives of this policy & procedures are:

- a) To establish a common management strategy to measure and adequately manage risk to employees and other parties who may be exposed to asbestos fibres released from ACM's.
- b) To meet our legal requirements in relation to asbestos.
- c) To identify and record the location and presence of Asbestos Containing Materials (ACMs)
 within the estate. A timetable for achieving this is set out in Table 1 Action Plan
 Programme
- e) To complete material and priority risk assessments on all identified ACMs in accordance with the commitments in the Action Plan Programme
- f) To employ competent staff, and consultants and other relevant parties.

4.0 OUTCOMES

- A safer working environment for employees and others who fall under the scope of this policy by providing a framework for managing the risks associated with ACM's.
- Clear roles and responsibilities of responsible persons are clearly outlined as part of this
 policy
- There is clear guidance on risk reduction measures which will minimise the risk associated with ACMs

Procedures for Tendering for competent surveyors and removal specialists are outlined

5.0 POLICY DEVELOPMENT GROUP

Members of the Policy Development Group can be found in Appendix 16 of this Policy & Procedures.

6.0 PPPG GOVERNANCE GROUP

Members of the Governance Group can be found in Appendix 17 of this Policy & Procedures.

7.0 SUPPORTING EVIDENCE

The following legislation is pertinent and was referred to during the development of this Policy & Procedures:

The Legal Context

There are various enactments and regulations governing the management of ACM's that are required to be complied with by employers (and others).

- Safety, Health and Welfare at Work Act 2005
- Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations, 2006, SI 386 of 2006, and 2010 SI 589 of 2010
- Safety, Health and Welfare at Work (General Application) Regulations, 2007, SI 299 of 2007
- > Safety, Health and Welfare at Work (Carcinogens) Regulations 2001 and 2015
- Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 and 2015.
- Safety, Health and Welfare at Work (Construction) Regulations 2013 to 2020.
- > Chemicals (Asbestos Articles) Regulation's 2011 (SI 248 of 2011)

Employers are required to be familiar with the requirements of these, how they apply within HSE, and how these should be implemented so as to achieve legal compliance and protect the health of employees and others as necessary.

In addition to these legal requirements the following HSA and UK HSE Hazardous Substance Guides (HSG's) are relevant as they set out how asbestos surveys should be undertaken, how risks should be assessed and how asbestos should be managed in buildings.

- > HSA Practical Guidelines on ACM Management and Abatement
- HSE 264 The Survey Guide
- HSG 248 The Analysts Guide
- ➤ HSG 247 The Contractors Guide

8.0 LITERATURE SEARCH STRATEGY

A literature review was undertaken by the Policy Development Group. The search terms used included 'asbestos', 'ACM's', 'asbestos surveyors', 'Asbestos removal', 'asbestos exposure incidents', and 'health effects of asbestos exposure'.

Websites accessed included the following: Health and Safety Authority (HSA), Health and Safety Executive (HSE UK) and European Agency for Health and Safety at Work (eu-osha.ie).

The literature accessed was predominately legislation and articles.

9.0 GOVERNANCE AND APPROVAL

Formal governance for this policy is provided by the National Director of Capital & Estates.

10.0 COMMUNICATION AND DISSEMINATION

The Policy will be disseminated through the National Capital & Estates Directorate for immediate implementation by relevant Services, in line with the agreed HSE protocol.

11.0 IMPLEMENTATION

Managers (Responsible Persons)

Managers are responsible for implementation of this Policy to include the identification of responsible person(s), specifying the necessary actions and timeframes for implementation within their areas of responsibility (Please refer to Part A Section 4.0 for detailed roles and responsibilities)

Education & Training

Please refer to Part A section 10.0

12.0 MONITORING, AUDIT AND EVALUATION

Managers are required to monitor and audit the implementation of this Policy & Procedures within their area of responsibility using the checklist in Table 1 in Part A of this policy and maintain evidence of same

Implementation of this Policy & Procedures shall be audited periodically at national level and by Capital & Estates.

13.0 REVIEW OF POLICY AND PROCEDURES

HSE will ensure that this document will be reviewed and updated every three years to confirm its ongoing suitability and effectiveness.

APPENDICES

Appendix 1 - Some Key Facts

Some Key facts in relation to Asbestos and Asbestos Containing Materials.

Asbestos is a term used for a range of naturally occurring silicate minerals which are widespread on the planet and exist in mineable quantities in some countries.

Asbestos was mined in 25 countries and used in manufacturing in 85 countries

Asbestos is still being mined and used in a range of products in some countries outside of Europe

Asbestos was widely used in building materials and in many other applications throughout the 20th Century

Background

Asbestos is a naturally occurring silicate mineral that exists throughout the planet. Asbestos deposits were mined in 25 countries and asbestos was used in manufacturing in 85 countries. There are 6 different forms of the mineral, 3 of which were commercially mined from the late 19th century. Asbestos has a unique range of natural properties which made it attractive for many applications. It is estimated that asbestos was used in over 3,000 applications from the 1950's.

The properties that made asbestos so popular include;

- Wear and friction characteristics
- ➤ Heat and fire resistant
- Isolation of temperature and electricity
- Has high tensile strength
- > Resistant to chemical and biological attack

Some of these applications in which asbestos was used include;

- Protection against high temperatures, e.g. Metallurgy
- > Protection against chemical agression, e.g. Chemical industry
- Car industry (brakes, clutches, sealings)
- Insulation of trains
- Shipbuilding
- Insulation of buildings
- Fire-resistant clothing
- Cigarette filters
- Wine and water filters appliances
- Gas Masks
- Asbestos cement manufacturing

Asbestos Minerals

The three asbestos minerals that were commercially exploited are;

Chrysotile (White)

Amosite (Brown)

Chrocidolite (Blue)

Chrysotile was the most commonly used fibre accounting for 95% of all asbestos fibres used. This is regarded as the least toxic of the three commercially exploited fibres.

The relative toxicity of these three fibres are;

Chrysotile (White) Fibres	Amosite (Brown) Fires	Chrocidolite (Blue) Fibres
1	100	500

It is possible that all three fibre types exist in building materials across the estates. Despite the difference in the toxicity there is a single Occupational Exposure Limit Value (OELV) of 0.1 f/ml regardless of fibre type.

Different fibres were used in different applications and in some applications a mix of fibres was used. The most common uses for each fibre type were;

Chrysotile (White) Fibres

This was the most commonly used of the asbestos fibres and can be found in many building products including;

- > Adhesives for roofs and floor products
- ➤ A wide range of cement based products including slates, corrugated sheeting, wall boards etc.
- > Fire prevention and fire proofing products.
- Insulation
- Roofing felt
- Vinyl tiles

Amosite (Brown) Fibres

Amosite fibres were generally mixed with Chrysotile (White) fibres to provide increased strength and can be found in;

- Asbestos cement sheets
- Thermal Insulation
- Lagging for pipes
- Insulation boards
- Ceiling, roof and floor tiles

Crocidolite (Blue) Fibres

Although the most toxic of the three commercially used fibres, Crocidolite is less heat resistant but has a greater tensile strength. These fibres were used in;

- Water supply pipes
- Ceiling tiles
- > Fire protection systems
- Insulation boards
- Spray on Insulation
- Electrical wires and circuit breakers

Thermal insulation

It is estimated that asbestos was used in more than 3,000 different applications.

There is no equivalence between Asbestos and ACM's. The term Asbestos is often incorrectly used when reference is being made to ACM's.

Exposure to airborne asbestos fibres is a risk to health however the presence of ACM's in good condition does not pose such a risk.

The risk to health from Asbestos fibres is caused only by fibres of particular dimensions. These are referred to as respirable fibres or sometimes as critical fibres.

The risk of fibre release depends on the nature and condition of the ACM and the likelihood of disturbance.

High density ACM's such as asbestos cement sheeting, slates and asbestos reinforced concrete pipes pose little risk compared to lower density materials such as sprayed - on asbestos or pipe lagging. However it is important to be aware that all of these materials can release fibres if not handled in the correct manner.

If ACM's are not managed properly then the health of employees and others may be put at risk.

Exposure to asbestos fibres occurs when ACM's or dust containing asbestos fibres are disturbed releasing fibres into the air.

Most work on ACM's requires a specialist contractor, but some minor work on high density ACM's can be done by a suitably trained and competent general contractor or employee if the correct precautions are implemented.

Appendix 2 - Glossary & Terms of Reference

ACW's – Asbestos Containing Waste(s)

Asbestos - A generic term used to identify a group of naturally occurring silicate minerals including the following three commercially exploited fibre types;

- Amosite (Brown fibres)
- Crocidolite (Blue Fibres)
- Chrysotile (White Fibres)

Asbestos Containing Materials (ACM's) - Any material or article that, as part of its design, contains asbestos.

Asbestos Register - A listing of the presence, quantities, locations, nature, type condition and risks associated with every ACM identified in the management survey to which the register relates

Occupational Health Register:- Records of health records of employees who is or may be exposed in the course of their work to dust arising from asbestos or materials containing asbestos.

Competent Person - For the purposes of this document a person is deemed to be a competent person where, having regard to the task he or she is required to perform and taking account of the size or hazards (or both of them) of the undertaking or establishment in which he or she undertakes work, the person possesses sufficient training, experience and knowledge appropriate to the nature of the work to be undertaken.

D.O.P. – **Dispersed Oil Particulate Test** - Test required to ensure that the H.E.P.A. filter in the vacuum is functioning effectively. This test must be repeated annually.

Emergency Response Kit – A kit containing the materials listed in Appendix 3 to be used following the accidental release of asbestos fibres into a workspace. These kits are to be provided on sites where the risk assessments requires it.

Encapsulation - The application of a sealing layer/coat to an asbestos containing material to bind the fibres to the surface and prevent fibre release.

Enclosure - A structure built over and/or around asbestos containing materials to prevent physical contact with the ACM's

Exposure Limit Value (E.L.V.) - The legally allowable exposure level for a substance which for asbestos is a respirable fibre level of 0.1 fibres per cubic centimetre (ml) of air measured in a person's breathing zone and expressed as a time weighted average fibre concentration calculated over an eight-hour working day.

Friable Asbestos - An asbestos containing material that has poor resistance to mild abrasion or damage and is more likely to release inhalable fibres.

H.E.P.A - An abbreviation for 'High Efficiency Particulate Arrestor' which is a filter with a collection efficiency of 99.95% for particulates of 3um or bigger

Management Survey - A survey of a structure undertaken by a competent person to determine the presence, locations, quantities, nature, type, condition and risks of the asbestos containing materials in the structure.

