KAD
ENVIRONMENTAL CONSULTANCY LIMITED

Asbestos Survey

on behalf of

NMSI Wroughton

Building 5 Hanger L2 & Annexes Type 2
Science Museum
Hackpen Lane
Wroughton
Wiltshire
SN4 9NS

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Names and Addresses

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NMSI Wroughton
Hackpen Lane
Wroughton
Wiltshire
SN4 9NS

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Phone: 01793 846225 Fax:

Instructing Party:

Building 5 Hanger L2 & Annexes
Science Museum
Hackpen Lane
Wroughton
Wiltshire
SN4 9NS

Contact: Darren Hopkins
Phone: 01793 846209 Fax: 01793 815413

Site Full Name:

Building 5 Hanger L2 & Annexes Type 2
Science Museum
Hackpen Lane
Wroughton
Wiltshire
SN4 9NS

Contact: Darren Hopkins
Phone: 01793 846209 Fax: 01793 815413

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SECTION ONE

SURVEY OBJECTIVES

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Survey Objectives

1 The objective of this inspection was to safely inspect the Building 5 Hanger L2 & Annexes, in order to locate and assess the presence of Asbestos Containing Materials (ACMs) in acordance with current MDHS100 & HSG248 guidence notes.

2 The project was to undertake a Type 2 asbestos inspection of the above location including all rooms, areas and spaces, in order to ascertain the presence of Asbestos Containing Materials (ACMs).

The purpose of the inspection was to locate, as far as is reasonably practicable, the presence and extent of any suspect ACMs in the, areas within the survey boundary, and to assess their condition.

Representative samples were collected from each type of suspected ACM found, samples were analysed for the presence of asbestos content to confirm or refute the surveyors judgement. If the material sampled was found to contain asbestos, other similar homogenous materials, which were used in a similar manner within the building, were also strongly presumed to contain asbestos. Less homogenous materials require a greater number of samples, the number of samples taken during this inspection were sufficient for the surveyor to make an accurate assessment to ascertain the presence of asbestos.

All areas were accessed and inspected as far as was reasonably practicable (eg above false ceilings, sealed boxings, service risers, ducts etc). Any material, which was reasonably expected to contain asbestos was sampled and analysed, where samples could not be taken, a strong presumtion was made that the material did contain asbestos as recommended in M.D.H.S 100 & H.S.G 248.

3 KAD have aimed to create a general awareness that other Asbestos Containing Materials (ACM) may be present, but may not have necessarily been identified due to survey restriction and limiitations. Any area outside of this survey boundary, or areas identified as 'No Access' must be presumed to contain ACMs and managed accordingly. Any information gained from further investigation must be added to the asbestos register.

4 The essence of the inspection was to investigate all accessible areas & including ceilings to view the ceiling void (where present).

5 To investigate, examine and analyse any suspect ACM located within the survey boundary, and document our finding.

6 Areas that have been identified as 'No Access' must be presumed to contain ACMs until proven otherwise.

7 To include a material and priority assessment for each individual sample taken.

8 To provide the basic information from which an effective asbestos management plan can be instigated.

9 To highlight the requirement for urgent action to be taken to reduce the risk of exposure from asbestos fibres.

10 Produce a detailed report, indicating the locations containing identified and suspected Asbestos Containing Materials. Including photographic records of asbestos occurences where possible.

11 The objective in this inspection is to reduce the risk of disturbing Asbestos Containing Materials (ACMs) and any subsequence human exposure. This is achieved by appointing KAD as your professional examiner to conduct an inspection of the building and assess the risk of asbestos exposure.

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SECTION TWO

SURVEY TECHNIQUE

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Survey Technique

1 An MDHS100 compliant inspection has been conducted to locate and assess all suspected Asbestos Containing Materials (ACMs), so far as is reasonably practicable within the scope of this project, or survey boundry.

2 Each area/room was inspected for materials suspected to contain asbestos, and representative samples were taken to confirm or refute the surveyors judgement. Individual ceiling tiles were removed and, existing access points or hatches were used to gain access where possible.

3 Where materials of a similar type were representativly sampled. It is assumed that other materials, which were identical to a sampled location, were of a similar composition, manufactured and installed in an identical fashion to the sample. This process is known as a 'visually identified' or ' strongly presumed' ACM.

4 Colour photographs were taken at all suspect material locations, unless otherwise instructed by the Client.

5 Samples that were taken are delivered to a UKAS (The United Kingdom Accreditation Service) Laboratory where analysis was carried out using stereo-microscopy, polorised light microscopy and dispersion staining techniques set out in the HSG 248.

6 This survey was undertaken in accordance with M.D.H.S. 100 current version (Method for the Determimation of Hazardous Substances).

7 There were no deviations from the standard MDHS100 methods used unless documented in this report.

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SECTION THREE

SURVEY BRIEF

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Survey Brief

1 KAD Environmental Consultancy Ltd were commissioned by Darren Hopkins to undertake a Type 2 Standard Sampling and Assessment Inspection of the Building 5 Hanger L2 & Annexes at the Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS.

The purpose of this type of inspection was to locate as far as reasonably practicable, the presence and extent of any asbestos containing materials (ACMs) within the area and assess their condition. Bulk samples from each type of suspect material found were taken and analysed to confirm asbestos type and content. Where the materials sampled were found to contain asbestos, other visually similar materials used in the same manner may have been referenced to the sampled material or presumed to contain asbestos.

In addition, the inspection body have:

Highlighted the requirement for urgent action to reduce the risk of exposure to respirable asbestos fibres.

Specifically identified all areas of 'No Access' to enable effective asbestos management.

Referenced any fibrous materials, which were considered to be non-asbestos and may be mistaken for suspected asbestos containing materials by other personnel.

2 This inspection was carried out by Malcolm Allen of KAD Environmental Consultancy Ltd 13th June 2007.

All areas agreed in the scope of the survey have been inspected, any areas that may potentially contain asbestos that have not been accessed, are detailed as areas of 'No Access' and can be found in the "EXCLUDED AREAS" section of this report.

3 When Asbestos Containing Materials (ACM's) are positively identified they are shown in the colour RED on the site drawings.

When non-asbestos materials are confirmed, they are shown in the clolour BLUE on the site drawings.

When areas of 'NO ACCESS' are identified, they are shown in the colour YELLOW on the site drawings.

Samples or inspection locations are shown using the word `ITEM`, which include the sample or inspection number(s). This therefore enables you quick and easy access to pinpoint where all asbestos installations are located.

For positive indentification of Asbestos Containing Materials (ACM's) please refer to the individual sample data sheets.

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SECTION FOUR

SURVEY NOTES

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Survey Notes

1 Whilst every effort was made to locate as many Asbestos Containing Materials (ACMs) as possible non other than those detailed within this report were identified. Some suspected ACMs may have been missed due to repairs, alterations etc, or where false and other finishes have been applied, (including a possible mixture of asbestos and non-asbestos) materials which have been used in the same area. Only by sampling each material would the composition of all the materials be known. This was clearly not practical in terms of cost or time.

2 No air monitoring was carried out whilst the survey was undertaken and therefore care was taken not to cause disturbance of fibre or contamination of clean surfaces.

3 This report has been written in accordance with all current HSE asbestos regulations and MDHS100 guidelines, current at the date of this report and describes circumstances at the site on the date the investigation took place.

4 Where similar items exist in the building, only one or two samples have been taken to ascertain the material content. It was assumed that similar products were of the same material, therefore only random sampling was carried out.

5 All the recommendations described in this report are based upon assumptions made after consideration of the type of material, condition of the material, its location analysis result and type of use the area is thought to be subjected to. However, statutory authorities or others, could require amendments based on local knowledge, change in legislation, change in use or indeed, other conditions of criteria.