- **P.A.T.** (Portable Appliance Test) Standard test applied to all portable electrically powered equipment which must be repeated annually.
- **P.C.O.M** Phase Contrast Optical Microscopy. Optical method for determining the presence of respirable fibres in an air sample. This method of analysis has a limit of detection of 0.01 f/ml and counts all respirable fibres present in the sample.
- **R.A** (Risk Assessment) an assessment of the risk associated with each ACM discovered in the management surveys. These assessments re undertaken using the method proscribed in UK HSE's Hazardous Substance Guides (HSG) 227 and 264 and include a material assessment and a priority assessment.

Refurbishment/Demolition Survey - A survey carried out by a competent person prior to the refurbishment or demolition of a building or any part of a building constructed prior to year 2000 to determine if there are ACM's present in the building. This is a more intrusive type of survey than the management survey

Respirable fibre - A fibre of the following dimensions

- (a) Less than 3 microns wide
- (b) More than 5 microns long
- (c) Has a length to width ratio (aspect ratio)of greater than 3:1
- **S.E.M/T.E.M** Scanning Electron Microscope / Transmission Electron Microscope. Electronic methods for confirming the presence and type of asbestos fibres in an air sample. These methods of analysis have much lower limits of detection than PCOM.



Appendix 3 - Contents of an Emergency Response Kit

The following is a non-exhaustive list of items required for emergency response kits. The need to have these kits on any HSE site should be determined by risk assessment.

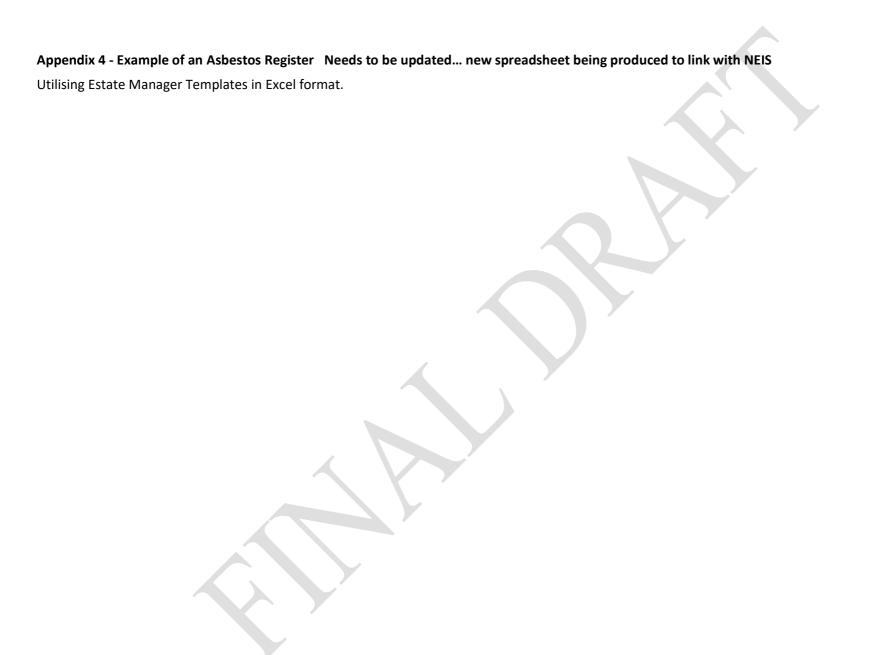
Vacuums fitted with H.E.P.A filters are essential and must be included in every response kit. These vacuums are required to be certified annually so they must pass both a P.A.T and D.O.P test each year. Proof of certification must be attached in the form of a sticker to each vacuum indicating the date of the last test. Vacuums without current certification should not be used to clean up asbestos debris.

These kits should be assembled in a way that makes them easily and quickly moved to the location where the incident has occurred. Plastic bins with wheels are very useful for this purpose.

Training of employees in the response to these incidents and the implementation of the response procedure is essential. This training should be done at regular intervals using mock incidents in different locations.

A list of the contents of the response kits should be attached to the container and should be audited regularly to ensure everything that is required is contained in the kit.

- ➤ H.E.P.A. Vacuums small industrial units certified
- > Polythene sheet / rolls
- Duct tape
- ➤ PPE PP3; Disposable overalls; gloves
- Camera or use smartphone!
- Measuring tape
- Warning signs
- Sample signs
- Sample bags
- Tweezers
- Sticky tape
- > Flashlight
- ➤ Tack Rags
- Moist wipes
- Warning tape



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Appendix 5 - Material and Priority Assessment

HSG264 Material Assessment & HSG227 Priority Assessment (HSG264)

Parameter	Examples of scores	Score
(Categories)		
Product Type	Asbestos- reinforced composites (plastics, resins, mastics, roofing	1
	felts, vinyl floor tiles, semi-rigid paints or decorative finishes,	
	asbestos cement etc.)	
(Or debris from	Asbestos insulating board, mill board, other low density board,	2
product type)	asbestos textiles gaskets ropes and woven textiles, asbestos paper	
	and felt	
	Thermal insulation (e.g. pipe & boiler lagging) sprayed asbestos,	3
	loose asbestos, asbestos mattresses and packing	

Extent of damage / deterioration	Good condition: no visible damage	0
	Low damage: a few scratches or surface marks, broken edges on companies tiles etc	1
	Medium damage: significant breakage of materials or several small areas where materials has been damaged revealing loose asbestos fibres	2
	High damage or delamination of materials, sprays and thermal insulation. Visible asbestos	3

Surface Treatment	Composite materials containing asbestos: reinforced	
	plastics, resins vinyl tiles	
	Enclosed sprays and lagging AIB (with exposed face	1
	painted or encapsulated) asbestos cement sheets etc	
	Unsealed AIB, or encapsulated lagging and sprays	2
	Unsealed lagging and sprays	3

Asbestos Type	Chrysotile	1
	Amphibole asbestos excluding	2
	crocidolite	
	Crocidolite	3

- For identified ACM the score that equates to the analysis result is selected. If the item is more than one type of asbestos the highest score is used
- Presumed and strongly presumed ACMs are scored as though CROCIDOLITE (3) unless analysis of similar materials shows a different asbestos type or there is a reasoned argument that another type of asbestos was always used

The 4 scores are added together to produce a total.

The total score can be considered in the material assessment table below

Score	Potential to Release Asbestos Fibres
4 or less	Very low
5-6	Low
7-9	Medium
10 or more	High

Priority Assessment

NOTE: It is not necessarily the materials with the highest score will become the priority for remedial action. To prioritise action it necessary to consider

Normal occupant activity Likelihood of disturbance Exposure potential Maintenance activity

This system is based on the method as described in HSG227.

The asbestos risk assessment system adopted concentrates solely on the likelihood of fibre release from ACMs into the breathing zone of persons at risk. This is the single most important factor in assessing the likelihood of that person being exposed to asbestos fibres, which may be harmful to health.

The table below is indicative of issues to be considered while assessing likelihood of personal exposure of occupants. Four assessment factors are recommended to be used, each score to be averaged to give an overall mark between 0-3, each factor is added to give a priority rating of 0-12.

Priority Assessment (HSG 227)

Assessment Factor	Score	Score Variables		
Normal Activity in area	0	Little use, rare disturbance (e.g. store room)		
	1	Low disturbance activity (e.g. office)		
	2	Moderate risk of disturbance (e.g. corridor with trollies)		
	3	High risk of disturbance (e.g. door covered with asbestos		
		insulating board in constant use)		
Likelihood of disturbance				
Location	0	Outdoors		
	1	Large well ventilated area		
	2	Rooms <100m ²		
	3	Confined spaces		
Amount	0	Gasket		
	1	>10m ² or <10m pipe run		
	2	10 – 50m ² or 10 – 50m pipe run		
	3	>50m ² or 50m pipe run		
Accessibility 0		Unlikely disturbance		
	1	Occasionally disturbed		
	2	Easily disturbed		
	3	Routinely disturbed		

[
Exposure potential		
Number of occupants	0	None,
	1	1-3 persons
	2	4-10 persons
	3	>10 persons
Average time area in use	0	less than 1 hour
	1	1-3 hours
	2	3-6 hours
	3	>6 hours
Frequency of use of area	0	Infrequent
	1	Monthly
	2	Weekly
	3	Daily
Maintenance Activity		
Type of activity	0	Rare, disturbance unlikely(e.g. store room, outdoors)
	1	Low disturbance activity (e.g. changing a light bulb or tube in an asbestos insulating board ceiling)
	2	Moderate risk of disturbance (e.g. lifting one or two asbestos
		insulating board tiles)
	3	High risk of disturbance (e.g. lifting a large number of asbestos
		insulating board tiles)
5		Market .
Frequency	0	Unlikely
	1	1 per year
	2	>1 per year
	3	>1 per month

Material Assessment + Priority Assessments = Risk Assessment score for remedial action

The risk assessment scores will be split into categories, each category indicating the level of prioritisation for remedial action.

Category	Overall Risk score (combined risk & materials assessment	Level of Risk	Action
	scores)		
Category A	18+	High Risk	Immediate Action
Category B Risk	13-17	Medium Risk	Near Term Action
Category C Risk	9-12	Low Risk	Regular Inspection
Category D	8 or below	Very Low Risk	Annual Inspection
Source: HSG 227			

Appendix 6 - Asbestos Incident Response Procedure

Accidental Release of Asbestos Fibres

Before maintenance employees or contractors undertake any work in a building known to contain ACM's they must first check the building register and satisfy themselves that the proposed work area is free of ACM's.

If there is any doubt about the presence of ACM's then the work must be deferred until the situation has been clarified.

Even with the best asbestos management plans it is still possible to come into contact with ACM's that were not identified in the building management survey. The management survey is not very intrusive and it is possible to encounter ACM's within the building fabric during maintenance/repair works that are not in the building register.

For this reason it is essential to have a procedure for reacting to and effectively dealing with accidental disturbance of ACM's which may have released fibres into the air.

In the event of such an occurrence the following procedure must be implemented.

Keep the spread of dust to the minimum area possible. The following procedure is intended to achieve this.

Immediately Stop all work

It is important to reduce the spread of the contamination as much as possible in the first few minutes of a known asbestos fibre release.

Immediately Turn off all air management systems in the Building

Where an air management system exists within a building it should be shut down immediately to stop further contamination. If this is not possible to do in the immediate vicinity of the incident then ring building maintenance or security and request them to turn the system off. Close any open windows in the affected area.

Immediately have an emergency response kit brought to the site of the incident

Have the emergency response kit delivered to the site of the incident by someone wearing PPE including RPE.

Immediately evacuate all personnel in the area and/ or adjacent areas not affected/contaminated with dust without causing alarm.