6 Equipment, machinery, ducting etc were not moved, opened up or examined for the purpose of this investigation except in the odd occasion where hatches were available.

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SECTION FIVE

LIMITATIONS OF SURVEY

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Limitations of Survey

1 This report is based upon a non-destructive investigation of an unfamiliar site.
Whilst the surveyor made every effort to examine all suspect materials, we cannot guarantee that all Asbestos Containing Materials have been located. Some materials may well be hidden within the fabric of the building and may only come to light when the building is being demolished/refurbished/structurally altered, for these and other reason set out in this report complete assurance cannot be given that all materials that may contain asbestos content have been found due to limitations & restrictions of the inspection.

Where suspect asbestos installations are found during the survey, it is not the policy of KAD to disturb this material in any way other than to take a representative sample. KAD cannot, therefore, take responsibility for the presence of asbestos behind an identified asbestos installation.

Equipment, machinery, ducting/site gauges etc were not moved, opened up or examined for the purpose of this investigation except where safe access were available.

Full access is not always possible into certain areas during the inspection for various reasons. If an area is recorded as No Access it is usually due to Health & Safety or contractural obligations, KAD promote explainations of No Access areas to assist our clients, therefore a detailed listing of any areas that were not fully accessed can be found in the Excluded Areas section of this report.

2 Where Asbestos Containing Materials (ACMs) have been identified or presumed, it is possible through years of degredation or even future delapidation, may cause an ACM to breakdown. When an ACM begins to deteriorate there is a higher risk of that material releasing asbestos fibres, and could potentailly contaminate localised areas.The presence or extent of any such contamination may not be visually identified or assessed with the use of airborne fibre monitoring, or swab sampling techniques being employed. This type of exercise would require a seperate instruction and would be subject to further cost implications.

KAD recommend that futher samples are taken of any suspected Asbestos Containing Material (ACM), that maybe suspected or discovered, or within the areas of the site not included in the inspection.

3 Access may not have been gained to several areas of the site, for example:
sealed or inaccessible spaces/confined or loft spaces
floor ducts/areas which are blocked off or bricked up

Access could not be gained to certain elements of the site as listed below:
Heavy floor ducts
Live electrical equipment or instalations
Supporting structures.

If the client requires access into any of the above areas please contact the KAD who will be happy to assist.

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Limitations of Survey

4 Use of both asbestos and non-asbestos materials could have been made in close proximity to one another. Care must therefore be taken when disturbing areas of mixed materials and all should be treated as asbestos until an inspection, or sampling proves otherwise.

In accordance with the current Asbestos Regulations, any refurbishment, demolition or alteration work that is liable to disturb or damage Asbestos Containing Materials must first be inspected under Type 3 fully intrusive methods. Any ACMs that are identified during the Type 3 inspection will need to be safely remove prior to commencing with the planned works.

A HSE licensed Asbestos Removal Contractor may be required for any asbestos works which are liable to elevate fibre levels near to the current control limit.

5 Whilst undertaking the survey every effort was made to locate the ceiling panels, wall partitions and other panels, which may have been constructed using asbestos boarding, none other than those detailed were found at the time when the survey was undertaken. Some may have been missed due to repairs, alterations etc, where false and other finishes have been applied or where different specifications were used (including a possible mixture of asbestos and non asbestos panels) in the same area.

Only by sampling each panel would the composition of all the materials be known. This was clearly not practical in terms of the cost and time.

6 All materials of a similar type were representatively sampled. It was assumed that all surfaces that were identical to the sampled material were of a similar composition.

7 Installations that are suspected to contain asbestos materials but have not been inspected internally for reasons of safety (e.g." live electrical equipment) or because it would have entailed destructive testing procedures (e.g. fire doors,) have been recorded as 'No Access' & should be presumed to contain ACMs.