Cordon off and seal the site using the contents of the emergency response kit until an assessment can be completed.

Immediately report the incident to local Maintenance Manager who will inform the Service Manager.

Use the HEPA vacuum in the emergency response kit to remove dust from the breathing zones of affected personnel.

Have all affected personnel put on RPE (which is in the emergency response kit) after vacuuming the dust from their breathing zone.

Remove dust from the clothes and footwear of affected personnel using the HEPA vacuum.

If the clothes are heavily contaminated with dust they should be removed and replaced with a Type 5 disposable overalls.

All contaminated clothes must be double bagged and disposed of as asbestos wastes.

ASBESTOS EMERGENCY CHECKLIST				
To be completed in the ever	nt of an accidental	release		
THIS FORM MUST COMPLET	ED AND A COPY P	ROVIDED TO ESTATES		
Property Address				
Issue Number		Date		
Asbestos location				
Section 1 – Containment				
1. Has worked been stopped	l immediately?		Yes	No 🗌
2. Have all personnel been e	vacuated to a safe	location?	Yes	No 🗌
3. Has the site been cordone	ed off?		Yes	No 🗌
4. Have Maintenance Depar	tment been notifie	d?	Yes	No 🗌
5. Has the asbestos register been consulted?			Yes	No 🗌
6. Is asbestos present?			Yes	No 🗌
If yes, proceed to Section 2.	If no, no further o	action required.		
7. If no survey data present has a specialist been employed?			No 🗌	
Section 2 – Personnel				
1. Have affected personnel PPE?	and attendants be	een issued with appropriate	Yes	No 🗌
2. Have all personnel completed a full decontamination?		Yes	No 🗌	
3. Has all clothing, towels and disposable PPE been securely bagged and labelled for disposal?		Yes	No 🗌	
4. Have the names of affected personnel been reported and recorded		Yes	No 🗌	
5.Is a health assessment required / been obtained		Yes	No 🗌	
Please list the names of all affected personnel				
Name		Employer		
$\rightarrow \lambda \lambda \gamma$				

Section 3 – Response Plan	ning		
1. Has the area been assessed by a competent person?			No 🗌
2. Has a specialist contract	or been employed to clean the area?	Yes	No 🗌
3. Has a specialist contra asbestos?	ctor been employed to remove any damaged	Yes	No 🗌
4. Has a 14-day notice wai	ver been obtained from HSA?	Yes	No 🗌
5. Has an HSE approved specialist carried out clearance test?			No 🗌
6. Has a certificate of reoccupation been issued?			No 🗌
If yes the building can be	reoccupied. If no return to Section 3, item 1		
Maintenance Use Only			
Asbestos Register Update	d 🔲		
Print Name			
Signature	Date		

Appendix 7 - Fibre in Air Monitoring

The measurement of airborne asbestos fibres is required to be carried out when ACM's are being worked on and/or removed for disposal. In all such situations the fibre in air concentrations must be measured by a competent analyst to demonstrate that the contractors work practices are sufficiently good and not giving rise to unacceptable airborne fibre concentrations. Or contaminating adjoining areas.

The number of samples required, the locations of sampling pumps and the frequency of sampling will vary greatly and can only be decided by the PSDP in consultation with the independent monitoring consultant appointed on the project.

Inside Enclosures

Where the nature of the asbestos materials being removed requires the erection of an enclosure operated under negative pressure then the fibre levels inside the enclosure is a matter for the contractor as the contractor is responsible for protecting the health of his employees.

Outside of Enclosures

Monitoring the fibre in air concentration outside of the enclosure is essential to demonstrate that the combination of the working methods employed and the effectiveness of the sealing of the enclosure are preventing the migration of fibres to areas outside of the enclosure.

The Occupational Exposure Limit Value (OELV) for asbestos fibres in the workplace is currently 0.1f/ml. This means that employees should not be exposed to a fibre in air concentration of greater than 0.1f/ml.

HSE accepts that this OELV applies only to the asbestos operatives working inside the enclosure and is not an acceptable level of exposure for people outside the enclosure as they are not asbestos workers.

The required fibre in air concentration outside of an active asbestos enclosure should not exceed the ambient/background concentration in the absence of asbestos works. This background fibre concentration should be less than 0.01f/ml measured using PCOM analytical methods.

If any sample fails to meet this standard then appropriate action must be taken to determine why this has occurred.

The table below identifies the required response for a range of fibre in air concentrations measured outside of the contractors work enclosure.

Action level	Control measure
< 0.01 f/cm ³	No new controls necessary. Review control measures.
>0.01 but less than 0.02 f/cm ³	 Review control measures. Investigate cause of breach. Implement controls to eliminate or minimise exposure and prevent further release.
> 0.02 f/cm ³	 Stop removal work. Investigate the cause: conduct a thorough visual inspection of the enclosure and associated equipment in consultation with all workers involved with the removal work. Implement controls to eliminate or minimise exposure and prevent further release. Extend the isolated/barricaded area around the removal area/enclosure as far as reasonably practicable (until fibre levels are at or below 0.01 f/cm³), wet wipe and vacuum the surrounding area, seal any identified leaks (e.g. with expandable foam or tape) and smoke test the enclosure until it is satis factorily sealed. Do not recommence removal work until further air monitoring is conducted. Do not recommence until fibre levels are at or below 0.01 f/cm³.

Source – HSA Asbestos – containing Materials in Workplaces – Practical Guidance on ACM Management and Abatement

Appendix 8 - Training of Employees and Contractors

Appropriate training of different groups of employees is essential to effectively achieve the implementation of the asbestos management processes and procedures.

A number of different groups of employees can be identified including senior managers, line managers, maintenance employees and other relevant employees all of which require training relative to their roles and responsibilities within HSE.

Senior managers must be familiar with their responsibilities under the law and how their decisions influence the effective implementation of this management system. Making adequate resources available annually is essential for progress in reducing risk and in time achieving asbestos free facilities throughout the Estates.

Line managers have a very important pro-active role in the implementation of the processes and procedures detailed in this document. In addition to protecting the health of those who report to them line managers are essential in the control of contractors engaged to undertake asbestos works. To be effective in this they must be trained in the legal requirements and the practical details of executing asbestos removal works.

Maintenance Employees

Maintenance employees are more likely to interact with the building fabric that any other group except contractors. It is imperative that maintenance employees are adequately trained to protect themselves and their colleagues from accidental exposure to asbestos fibres when undertaking their work.

Their training must be easily understood and provide them with the necessary knowledge and skills relating to the following:

- > The potential risks to health from exposure to dust arising from asbestos and materials containing asbestos.
- > The level and meaning of the established exposure limit value.
- > The operations which could result in asbestos exposure.
- The importance of prevention controls to minimise exposure.
- The control limit and the need for atmospheric monitoring.
- > The properties of asbestos and its effects on health including the synergistic effect of smoking.
- The types of products likely to contain asbestos.
- The hygiene requirements necessary no smoking, eating or drinking where there is a risk of exposure.
- > Safe work practices, control measures and protective equipment.
- > The choice, selection and limitations and proper use of respiratory equipment.
- > The precautions to be taken to avoid or minimise risk associated with exposure to asbestos containing dust including the need for protective clothing and equipment.
- Emergency procedures.
- Decontamination procedures.
- Waste storage/disposal procedures
- Medical examination requirements.
- Risk assessments.
- Explanation of air monitoring results.

There is also a requirement for task oriented training for maintenance staff such as the replacement of gaskets and the required response to accidental release of asbestos fibres.

This training should only be delivered by competent experienced professionals.

Participant's knowledge/understanding of the training must be assessed at the end each training session. The quality of delivery of the training must also be assessed by requiring the participants to complete a questionnaire at the end of each training session.

This training must be repeated annually to ensure the required knowledge and skills are up to standard.

A basic asbestos safety awareness/ refresher training program is provided on HSELanD for Estates staff, Maintenance Officers their staff service managers and others where appropriate.

Agency Workers

Special attention is required for temporary workers brought into maintenance. These workers should receive a comprehensive induction before being allowed into any workplace where there asbestos materials.

Different training and induction will be provided for different building users; the purpose being to provide all relevant personnel with the skills and knowledge necessary to understand the hazards and risks involved when working in or near an area where asbestos has been identified.

Training will be provided for all relevant employees. Site inductions will be undertaken for all third party contractors. This training/induction will be provided prior to any persons commencing work to enable persons to work safely.

Training Records:

Records of all training are required to be collated in detail and retained for a period of 40 years. Records must include a copy of the training slides/handbook and all other documents provided by the trainer. The signed attendance sheets together with the assessments of the training must also be retained. Any training certificates received are held centrally. These records are treated as confidential to each member of staff and are kept in a controlled location. Each employee will, however, have access to their own records upon request.

Employees who are likely to be required to undertake works that may bring them into contact with ACM's are required to be adequately trained to, in the first instance, avoid disturbing ACM's, understand the risks associated with ACM's and how to protect themselves and how to respond in the event of potential fibre release.

HSE has prepared an asbestos awareness training package to address these issues

Appendix 9 - Labels

Labelling of asbestos can be emotive and needs to be handled sensitively to avoid unnecessary concerns, especially in public and staff areas. Conversely, asbestos labelling needs to be prominent enough to warn anyone who may disturb it.

Labels should not be seen as a control measure and should be used in conjunction with all other control measures as detailed in this procedure.

Signage shall conform to Safety, Health and Welfare at Work Regulations. Below are two types of labels suitable for use.

Occupied Areas

To be affixed in corner of ceiling, wallboard, pipe work etc. where there is a possibility of disturbance. Alternative arrangements may be implemented in occupied areas and will be agreed between the Surveyor and Estates/ Maintenance such as the use of Permit to Work (PTW) or other identification methods that will suitably alert and communicate the risk as required.



Un-Occupied Areas (plant rooms, ceiling voids, ducts, etc.)



Appendix 10 - Asbestos Contractor Management Procedure

NB: To be completed by the PSDP with the Contractor and / or the Client

Supervision / Management of Asbestos Works

Effective management of ALL works involving interaction with ACM's is essential to protect the health of contractor employees, HSE employees, and others who may be in the vicinity of the works and/or frequent or use the premises where the works are/have been undertaken.

The approach to be adopted when undertaking asbestos works for HSE is to design and implement the works in a manner that prevents the release of asbestos fibres either into the space where the works are being undertaken or the general environment.

This is more stringent than the standard approach of focusing the control measures exclusively on the protection of the contractor employees undertaking the works.

All asbestos works carried out on behalf of HSE HES—should only be undertaken by competent contracted employees. Such works should not be undertaken by HSE employees unless they have been trained and are competent to undertake the specific task.

The following are the requirements to be implemented with every contractor engaged by HSE to carry out any works involving interaction with ACM's including environmental cleaning works.

NOTE: The authorisation of contractors and the awarding of contracts are not addressed in this document. Only contractors who are on the Office of Government Procurement (OGP) panel and who have completed the ARCA asbestos training can be engaged to carry out asbestos works for HSE.

Detailed planning and preparation in advance of the execution of all proposed works is essential and can often prevent problems arising during the execution of the works. The following paragraphs set out in detail the issues to be discussed with the contractor appointed to undertake asbestos works. Where a sub-contractor is engaged to undertake the works then both the main and sub-contractor must be involved in the pre-start and other discussions detailed below.

All relevant stakeholders must be advised in advance of works commencing. Employees must be made aware of any impacts the works may have on how they enter/exit their work area and any impacts there may be on their normal work routine. A suitable mechanism must be established for doing this and addressing any queries or concerns employees and/or others may have.

Pre-Start Discussions

Pre-start discussions are required to be carried out with the contractor at various stages including prior to mobilisation and prior to works commencing. The following issues are relevant and should be discussed before the asbestos contractor mobilises on site.

NOTE; A unique Project Number must be assigned to each project and should appear on all project documents.

Before Mobilisation

Prior to the contractor mobilising on site discussion/ agreement /confirmation are required on the following;

- > Appointment of project supervisors
- Define roles and responsibilities
- Notification to the Health and Safety Authority
- Site access and egress routes
- Parking arrangements
- Contractor's base/office(s)

- Contractors lay-down area/area for storage of tools and equipment
- Agreement on what plant and machinery (if any) will be brought on site (These areas must be clearly delineated)
- > Procedure for registering time and attendance while on site
- > Confirmation that all relevant stakeholders have been informed of the extent and duration of the works to be undertaken.
- Identification of the hazards must be job specific
- > Assessment of the risks must be job specific
- > Elimination and/or reduction of the risks
- ➤ Works supervisors both client and contractors
- Communications process/procedures
- Frequency of meetings between client and contractor
- > Arrangements for independent sampling, analysis and clearance for re-occupation
- ➤ HSE requirements for Environment, Health and Safety standards
- Disciplinary procedures
- > Permits to work
- Location of DCU (De-Contamination Unit)
- Transit routes

These details are provided in the Appendix –see Form 1A which must be completed

When the contractor has establish their facilities on site the following issues must be discussed with all contractor employees prior to any works commencing.

Before Commencing Works

Prior to any works commencing all of the following issues must be discussed and agreed, where relevant, with contractor and contractor employees. If a sub-contractor is engaged to undertake the works then both the main contractor's representative and the sub-contractors employees must be in attendance. All contractor employees must receive a detailed induction which must be recorded and signed off by all present. An induction checklist is included in Appendix – see Form 1C. All of the issues in the checklist must be discussed with all of the contractor employees. In recent years there are increasing numbers of Non-English speaking employees engaged by asbestos contractors. Their understanding of the method statement, risk assessment, induction and checklists must be tested to ensure there is an adequate understanding of their contents/requirements.

- > Site induction for all contractor employees (see checklist in Appendix Form 1C) which must be completed
 - Define roles and responsibilities
 - Confirm HSA approval or wavier is in place
 - Ensure communications procedures are in place and agreed
 - Registering time and attendance on site
 - Identification of no-go areas
 - Recognition of alarms
 - What to do in an emergency
 - How to raise the alarm how to seek assistance
 - Provision of contact names and numbers
 - Contractor employee's familiarity with the method statement and risk assessment
 - o Procedures for securing the work area
 - Procedure for entering/leaving the work area
 - Storage of wastes arising
 - Maximum waste storage allowed
 - o Removal of wastes from site
 - Disposal of wastes
 - Reporting of accidents and incidents
 - Completion of the pre-start checklist

- o Required standards of behavior on site
- Site rules

Checklists containing all of these elements are provided in Appendix – see Form 1B.

These checklists are required to be completed at the relevant stages of every asbestos removal and cleaning project. This should be done by the contractor and the HSE's representative on the project which will usually be the appointed PSDP.

Monitoring the Works

The execution and progress of the works must be monitored to ensure that the works are being carried out in accordance with the agreed method statement and the work is progressing according to plan. Prior to work commencing the contractor should be informed about the frequency of the site visits intended by the client/PSDP.

All site visits/inspections must be recorded and any issues arising discussed with the contractor. The following items should be included in every check/inspection.

- Is the contractor working safely as required?
- ➤ Is the contractor complying with the agreed method statement?
- > Are the risks identified in the job risk assessment adequately managed?
- > Have new risks been identified during the course of the works?
- ➤ Have there been any accidents or incidents?
- > Any deviations from the agreed plan?
- > Any change of personnel?
- ➤ Record the date, time and findings of every check/inspection
- > Issues arising from these checks must be documented together with how they were resolved
- The findings of every check must be discussed at client/contractor meetings

Where breaches of standards, poor working practices or unsafe situations are observes the contractor must be issues with a **Health & Safety Remedial Action Notice** outlining the relevant details which must be completed and issued to the contractor who must address the issues raised in the notice within the required timeframe.

If the contractor fails to address the issues and/ fails to undertake the actions required in the Health & Safety Remedial Action Notice then sanctions may be implemented against the contractor.

If several notices are required to be served on a contractor then sanctions may be implemented against the contractor whether or not the items raised in each notice are being addressed.

Independent Supervision

- HSE will engage an independent expert to address the following issues;
 - Check the standard of the contractors work
 - Supervise smoke tests where required
 - Measure the fibre in air concentration using PCOM at locations and frequency agreed prior to works commencing
 - Ensure the required PPE is used and correctly applied
 - o Check that the tools and equipment being used are up to standard, fit for purpose and correctly used
 - o Undertake clearance testing visual and disturbed air tests as required
 - Issue reports and certificates as required

The selection and appointment of these independent experts cannot be done by the contractor. Such appointments can only be made by HSE. The appointed person then reports directly to HSE and cannot in any way

be influenced by the contractor. This will eliminate difficulties that arose in the past relating to poor contractor performance leaving asbestos residues on pipes, walls etc.

Reviewing Contractors Performance

When the works are complete a review of how the works progressed and the contractor's performance should be undertaken.

The following should be addressed in the review;

- ➤ How effective was the planning?
- ➤ Were there any unforeseen events or occurrences?
- ➤ How good was the contractor's performance?
- Were Health & Safety Remedial Action Notices Served on the contractor?
- > How effective/efficient were the issues raised in the Health & Safety Remedial Action Notices addressed?
- Incidents and accidents that occurred
- > Issues with equipment certificates, employees training, medical tests, face fit tests etc.
- ➤ Unacceptable air monitoring results
- > Failures of clearance tests.
- Other relevant issues

Having completed this review a decision is required as to whether the contractor should remain on the HSE's list of authorized contractors and/or is suitable to undertake other work for HSE.

Sub-Contractors

The main contractor may engage sub- contractor(s) to undertake asbestos related works where such work is a part of a larger contract. It is imperative that all sub-contractors are vetted and deemed competent to undertake the asbestos works. If the proposed sub-contractor is unknown to HSE their experience in undertaking similar work to what is proposed must be reviewed. The quality of their method statement and risk assessment together with the completed checklists will provide a good indication of their knowledge and attention to detail. Sub-contractors insurance certificates must be reviewed to ensure there are no limitations or exclusions that might compromise cover in the event of an accident or something going wrong during the execution of the works.

The main contractor is responsible for any sub-contractors employed on the works however all sub-contractors must meet the HSE's minimum requirements of engagement before being allowed on site. They must therefore be on the OGP panel and all employees must have successfully completed the relevant ARCA asbestos training course.

If there are doubts about the competency of any sub-contractor they must be resolved if possible or an alternative sub-contractor engaged to undertake the works.

Sanctions

The contractors must be made aware of any sanctions that may be implemented and the circumstances in which with that might happen.

Sanctions can include one or more of the following

- > Removal of individuals from site
- > Termination of the works
- > Removal of the contractor from the HSE's list of authorized contractors for a period of time or permanently.

The application of any sanction must be proportionate to the failure that requires sanction and sanctions must always be applied consistently.

Records of Works

A project file is required to be established for all asbestos related works including environmental cleaning works undertaken on behalf of HSE. The following documents, reports, drawings etc. are required to be included in the project file and retained for a period of 40 years.

This project file must be assembled by the main contractor and passed over to the client/PSDP at the end of the project.

Note: not all of the following are relevant to all asbestos related works.

- Contractor Method Statement (signed off by all asbestos removal workers and the HSE representative)
- > Job specific Risk Assessment
- Notification to HSA and HSA approval or wavier as appropriate
- Completed pre-start checklist
- Completed pre-start induction record
- Air monitoring Certs
- Smoke test Certs
- Clearance Certs
- Records of client/contractor meetings
- > Records of accidents/incident reports
- Records of any queries/complaints that arise
- Records of checks/inspections carried out during the execution of the works
- Drawings indicating:
 - Location of works
 - o Location of contractors compound
 - o Locations of air sampling pumps
 - Location of DCU's
 - Transit routes
 - Waste storage location
- Daily weather conditions (for external works to include wind speed, direction and rainfall)
- Health and Safety Authority visits
- Waste disposal certs

A copy of these records must be provided to the HSE service manager/project manager/PSDP. The Project Manager must update the asbestos registers and management surveys following the completion of all asbestos works.

Sequence – The Ten Steps

The following is the sequence to be used when planning, before commencement of works, during execution of the works and following completion of the works.

- 1. Complete Form 1A contractor pre-start discussions Before Mobilisation
- 2. Record the details agreed on the 'Notes on Pre-Start Discussion Sheet'
- 3. Following the contractors mobilization on the site complete Form 1B

NOTE: Item 1 relates to contraction induction which must be done with every contractor employee.

The induction details are included on Form 1C which must be completed.

- 4. Record the details agreed and any issues arising on the sheet 'Notes on Contractor Induction Checklist' and address issues that arise.
- 5. Complete the Contractor Safety Code Checklist Form 1D record the details agreed and address issues that arise.
- 6. Only allow works to commence if all of the issues have been addressed adequately and you are satisfied that the contractor is aware of the HSE's requirements.
- 7. Review the requirements of Form 2A relating to;
 - a. Checking the works
 - b. Monitoring and supervision of the works

Ensure that adequate supervision is provided throughout the execution of the works.