8 Any person undertaking works on or within the building must be informed of the potential presence of asbestos. This briefing also applies to any person associated with this site, including staff, sub-contractors and volunteers.

9 The site drawings within this report are not to scale and are illustrative only to indicate approximate locations of Asbestos Containing Materials (ACM's). The descriptions used are for location identification purposes only.

10 All the recommendations described in this asbestos register are standardised and based upon material and priority assessments for each individual accurrence. The assessments take into account the product, location and condition to generate the associated risk. Recommendations should still be reviewed for suitability for each circumstance, however statutary authorities or other bodies, could require amendments based on local knowledge, changing legislation, changes in use of other criteria.

11 Samples that have been taken from floor tiles, roofing felt (or similar materials) may include a bitumasttic adhesive as part of the sample. It is known that some proprietary brands of bitumen often have an asbestos content and this will be included as an integral part of the bulk sample unless otherwise stated.

This inspection has been conducted on the basis that the building or area is not situated on contaminated land. No prior knowledge has been provided by the client to establish any extent of contamination to the land unless specifically mentioned in this report. Should further in depth testing and analysis prove that the land contains contaminants, please be aware that this aspect of contaminataion testing was not included within the scope of this inspection. KAD will happily make arrangements for land conatamination testing if required, however this type of exercise will require a seperate instruction and visit, and would be subject to further cost implications.

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Limitations of Survey

12 As part of your asbestos management plan, we recommend that all Asbestos Containing Materials (ACM's) that were identified during this inspection are labelled with approved asbestos warning labels ('a' labels) to prevent accidental damage. The extent of labelling should be agreed with the Client.

13 If any suspicious materials thought to contain asbestos content are found and are not included in this asbestos register, please contact KAD immediatly so that appropriate action can be taken and registers updated.

14 Under no circumstances must any work with Asbestos Containing Materials (ACM's) be undertaken without an assessment of work as detailed in the of Control of Asbestos Regulations 2006.

15 This report may be used as an asbestos register to which any later discoveries of Asbestos Containing Materials (ACM's) should be added. The findings will instigate programming of the asbestos management plan.

16 KAD Environmental Consultancy Ltd cannot be held responsible for any liability for loss, damage or penalty issues due to errors or omissions within this report, beyond the limitations of so far as reasonably practicable.

KAD Environmental Consultancy Ltd cannot be held responsible for any fabric damage caused during the inspection, as testing of materials is compulsory in order to correctly establish a materials identity. Due to the nature and necessity of sampling for asbestos some damage is unavoidable. All fabric damage will be kept to a minimal by only test sampling materials that are suspected to contain asbestos.

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SECTION SIX

SITE DESCRIPTION

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Site Description

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Environmental Consultancy Limited

General Information:

Built by the M.O.D. in the early 1940's, used to service & repair aircraft in active service during world war two.

Steel constructed roof curved to floor level on either side, Rendered brick, Steel & concrete end infils.
Annexe buildings contain Boiler House, Tankroom, Offices & Toilets.

Now used as a Museum for large objects:- Tractors, Buses etc. Also open to the public on special occasions.