- 8. Use the *Health & Safety Remedial Action Notice* a copy of which is included in the Appendix if you observe unsafe situations, breaches of standards and/or poor working practices. This should be given to the contractor who must address the issues in the notice.
- 9. When the works are complete the contractor's performance must be evaluated. Some relevant issues to be addressed are provided on Form 3A
- 10. Record the works The project file must contain all of the documents included in Form 4A.





HSE Asbestos Contractors

Management Procedure



Form 1(A) – Asbestos Contractor Pre-start Discussions

Form 1(B) - Asbestos Contractor Pre-start Discussions

Form 1(C) - On-Site Contractor Induction Checklist

Form 1(D) - On-site Contractor Safety Code Checklist

Form 2(A) - On-Site Contractor Safety Code

Form 3(A) - Reviewing Contractor Performance

Form 4(A) - Contractor Record of Works

Health & Safety - Remedial Action Notice

Asbestos Contractor
HSE Requirements for the Management of Asbestos Works



Project Name:	Project Number:
Form 1(A) – Asbestos Co	ontractor Pre-start Discussions

This checklist is provided as a reminder of the issues that must be reviewed/agreed prior to the commencement of any works related to ACM's. This must be completed for all asbestos related works including environmental cleaning works.

A)	Before Mobilisation Prior to the contractor mobilising on site discussion/ agreement / confirmation are required on the following:	Yes	No	N/A
1.	Appointment of project supervisors			
2.	Define roles and responsibilities			
3.	Notification to the Health and Safety Authority			
4.	Site access and egress routes			
5.	Parking arrangements			
6.	Contractor's base/office(s)			
7.	Contractors lay-down area/area for storage of tools and equipment			
8.	Agreement on what plant and machinery (if any) will be brought on site.			
9.	Procedure for registering time and attendance while on site			
10.	Have all relevant stakeholders been informed of the extent and duration of the works			
11.	Identification of the hazards			
12.	Assessment of the risks			
13.	Elimination and/or reduction of the risks			
14.	Works supervisors – both client and contractors			
15.	Communications process/procedures			
16.	Frequency of meetings between client and contractor			
17.	Arrangements for independent sampling, analysis and clearance for re-occupation			
18.	HSE requirements for Environment, Health and Safety standards			
19.	Sanctions on Contractor for breaches of Safety			
20.	Permits to work			
21.	Location of DCU			
22.	Transit routes			
23.	Site specific Method Statement			
24.	Drawings Required			

Completed by: .	
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Project Name:	 Project Number:

NOTES

Line Item	Comments	Project No:







Project Name:	Project Number:

Form 1(B) – Asbestos Contractor Pre-start Discussions

This checklist is provided as a reminder of the issues that must be reviewed/agreed prior to the commencement of any works related to ACM's. This must be completed for all asbestos related works including environmental cleaning works.

B)	Following Mobilisation and Before Commencing Works	Yes	No	N/A
1.	Site induction for all contractor employees (Complete Form 1C)			
2.	Define roles and responsibilities			
3.	Confirm HSA approval or wavier is in place			
4.	Ensure communications procedures are in place and agreed			
5.	Registering time and attendance on site			
6.	Identification of no-go areas			
7.	Recognition of alarms			
8.	What to do in an emergency			
9.	How to raise the alarm – how to seek assistance			
10.	Provision of contact names and numbers			
11.	Contractor employee's familiarity with the method statement and risk assessment			
12.	Procedures for securing the work area			
13.	Procedure for entering/leaving the work area			
14.	Storage of wastes arising			
15.	Maximum waste storage allowed			
16.	Removal of wastes from site			
17.	Disposal of wastes			
18.	Reporting of accidents and incidents			
19.	Completion of the pre-start checklist			
20.	Required standards of behaviour on site			
21.	Site rules			

Completed by:	
Dated:	
n attendance:	





Project Name:	Project Number:

NOTES

Line Item	Comments	Project No:

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Projec	roject Name: Project Number:			
	Form 1(C) - On-Site Contractor Induction Ch	eckl	ist	
			ssed / /	Agreed
Pro	ject Name; Project Number:	Yes	No	N/R
1.	Site Access / Exit			
2.	Need to and Procedure for Daily Sign-In / Out of the site			
3.	Hours of Working on Site			
4.	Site Speed Limits			
5.	Location of Washing / Toilet Facilities			
6.	Location and Arrangements in Canteen			
7.	Fire and Emergency Arrangements			
8.	Fire Assembly Point			
9.	Accident / Incident Reporting			
10.	Are SafePass Certs in Date?			
11.	Emergency Contact Numbers			
12.	First Aid Arrangements			
13.	Fire Equipment			
14.	Asbestos Register and Related Issues			
15.	Delivery Off-loading / Storage of Materials			
16.	Agreed Schedule of Plant and Equipment: Vehicles; Power Tools; Pumps; Heavy Plant; etc			
17.	Parking / Storage of Plant / Equipment			
18.	Availability / Access to Utilities: Power; Water; Gas; Compressed Air			
19.	MSD Sheets for Materials intended for use on-site			
20.	Chemical Substances to be Used			
21.	Permits to Work: Hot Work; Confined spaces; etc			
22.	Interaction between Contractor and HSE Employees			
23.	Use of Personal Protective Equipment			
24.	Restrictions on Work Areas / Exclusion Zones			
25.	Temporary Works Required			
26.	Waste Handling / Storage / Disposal			
27.	Energy Isolation Procedures			
	ve been informed and understand the arrangements for all of the issues listed ab ere to the HSE requirements as discussed at this induction.	ove an	d agree	to
	ree that should any changes in the above be necessitated by the execution of the be discussed and agreed with the HSE representative prior to implementation.	works	such ch	anges
Sig	ned By:			
Cor	mpany:	Date	:	

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Contractor:

Date:



Project Name:	Project Number:
---------------	-----------------

NOTES

Line Item	Comments	Project No:







Project Name:	Project Number:

Form 1(D) - On-site Contractor Safety Code Checklist					
		Yes	No	N/R	
1.	Has the Contractor been authorised as per HSE requirements?				
2.	Has a Method Statement been provided?				
3.	Has the Method Statement been agreed and signed off?*				
4.	Has the Risk Assessment been carried out?				
5.	Has the Risk Assessment been agreed and signed off?*				
6.	Have Project Supervisor(s) been agreed and appointed?				
7.	Has the HSE Representative been appointed?				
8.	Have Certificates for all items on lifting equipment been checked?				
9.	Have Contractor Employee Training Certificates been checked?				
10.	Have Certificates for Vacuums been checked? **				
11.	Have Certificates for Extractors been checked? **				
12.	Is Excavation required?				
13.	Has location, depth and extent of proposed excavation been agreed?				
14.	Has the route been checked for buried services?				
15.	Has Asbestos Register been consulted?				
16.	Is the Project Contract list issued?				
17.	Communications Process agreed for the project?				
18.	PSCS Appointed?				
19.	Safety File issued?				
20.	PSDP Appointed?				
21.	HSA Notification issued?				
22.	HSE Project Manager appointed?				
23.	Contractor Project Manager Appointed?				
24.	Contractors Insurance checked?				
25.	Will Sub-contractors be used?				
26.	Have Sub-contractors detailed been checked?				
27.	Have COVID procedures and processes been explained?				
28.	Aspergillus documentation completed?				
29.	Are Dust Control measures addressed?				

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Projec	t Name: Project Number	er:		
30.	Have the site security arrangements been addressed?			
31.	Have the work perimeters been delineated?			
32.	Have Contract Variation Processes been addressed?			
33.	Have access to Site Services and Connection Points been discussed and agreed?			
agr	uring the execution of the works this is required to be amended then such amended by the contractor and HSE representative recorded, dated and signed off. These items relate to works associated with asbestos containing materials.	iments	must	be
Sign	ned By:			
Con	npany:	Date	:	
Con	tractor:	Date	:	
NOT	ES			
Line Iten	Comments			

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Project Name: __



Project Number: _____

	5 2/1 0 C 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
	Form 2(A) - On-Site Contractor Safety Co	ode		
	Monitoring & Supervision Requirements			
1.	Who will check the work's			
2.	How frequently this will be done			
3.	How are the works progressing?			
4.	Is the contractor working safely as required?	Yes	None	N/R
	Any Incidents?			
	Any Surprises?			
	Any change of personnel?			
	Record the date, time and findings of every check			
5.	Issues arising from these checks must be documented together with how they were			
6.	The findings of every check must be discussed at client/contractor meetings			
	Monitoring and Supervision	Yes	No	N/A
	HSE will engage an independent expert to			
1.	Check the standard of the contractors work			
2.	Supervise smoke tests where required			
3.	Measure the fibre in air concentration at locations and frequency agreed prior to			

Completed by:	
Dated:	
In attendance:	d:tendance:

6. Undertake clearance testing – visual and disturbed air tests as required

5. Check that the tools and equipment being used are up to standard, fit for purpose and

4. Ensure the required PPE is used and correctly applied

7. Issue reports and certificates as required

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Project Name:	Project Number:
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NOTES

Line Item	Comments	Project No:







Proje	ect Name: Project Numb	oer:		
	Form 3(A) — Reviewing Contractor Perform	ance	•	
	Reviewing Contractor Performance When the works are complete a review of how the works progressed and the contractor's performance should be evaluated. The following should be addressed in the review;			
1.	contractor's performance should be evaluated. The following should be addressed in the review; 1. How effective was the planning? 2. How good was the contractor's performance? Yes None N/A 3. Were there any unforeseen events or occurrences? 4. Incidents and accidents that occurred 5. Issues with equipment certificates, employees training, medical tests, face fit tests etc.			
2.	How good was the contractor's performance?			
		Yes	None	N/A
3.	Were there any unforeseen events or occurrences?			
4.	Incidents and accidents that occurred			
5.	Issues with equipment certificates, employees training, medical tests, face fit tests etc.			
6.	Unacceptable air monitoring results			
7.	Failures of clearance tests and Health & Safety Action Review Notice			
8.	Other relevant issues			
	ide if the contractor should remain on the HSE authorised list of contractors and/or is suitable to un and take appropriate actions.	dertake (other wor	k for

Completed by:	
Dated:	
In attendance:	
in detendance.	



Project Name: Project Number: NOTES Line Item	
Line Comments	

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Form 4(A) — Contractor Record of Work thecklist is provided as a reminder of the issues that must be reviewed/agreed prior to the related to ACM's. This must be completed for all asbestos related works including enviro Record of Works A project file is required to be established for All asbestos removal and environmental cleaning works undertaken on behalf of HSE. The following	(S e comme	ncemen	
thecklist is provided as a reminder of the issues that must be reviewed/agreed prior to the related to ACM's. This must be completed for all asbestos related works including enviro Record of Works A project file is required to be established for All asbestos removal	e comme		
related to ACM's. This must be completed for all asbestos related works including enviro Record of Works A project file is required to be established for All asbestos removal			
documents etc. are required to be included in the file and retained for a period of 40 years. Note: Not all of the following are relevant to all removal works	Yes	No	N/A
Contractor Method Statement (signed off by all asbestos removal workers and the HSE representative)			
Job specific Risk Assessment			
Notification to HSA and HSA approval or wavier as appropriate			
Complete Form 1 - Management of Asbestos Works			
Complete Form 2 - Asbestos Contractor Checklist & Induction Form			
Completed Pre-start checklist and induction record			
Air monitoring Certs			
Smoke test Certs			
Clearance Certs			
Records of client/contractor meetings			
Records of accidents/incident reports			
Records of any queries/complaints that arise			
Drawings indicating;			
Location of works			
Location of contractors compound			
Locations of air sampling pumps			
Location of DCU's			
-			
Daily weather conditions (for external works to include wind speed, direction and rainfall)			
Health and Safety Authority - reports of visits			
Waste disposal certs			
leted by:			
	documents etc. are required to be included in the file and retained for a period of 40 years. Note: Not all of the following are relevant to all removal works Contractor Method Statement (signed off by all asbestos removal workers and the HSE representative) Job specific Risk Assessment Notification to HSA and HSA approval or wavier as appropriate Complete Form 1 - Management of Asbestos Works Complete Form 2 - Asbestos Contractor Checklist & Induction Form Completed Pre-start checklist and induction record Air monitoring Certs Smoke test Certs Clearance Certs Records of client/contractor meetings Records of accidents/incident reports Records of any queries/complaints that arise Drawings indicating; Location of works Location of contractors compound Locations of air sampling pumps Location of DCU's Transit routes Waste storage location Daily weather conditions (for external works to include wind speed, direction and rainfall) Health and Safety Authority - reports of visits Waste disposal certs A copy of these records must be provided to the HSE Service Manager. The Project of update the asbestos registers and management surveys following the completion of all leted by: Leted by: Leted by:	and environmental cleaning works undertaken on behalf of HSE. The following documents etc. are required to be included in the file and retained for a period of 40 years. Note: Not all of the following are relevant to all removal works Contractor Method Statement (signed off by all asbestos removal workers and the HSE representative) Job specific Risk Assessment Notification to HSA and HSA approval or wavier as appropriate Complete Form 1 - Management of Asbestos Works Complete Form 2 - Asbestos Contractor Checklist & Induction Form Completed Pre-start checklist and induction record Air monitoring Certs Smoke test Certs Clearance Certs Records of client/contractor meetings Records of accidents/incident reports Records of any queries/complaints that arise Drawings indicating; Location of works Location of contractors compound Locations of air sampling pumps Location of DCU's Transit routes Waste storage location Daily weather conditions (for external works to include wind speed, direction and rainfall) Health and Safety Authority - reports of visits Waste disposal certs A copy of these records must be provided to the HSE Service Manager. The Project Manager update the asbestos registers and management surveys following the completion of all asbesto	and environmental cleaning works undertaken on behalf of HSE. The following documents etc. are required to be included in the file and retained for a period of 40 years. Note: Not all of the following are relevant to all removal works Contractor Method Statement (signed off by all asbestos removal workers and the HSE representative) Job specific Risk Assessment Notification to HSA and HSA approval or wavier as appropriate Complete Form 1 - Management of Asbestos Works Complete Form 2 - Asbestos Contractor Checklist & Induction Form Completed Pre-start checklist and induction record Air monitoring Certs Smoke test Certs Clearance Certs Records of client/contractor meetings Records of any queries/complaints that arise Drawings indicating; Location of works Location of contractors compound Locations of air sampling pumps Location of CoU's Transit routes Waste storage location Daily weather conditions (for external works to include wind speed, direction and rainfall) Health and Safety Authority - reports of visits Waste disposal certs A copy of these records must be provided to the HSE Service Manager. The Project Manager must update the asbestos registers and management surveys following the completion of all asbestos works.

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Project Name:	Project Number:
,	

NOTES

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HSE Requirements for the Management of Asbestos Works		os Works	. á Forbairt 6	Serv	
Project	Project Name: Project Number:			Number:	
HE	ALTH & SAFETY -	Remedial Acti	on Notice		
LOCATION:					
DATE OF INSPECTION:					
PROJECT / WORKS DESCRIPTION:					
PROJECT NO/ UNIQUE IDENTIFIER:					
NABAE	(c) OF CONTRACTOR (c) ON	eite.			
VAIVIE	(s) OF CONTRACTOR (s) ON	SITE:			
	Y ON SITE – INSPECTION / AU tick the relevant area(s) of infringen General Public Safety Personal Protective Equipment		Housekeeping Site Documentation		
(5)	Ladders / MEWPS	(6)	Electricity		
(7)	Site security / Hoarding	(8)	Fire Safety		
(9) (11)	Welfare Facilities Plant & Small Tools	(10)	Excavations / Demolition Welding / Cutting	\vdash	
(13)	Scaffolding	(12)	Working at Heights	\vdash	
(15)	Cranes & Lifting Appliances	(16)	General remarks		
(17)	Permits to Work	(18)	Asbestos		
(19)	RAMS (Risk Assessment Method Statement)	(20)	Environmental Issues		
DESCR	IIPTION OF ISSUE				
АСТИ	ON BY ✓ IMMEDIATE U	JRGENT WITHIN	HOURS WITHIN	DAYS	
	_	_			
SSUED	NOTICE ISSUED:				
	ANY NAME:				
	ED BY:				
THE REAL PROPERTY.	LUUII				

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Appendix 11 - Recommended Specification, Asbestos Management Surveys

1 Background

This specification provides for the appointment of a competent person to survey HSE premises to UK Health and Safety Executive Standards HSG 264 Surveying, sampling and assessment of asbestos-containing materials and HSG227 – A comprehensive guide to managing asbestos in premises:

Ensure that all Asbestos Containing Material (ACM) is identified, documented, logged, assessed and labelled.

Develop the asbestos management plan/management strategy giving short and long-term recommendations in line with the organisation's policy on asbestos management and the following non-exhaustive list of legislation:

- Safety, Health and Welfare at Work Act 2005.
- Safety, Health and Welfare at Work (General Application) Regulations 2007.
- Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001.
- > Safety, Health and Welfare at Work (Carcinogens) Regulations 2001.
- Chemicals (Asbestos Articles) Regulations 2011
- > Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 & 2010.
- Safety Health and Welfare at Work Act (Construction Regulations) 2013

2 Outline Methodology

A more detailed methodology is given in section 7 of this specification, but by way of a summary the contract shall include the following:

2.1 Core Elements

Meet with the HSE Estate Manager or Representative to agree a work plan for the contract period.

Carry out surveys, sampling and provide reports and other indicators (e.g. these are detailed in Section 8 of this Specification).

Undertake training needs analysis of HSE personnel.

2.2 Optional items to be priced (to be provided on request)

Provide training at an agreed rate.

Investigate accidents and incidents relating to ACM and carry out reassurance tests/sampling at an agreed rate.

Provide a PSDP service in relation to ACM work.

Evaluate the activities of Contractor/Sub-Contractors and produce a written report at an agreed rate.

3 Personnel

In order to be eligible the individual or organisation concerned must provide evidence to the HSE that they:

- Have adequate training, knowledge, experience and qualifications in this type of work
- Be able to demonstrate independence, impartiality and integrity

- Have an adequate (internationally recognised) quality management system
- ➤ Have standard written operating procedures for surveying, sampling, training and accident/incident investigation in accordance with legislation and guidance, etc., e.g. HSG 264 and HSG227
- Fulfil the basic insurance pre-qualification criteria set down by H.S.E. insurers

Surveyors will be prequalified by means of a Suitability Questionnaire. This will include assessment of competency to perform the role of PSDP for asbestos survey work.

The HSE requires that a copy of a current vocational training certificate for any persons likely to be working on the project be submitted with the tender. Such certification includes the British Occupational Hygiene Society qualifications: P401 – P406.

- ➤ P402 Buildings Surveys and Bulk Sampling for Asbestos (including Risk Assessment and Risk Management Strategies)
- P405 Management of Asbestos in Buildings
- S301 Asbestos and Other Fibres

Persons will not be permitted to carry out work for the HSE without valid certification.

It is a specific condition of the contract that the tenderer can demonstrate a thorough knowledge of the requirements of all relevant legislation, guidelines, standards and approved practices/codes of practice for the transport, etc., of dangerous goods (i.e. have access to a fully qualified Dangerous Goods Safety Adviser).

The names of persons who will be working on this project must be submitted with the tender. Should any changes to personnel be made, this must firstly be agreed with the HSE.

4 Reporting Structure

The successful tenderer shall ultimately report to the Maintenance and/or Estate Manager. On a day-to-day basis, the tenderer shall liaise with and report to the designated project lead normally Project Manager, Maintenance Manager or Fire and Safety Officer.

5 Timescales

The contract provides for the complete review, survey, assessment and labelling of all ACM in the listed HSE premises including all site visits, samples, expenses and written and computer based reports detailing survey findings and recommendations for action. The tenderer must include the number of days predicted for the completion of the project.

The tenderer is requested to give a daily rate for subsequent work beyond this initial contract (e.g. for HSE premises not listed). The HSE does not commit itself to availing of additional days, but wishes to have the facility of requesting additional days at an agreed rate.

The agreed work plan is to be completed and invoiced not later than:

6 Project Objectives

6.1 Core Objectives

6.1.1 To review what is known about ACM in HSE Premises. This will include reviewing *all* existing asbestos survey reports

- 6.1.2 Updating, amalgamating and rationalising existing reports, the objectives are:
 - To produce a single amalgamated document for areas where multiple surveys have been carried out.
 - To account for areas where asbestos has been removed since the previous surveys were completed.
- 6.1.3 To carry out a Management survey at each of the listed premises. An initial inspection for the damage and disturbance of materials is to be undertaken, followed by sampling as necessary to determine whether asbestos is or is not present. The survey will be carried out in accordance with HSG 264.