Building, Floor, Room/s	Comments	Accessed
S05.G-1	Steel constructed roof, curved to the ground on either side, Steel & brick walls & sliding doors to infill walls at either end.	Yes
S05.G-1 continued	MMMF pipework insulation at high level above sliding doors, Concrete floor, All electrics, switchboxes etc - Inspected,	Yes
S05.G-1 continued	New galvanized steel ducting - Inspected, Low level heating pipework - Not Inspected	Yes
S05.G-2	Concrete ceiling, Plaster & brick walls, Quarry tile floor. MMMF pipework insulation covered with aluminium, MMMF boiler insulation,	Yes
S05.G-2 continued	Glassfibre rope - boiler joints & access plates. Small bore pipework insulation - foam, MMMF boiler flue insulation covered with aluminium,	Yes
S05.G-2 continued	Boiler flue joints - Fibreglass rope, Timber door	Yes
S05.G-3	Concret floor & ceiling, Brick walls, Steel tanks & pipework	Yes
S05.G-4	Brick & steel walls, Concrete floor, Steel caged door	Yes
S05.G-5	Plasterboard over concrete ceiling, Brick & plaster walls, Concrete floor, UPVC door	Yes
S05.G-6	Plasterboard over concrete ceiling, Brick & plaster walls, Concrete floor, Timber door & walls tiles, Foam pipework insulation	Yes
S05.G-7	Plasterboard over concrete ceiling, Brick & plaster walls, Concrete floor, Timber door & walls tiles, Foam pipework insulation, Plastic cistern	Yes
S05.G-8	Concrete ceiling & floor, Brick & plaster walls, Quarry tile window sill, Timber door	Yes
S05.G-9	Plasterboard over concrete ceiling, Brick walls, Concrete floor, UPVC door	Yes
External S05.Main Building	Tarmac roof, Rendered brick & concrete walls. Steel sliding doors	Yes
External S05.Annexes Building	Rendered brick walls, Tarmac roofs, Plastic rainwater pipes & gutters, Plastic fascia's, UPVC doors & windows throughout,	Yes

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External S05.Annexes Building continued	External electric & switchboxes - Inspected	Yes

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SECTION SEVEN

EXCLUDED AREAS

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Excluded Areas

1 Not all rooms and areas relating to Building 5 Hanger L2 & Annexes were accessed to a satisfactory standard for the purpose of identifiying ACMs and are listed as follows:

2	S05.G-1	Radioactive compound	Hazardous to health
	S05.G-1	Pipework running either side of hanger	Historical objects restricting access
	S05.G-1	Floor standing heaters	Solid steel construction
	S05.G-2	Boiler flue chimney access	Sealed

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SECTION EIGHT

SURVEY RECOMMENDATIONS

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Survey Recommendations

1 Once Asbestos Containing Materials have been identified it is essential that appropriate management and remedial measures be introduced. In general ACMs in good condition should not be disturbed. Their location should be recorded and their existence made known to staff, contractors and others who may be affected. Labelling of the materials may be appropriate. Periodic condition inspections shall be a prerequisite of any successful asbestos management plan.

Any person undertaking work on or within the premises should be told of the presence of asbestos. This briefing also applies to any other person associated with the site, including staff, sub-contractors and others.

Under no circumstances should any work with Asbestos Containing Materials be conducted without first undertaking a detailed risk assessment, and documenting control measures to be used in a plan of work. This is a requirement of the Control of Asbestos Regulations 2006 and must be adhered to at all times.

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Survey Recommendations

2 Material Assessment and Algorithm

The material assessment is an assessment of the condition of the ACM, or the presumed ACM, and the likelihood of it releasing fibres in the event of it being disturbed in some way. This material assessment will give a good initial guide to the priority for management, as it will identify the materials, which will most readily release airborne fibres if disturbed. However, there are other factors to take into account when prioritising action. MDHS100 recommends the use of an algorithm to carry out the material assessment, and contains an example. The algorithm is a numerical way of taking into account several influencing factors, giving each factor considered a score. These scores can then be totaled to give a material assessment score. The use of algorithms is not infallible, but the assessment process is clear for all to see, so if discrepancies arise, it should be possible to track back through the assessment process to find the root of the error. The algorithm shown in MDHS100 considers four parameters that determine the risk from ACM: that is the ability to release fibres if disturbed. These four parameters are:

Product type;
Extent of damage;
Surface treatment; and
Asbestos type

Each of the parameters is scored and added to give a total score between 2 and 12:

Materials with scores of 10 or more should be regarded as high risk with a significant potential to release fibres if disturbed;

Those with a score between 7 and 9 are regarded as medium risk;

Materials with a score between 5 and 6 are low risk; and

Scores of 4 or less are very low risk.

PRIORITY ASSESSMENT AND ALGORITHM

The material assessment identifies the high-risk materials, that is, those which will most readily release airborne fibres if disturbed. It does not automatically follow that those materials assigned the highest score in the material assessment will be the materials that should be given priority for remedial action. Management priority must be determined by carrying out a risk assessment which will also take into account factors such as:

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

THE RISK ASSESSMENT INCLUDES A MATERIAL ASSESSMENT AND A PRIORITY ASSESSMENT.

THE MATERIAL ASSESSMENT LOOKS AT THE TYPE AND CONDITION OF THE ACM AND THE EASE WITH WHICH IT WILL RELEASE FIBRES IF DISTURBED.

THE PRIORITY ASSESSMENT LOOKS AT THE LIKELIHOOD OF SOMEONE DISTURBING THE ACM.

The risk assessment can only be carried out with detailed knowledge of all the above. Although a surveyor may have some of the information which will contribute to the risk assessment and may be part of an assessment

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Survey Recommendations

team, you, as the duty holder under CAW, are required to make the risk assessment, using the information given in the survey report and your detailed knowledge of the activities carried out within your premises. The risk assessment will form the basis of the management plan, so it is important that it is accurate.

MAINTENANCE ACTIVITY
The first and most important factor which must be taken into consideration is the level of maintenance activity likely to be taking place in an area. Maintenance trades such as plumbers and electricians are the group who the duty to manage is primarily trying to protect. There are two types of maintenance activity, planned and unplanned. Planned work can be assessed and carried out using procedures and controls to reduce exposure to asbestos. Unplanned work requires the situation to be dealt with as found and the controls that can be applied may be more limited. The frequency of maintenance activities also need to be taken into account in deciding what management action is appropriate.

OCCUPANT ACTIVITY
The activities carried out in an area will have an impact on the risk assessment. When carrying out a risk assessment the main type of use of an area and the activities taking place within it should be taken into account. For example a little used storeroom or an attic will rarely be accessed and so any asbestos is unlikely to be disturbed. At the other end of the scale, in a warehouse lined with asbestos insulating board panels, with frequent vehicular movements, the potential for disturbance of ACMs is reasonably high and this would be a significant factor in the risk assessment. As well as the normal everyday activities taking place in an area, any secondary activities will need to be taken into account.

LIKELIHOOD OF DISTURBANCE
The two factors that will determine the likelihood of disturbance are the extent or amount of the ACM and its accessibility/vulnerability. For example, asbestos soffits outdoors are generally inaccessible without the use of ladders or scaffolding, are unlikely to be disturbed. The asbestos cement roof of a hospital ward is also unlikely to be disturbed, but its extent would need to be taken into account in any risk assessment. However if the same ward had asbestos panels on the walls they would be much more likely to be disturbed by trolley/bed movements.

HUMAN EXPOSURE POTENTIAL
The human exposure potential depends on three factors: the number of occupants of an area, the frequency of use of the area, and the average time each area is in use. For example, a school boiler room is likely to be unoccupied, but may be visited daily for a few minutes. The potential for exposure is much less than say in a classroom lined with asbestos insulating board panelling, which is occupied daily for six hours by 30 pupils and a teacher.

PRIORITY ASSESSMENT ALGORITHMS
Taking all these factors into account in a logical, consistent manner is difficult. Using an algorithm will help you to produce priority assessments that have taken the factors into account in a consistent way. The number of factors relevant at any one site needs to be carefully considered, as the more factors included in an algorithm, the lower the influence of the most important risk factors becomes, and this may produce anomalies. For this reason it is recommended that the number of factors that are scored is limited to four, the same as the number of factors in the material assessment. There is no single set of factors that can be recommended that will apply equally to all types of premises. Therefore four general headings have been used and one or more factors can be taken into account and averaged under each heading to suit the circumstances. If you choose to use more than one factor under a general heading, then average the scores under that heading, rounding up where necessary.