Notes on Survey:

- The survey shall be a **full sampling survey**. Through bulk sampling and detailed enquiries as necessary, the surveyor shall determine as far as is reasonably practicable the presence and extent of any ACMs and assess their condition. All areas should be accessed and inspected as far as reasonably practicable (e.g. above false ceilings and inside risers, service ducts, lift shafts, attics, etc.). The following rules apply:
 - Where the material can be strongly presumed to contain asbestos ⇒
 Take a representative sample if reasonably practicable ⇒ record
 result.
 - Where the material is similar to that which has been shown by test to contain asbestos ⇒ Sample if reasonably practicable, otherwise *Strongly Presume* material contains asbestos ⇒ record.
 - In the case of all other remaining material, where there is strong
 evidence to support a reasoned argument that it is highly unlikely to
 contain asbestos

 record. In the absence of such evidence

 Presume ACM; take representative sample where reasonably
 practicable

 record result.
 - In the case of inaccessible areas/materials (i.e. where it is not reasonably practicable to access or inspect the area and sample) ⇒ Presume or Strongly Presume ACM as appropriate ⇒ record.
 - Where a material is not sampled the reason for this shall be clearly stated.
- Each and every source of ACM identified/suspected/presumed shall be subject to an individual risk assessment (comprising a Material Assessment as per HSG 264 and Priority Assessment as per HSG227) and displayed as a table with corresponding photograph and sample material report(s). All survey information must be entered in Excel spreadsheet format.

6.1.4 To advise the HSE on, short and long term remedial/management actions for each ACM.

6.2 Optional Objectives

- > To review the HSE asbestos training provision and produce training needs assessment
- Provide asbestos competency training.
- Conduct an accident/incident investigation, with reassurance sampling, and report.
- Review the activities of Contractors/Sub-Contractors.

7 Detailed Method

Project to include the following elements:

- 7.1 First attendance at site concerned. This shall incorporate:
 - Preliminary meeting at the Estates Department Offices.
 - Desktop study to plan survey strategy.
 - Meet with the Estates staff to agree scope of works and formalise plan of work.
- 7.2 Review existing asbestos surveys with the assistance of the designated project lead normally Maintenance Manager or Fire and Safety Officer.
- 7.3 Develop a survey plan and sampling strategy. The survey shall be methodical and systematic, covering all areas as far as reasonably practicable. In areas where building work/demolition is planned a further demolition type survey will be requested, hidden areas will also be within the scope of this project. The survey should take a bottom up approach, covering each individual room as well as all accessible building services, machinery and floor and ceiling voids. Both external and internal areas are to be included.

Management survey.

(Demolition/major refurbishment surveys may be specified on request of the HSE Supervising Officer.)

The survey shall record the following (non-exhaustive):

- Product type.
- Location.
- Extent (quantity).
- > Asbestos type.
- > Accessibility.
- Amount of damage or deterioration.
- Surface Treatment.
- Whether visible fibres are present on close inspection.
- The colour of the fibres if visible.
- Whether the fibres are visually consistent with asbestos.
- 7.4 Take bulk samples and analyse them in accordance with all relevant legislation, standards and guidelines (see HSG 264). When taking samples the surveyor shall (non-exhaustive list of precautions):
 - Ensure his/her safety statement, risk assessments, method statement and standard operating procedures are fully up to date.
 - Work in accordance with the method statement.
 - Work in a way that minimises disruption to HSE activities and the risk to hospital staff, patients, visitors and others.
 - Avoid occupied areas where possible. In constantly occupied areas the contactor must work with the designated project lead normally Maintenance Manager or Fire and Safety Officer for the HSE premises in question to ensure that sampling is carried out at times of minimal occupation.
 - Use warning signage where necessary.
 - Wear PPE and RPE as appropriate. The Surveyor is responsible for providing his or her staff with any necessary safety and sampling equipment.
 - Ensure that airborne emissions are fully controlled (e.g. pre-wetting and shadow vacuuming, etc.). Sample areas to be left clean with no evidence of sampling debris.
 - Permanently label, record and photograph all material sample sites.

- Analyse and report on samples in accordance with HSG 264. Evidence of standard operating procedures for sampling may be requested prior to tender award.
- 7.5 Using the HSE approved label, label all identified sources of ACM. The Surveyor shall provide these labels and the cost for same shall be incorporated into the tender price.
- 7.6 Produce a survey report utilising (or compatible with) the Estate Manager Excel spreadsheet format which clearly identifies:
 - > The sample locations.
 - Extent of material.
 - Product type.
 - Level of identification.
 - > Asbestos type.
 - > Accessibility.
 - Amount of damage or deterioration.
 - > Surface treatment.
 - > Laboratory results to be appended.
 - Materials identified as not containing asbestos to be recorded as "Asbestos not Detected".
- 7.7 Produce scale drawings. Drawings for some premises may be available from the Estates Drawing Office. However, the Estates Department cannot guarantee the accuracy of these drawings and it shall be the responsibility of the Surveyor/survey to ensure that the drawings submitted as part of this project are representative of the areas surveyed. The surveyor shall therefore:
 - ➤ Prepare drawings for each premises or update existing drawings where available. If significant discrepancies in layout are identified these shall be marked on the drawings by the Surveyor before updating them with asbestos information.
 - Provide electronic copies of drawings. Photograph, risk assessment and sample reference numbers shall be identified on the drawings.
- 7.8 Prepare material, priority and risk assessments, in accordance with the following:
 - ➤ The Surveyor shall carry out material assessments in accordance with the material assessment algorithm set out in HSG 264. The material assessment score should be calculated and recorded as part of the asbestos survey.
 - > The Surveyor shall produce Priority Assessments in consultation with project lead based on factors such as maintenance activity, occupant activity, likelihood of disturbance and human exposure potential. The priority assessment algorithm given in HSG227 is to be used for this purpose.
 - > The scores for the material and priority assessments are to be used by the Surveyor as the basis of risk assessments, which in turn will form the basis of the recommendations for a long-term management plan.
- 7.9 Produce an asbestos management plan, in consultation with the Maintenance/Estate Manager. Each element of this plan shall be accompanied by an estimated cost.
- 7.10 Provide reports as detailed in section 8 below.

8 Reports & Other Indicators

8.1 Mandatory Written Reports

Note that the satisfactory completion of these items will be taken as project markers.

- 8.1.1 At pre-tender stage provide a written scope and plan of work, including a project Gantt chart and method statement detailing how the objectives of this project are to be met and timescales for same. This is to be updated/revised as necessary following tender award and first attendance (see clause 7.1).
- 8.1.2 Written report of initial review and inspection giving short-term controls for high risk, damaged or deteriorating material.
- 8.1.3 Written survey and assessment reports (see also 8.3) for each premises. The survey reports shall form the basis of the HSE Asbestos Register (i.e. the final report). This written document shall (non-exhaustively) contain the following sections:
 - General site and survey information.
 - Survey report(s).
 - Bulk analysis report(s).
 - Material and priority assessment report(s), i.e. Tables, spreadsheet or database containing the descriptors given in Appendix 3 of HSG227 (see also Table 3 HSG227).
 - Summary risk assessment(s).
 - Recommendations/suggested management plan.

All survey information must also be input Excel spreadsheets provided or provided in a format that can be imported directly into the Estate Manager Asbestos module with all corresponding fields.

- 8.1.4 Marked-up plans, in a format provided by the HSE, i.e.:
 - Autocad (.dwg)
 - PDF

Further clarification can be sought from the Estates Department.

- 8.1.5 Periodic Progress reports.
- 8.1.6 Linking document/index and summary report in soft and hard copy, drawing all the individual site reports into one HSE Asbestos Register.

8.2 Written Reports to Be Provided at Request of HSE (Optional)

The tenderer shall take note that the HSE shall not commit itself to availing of any of the following, but wishes to have the option of requesting the Surveyor to carry out the services/produce the reports at an agreed rate. These functions are to be tendered separately and would be performed outside the basic contract.

- 8.2.1 Occurrence investigation reports (findings and recommendations).
- 8.2.2 Training needs analysis reports and written training procedures.
- 8.2.3 Contractor/Sub-Contractor evaluation reports.

8.3 General Notes on Reports

8.3.1 All reports shall be in a form, which can be:

- Easily manipulated to produce summary reports.
- Simplified to produce as much or as little information as required.
- Easily amended to ensure that the survey information can be updated, easily archived and merged to combine information about multiple premises, buildings or locations.
- Easily distributed.
- Secure, but readily accessible with relevant authorisation.

8.3.2 The HSE will require reports in soft and hard copy.

The Surveyor will therefore be required to provide all reports and plans on an agreed format compatible with Microsoft Windows 98 or later. All survey information must also be input into Excel spreadsheets provided or provided in a format that can be imported directly into the Estate Manager Asbestos module with all corresponding fields.

9.0 General Conditions

9.1 Confidentiality

The tenderer will be obliged to complete a standard HSE confidentiality agreement.

9.2 Site Location and Access

Access will be as instructed by the designated project lead normally Maintenance Manager.

On completion of the works the Surveyor will make good all ceilings and surfaces, etc., disturbed.

The Surveyor shall undertake to ensure access routes are kept free of materials at all times.

Access by the Surveyor to the any other areas of the premises will be by prior arrangement only.

9.3 Working Area

Details of the working areas will be provided to the Maintenance Officer. The surveyor shall not have possession of any area other than the area in which he is carrying out work. Adequate security measures shall be put in place to prevent unauthorised access to the works in accordance with a schedule agreed by the designated project lead.

The Surveyor shall allow for the provision, erection and removal on works completion, of the said measures in his tender.

The following security issues must be noted at all times:

- Tools and equipment must never be left unattended
- The Surveyor must liaise with the designated project lead and Maintenance manager, on all matters of access and security
- A high level of security must be maintained at all times (in some premises this may include strict door securing protocol)

It may be necessary to be accompanied by a local representative at the discretion of the designated project lead

It is essential that two week's written notice of intention to visit be submitted to the designated project lead unless by prior mutual agreement.

Where applicable, provision shall also be made to prevent access through common doorways for the duration of the works. The Surveyor shall however maintain unobstructed escape routes through existing escape doors.

The Surveyor shall provide and maintain necessary lighting and watching for the works and he shall be solely responsible for any accident arising out of insufficient lighting, fencing, hoarding or watching.

9.4 Fire Safety

The Surveyor shall maintain the highest standard of fire safety at all times. The Surveyor shall not store flammable goods, liquids, or compressed gases within the building and shall securely store same in appropriate well-ventilated areas or off-site. The Surveyor shall comply fully with all relevant statutory regulations.

9.5 Existing Services

Before commencing, the Surveyor shall be deemed to have made a thorough examination of the drawings, specification, the sites and their environs; including, but not limited to, electrical cables/systems, ducts, attics, drains, sewers, water supplies, and any other item(s) that may affect the proposed works, so as to ascertain precisely the nature and extent of same.

The Surveyor's attention is drawn to the existence of the following services, which may exist close to the working area and may require to be isolated:

- Electricity supplies 220v & light fitting.
- Alarm detector heads 24v.
- Hot and cold water supply pipes.
- Gas supplies.
- Medical gas supplies.
- Radiation producing equipment.

So far as is reasonably practicable electrical supplies, etc., will be isolated on request and certified by the relevant Maintenance Department prior to work commencing. Confirmation of isolation must be sought from the Maintenance Officer prior to any work commencing.

9.6 Health & Safety

All works shall be carried out in accordance with all relevant Legislation, Standards, Codes of Practice and best practice and the Surveyor shall allow for all necessary costs incurred in so doing.

The Surveyor shall be appointed as the Project Supervisor Design Process and Project Supervisor Construction stage for the project.

Any appointment shall be subject to the receipt of a method statement indicating how the works are to proceed.

9.7 Site Preparation / Reinstatement

The Surveyor shall dispose of any materials/wastes created/produced as a consequence of this project. Disposal certification shall be provided where necessary (see 9.8).

9.8 Cleaning Up

The Surveyor shall from time to time as it accumulates clear away dirt, rubbish, offensive matter and superfluous material in accordance with HGS 264 and other legislation and guidelines as appropriate. On completion of the contract the Surveyor shall remove from the site all plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site clean and in a condition ready to occupy to the satisfaction of the Fire and Safety Officer, Maintenance/Engineering Officer and Responsible Person.

All waste shall be handled, stored, transported and disposed of in accordance with all relevant legislation, standards, guidelines, best practice, etc. Transport (Waste Collection Permit, Waste Transfer Form) and EPA Waste Licenses and disposal certification must be supplied to the HSE as required by law.

Appendix 12 - Asbestos Tender Document

Asbestos Review, Survey & Labelling in Accordance with All Relevant Legislation & Guidelines, etc. to cover the premises listed

I / we tender for the above-mentioned works in accordance with the attached specification. I / we confirm that I /we have visited the site, made any necessary enquiries, and am / are fully familiar with the requirements of the project.

Activity		No of Days	Price ex. VAT (€)	Price inc VAT (€)
a)	Amount for review, survey, bulk sampling, assessment, reporting (inc. marked drawings, written and electronic reports) and labelling of ACM at listed premises as per specification and in accordance with HSG 264 and HSG227.	Please State:		Rate:%
b)	Cost per sample for additional (i.e. outside this contract) samples to HSG 248 or equivalent	N/A		Rate:%
c)	Rate per day for additional services (note this does not form part of the main contract), i.e. for:	All Rate Per day	OK	
	c.1 Accident/incident investigation	1		Rate:%
	c.2 Further surveys (any type) excluding samples	1		Rate:%
	c.3 Review of contractor/Sub-Contractors	1		Rate:%
	c.4 Project Monitoring, inc. air monitoring	1		Rate:%
	c.5 Site/Enclosure Clearance for Reoccupation (i.e. four-stage site clearance) inc. air monitoring	1		Rate:%
d)	Rate per day for training (note this does not form part of the main contract)	Per day		Rate:%

Notes:

- The tenders must include all travelling and other incidental expenses
- The tender for the training (d above) must be given as a maximum cost including all training materials & other expenses & be based on 20 no. attendees per session.)

Estimated Start Date:	Estimated Completion Date:	_
Estimated number of samples:		
Signed:	Company:	
Print Name:	Date:	

IMPORTANT: THE LOWEST OR ANY TENDER WILL NOT NECESSARILY BE ACCEPTED

Appendix 13 - HSE Estates Asbestos Review / Compliance Project Group

Terms of Reference

Duties of the Project Group

The function of this project group is to identify and review management, policy development, procurement of specialists and assessment in relation to asbestos within HSE premises, to ensure a standardised approach to the management of asbestos within HSE Estates.

Membership

The project group shall comprise of various grades of members from HSE estates from compliance, maintenance, fire and safety, health and safety and project management.

The Committee reports directly to the Regional Estates Managers and ultimately to the Estates Management Team

Duties of the Project Group

The Role of the Estates Construction/Maintenance Compliance Project Group is to:

- Assess the implications and review systems to ensure compliance with the Safety Health and Welfare at Work Act 2005 and the Control of Asbestos Regulations 2006- 2010 and associated legislation and guidance.
- Coordinate the updating of the HSE Estates Asbestos Policy
- Review the current specifications for asbestos surveying with a view to a standardised approach and the development of a standard template for accepting both management and pre-demolition surveys.
- Run a mini competition for the procurement of asbestos surveying companies for the HSE.
- > Identify where necessary any supports that may be required in undertaking the work of the committee.
- ldentify priority areas for training and development and promote asbestos safety training course on HSE Land and face to face as required.
- Review the format for Asbestos Register and review if any asbestos items should be on the Service or the Estates Risk Register.

Attendance at and Frequency of Meetings

The group will meet on a 2 monthly basis initially in order to get the project group started It is expected that all project team members or a nominee attend all meeting.

From time to time non-members shall attend meetings at the invitation of the group and as required for the work of the group

Appendix 14 - Asbestos Control Measures

Each asbestos management survey will identify control measures required to be implemented to minimise/manage the risks associated with the ACM's identified in the survey. Estates and/or local building maintenance managers are required to implement the required actions. Such actions may include one or more of the following:

- ➤ Manage in situ
- Signage / Labelling of ACM
- > Protect / enclose the ACM
- > Seal / encapsulate the ACM
- > Remove the ACM
- > Implement regular inspection and record the findings

Manage in Situ

Where A.C.M's are:

- In good condition
- Not likely to be damaged and
- Not likely to be disturbed

They can be left in place and managed in situ.

ACM's left in situ are required to be inspected regularly to ensure they have not deteriorated or been interfered with increasing the risk of fibre release.

The frequency of inspections can vary greatly depending on their location and potential impact of fibre release.

Advice on the frequency of these inspections should be sought from the building surveyor or other competent person.

All inspections must be documented and recorded in the management system

Signage / Labelling ACM's refer to appendix 9 also.

Signs are required to be posted where it is necessary to advise / warn personnel and/or contractors of the presence of ACM's in a building which is not occupied and is only frequented on an occasional basis. Examples of this are electro rooms, plant rooms, boiler houses etc. which contain ACM's that potentially pose a risk of exposure to people entering the space. Such signs should warn of the danger and advise people of the precautions to be taken before entering. This will usually include the need for PPE and RPE. Entry to these spaces must be restricted by locking the facility and having designated key holders.

In situations where buildings are redundant no entry signs should be posted and access keys restricted to a single kay-holder

Labelling of ACM's is a key component of the management system. The labelling system is intended to ensure that persons are effectively alerted to the presence of ACM's. However before any work commences the asbestos register must consulted to determine the extent, nature and condition of the ACM's. Labelling should be done by the asbestos surveyor and details recorded in the management survey report.

Examples of suitable labels are included in Appendix 9. The internationally recognised asbestos 'a' label should only be used in non-public areas. The other label in Appendix 9 is suitable for all public areas.

Protect / Enclose ACM's

This involves creating a physical barrier between the ACM's and the surrounding area. The barrier will prevent contact with the ACM's behind it and therefore eliminate the possibility of disturbance and fibre release. Barriers must be sealed on all edges and their location must be recorded in the asbestos register. Appropriate labels should be placed on the barrier to alert maintenance personnel and contractors to the existence of ACM's behind the barrier.

Seal / Encapsulate the ACM's

This involves applying an appropriate sealing coat on the surface of the ACM's. These sealing coats are intended to adhere all loose fibres to the surface of the ACM's and prevent their release into the atmosphere. These sealing coats should not be applied by brushing. They should be applied using airless sprayers. As with all other asbestos measures this sealing / encapsulation works must be recorded in the asbestos register.

Removal of ACM's

ACM's must be removed when;

- Required in the management survey report.
- ➤ Have deteriorated or been disturbed and pose an unacceptable risk which cannot be addressed by implementing other control measures.
- Prior to the refurbishment and/or demolition of a building or a part of a building which contain ACM's.
- When required for strategic reasons

Details of the asbestos removal contractor requirements are addressed elsewhere in this document.



Appendix 15 - References

Health & Safety Authority Regulations

- Safety, Health and Welfare at Work Act 2005
- Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations, 2006, SI 386 of 2006, and 2010 SI 589 of 2010
- Safety, Health and Welfare at Work (General Application) Regulations, 2007, SI 299 of 2007
- > Safety, Health and Welfare at Work (Carcinogen)Regulations 2001, SI 78 of 2001
- > Safety, Health and Welfare at Work (Chemical Agents)Regulations 2001, SI 619 of 2001
- Safety, Health and Welfare at Work (Construction) Regulations 2006, SI 504 of 2006; 2013 SI 291
- > European Communities (Dangerous Substances and preparations) (Marketing and Use) Regulations 2006

Department of the Environment /Local Authority Regulations

- European Communities (Asbestos Waste) Regulations 1990 SI 30 of 1990 and 1994
- > European Communities (Control of Water Pollution by Asbestos) Regulations, 1990: SI 31 of 1990
- > Air Pollution Act 1989 (Emission Limit Value for Use of Asbestos) Regulations 1990: SI 29 of 1990
- Waste Management Act 1996
- > Chemicals (Asbestos Articles) Regulations 2011 SI 248 of 2011

List of Guidance Documents

- Asbestos Containing Materials in Workplaces, Practical Guidelines on ACM Management and Abatement (Health and Safety Authority)
- ➤ HSG 227; A Comprehensive Guide to Managing Asbestos in Premises and Sites. Suffolk: HSE Books, Crown Copyright HMSO, 2002
- ➤ HSG 248; Analysts Guide: HSE Books, Crown Copyright, HMSO 2005
- HSG 247: Contractors Guide: HSE Books, Crown Copyright HMSO 2007
- ➤ HSG264: Asbestos, The Survey Guide, HSE Books, Crown Copyright HMSO 2010

Appendix 16 Membership of the PPPG Development Working Group

John Collins; Fire & Safety Officer; Capital & Estates; HSE South

Deirdre Groarke Chairperson EM Infrastructural Risk Capital & Estates

Marguerite Heavey; National Fire & Infrastructural Risk Manager; Tusla Estates Department

Martina Hunt; Environmental Advisor, Capital & Estates; HSE South East

Kevin McNair; Asbestos Consultant; St Lomans Hospital Mullingar

Sean McMorris; Project Manager; Capital & Estates Bridge House Cherry Orchard Hospital

Brendan Mulligan, Project Manager Capital & Estates Mullingar

Appendix 17 Membership of the Approval Governance Group

Paul deFreine	Signature:
Head of Capital & Estates	
	Date:
Nicholas Parkinson	Signature:
Head of National Health and Safety Function	
	Date:
Representing HSMAC	