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Survey Recommendations

The scores from the material assessment (i.e. the condition of the ACM or presumed ACM) are added to the scores of the priority assessment (the likelihood of disturbance), to give the overall risk assessment. Risk assessment scores for different ACMs can then be compared to develop your action plan. In many circumstances the scores will be similar, making decisions more difficult. For example a boiler house with asbestos pipe work insulation in poor condition may get the same or similar risk assessment score to an office with asbestos insulating board in reasonably good condition. This is simply because the ACM in the boiler house received a higher score than the ACM in the office because the ACM in the boiler house was in poor condition. However, the priority assessment for the office will get a higher score than the boiler house since the office is occupied more often. Add the scores together for the material and priority assessments, and you get similar scores. If this is the case then you may decide that the office needs doing first because it is used daily. On the other hand you may decide that the poor condition of the ACM in the boiler house means that it should be done first. If the office was a classroom, the young age of the occupants may be a deciding factor. Algorithms are provided to help you, but they are best guesses and will often require you to make your own additional judgements.

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SECTION NINE

MATERIAL ASSESSMENT (PHOTO)

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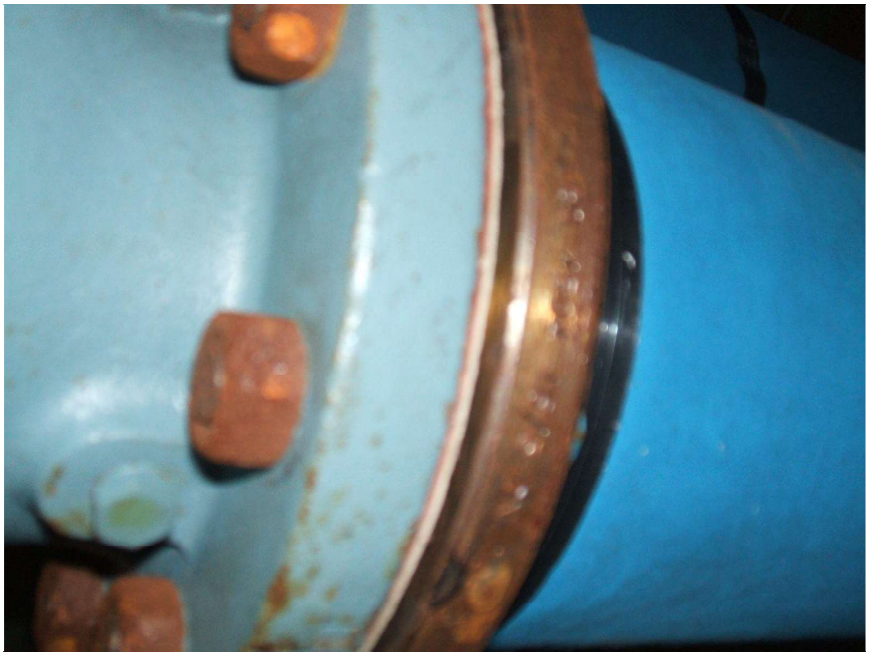
Material Assessment Record

Site Address:	Building 5 Hanger L2 & Annexes Type 2, Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS	Client Name:	NMSI Wroughton
		Project Number:	NMSI-207b

Sample ID:	300967	Survey Type:	T 2
Sample Number:	Item 1	Product Type:	Gaskets
Product:	Gasket	Damage:	Low damage
Area:	(5) Hanger L2 & Annexes	Treatment:	Composite asbestos materials
Floor:	Roof level	Asbestos Type:	Chrysotile
Room:	S05.G-1	Identification:	Identified
Surveyor Name:	M.Allen	Quantity:	1m2
Drawing Ref:	Item 1	Accessibility:	Difficult Accessibility
Asbestos ?	Yes		
Date:	12 June 2007		
Next Inspection:	11 June 2008		
Analysis:			
Action:	Encapsulate, Label and Inspect		

Material Risk Score:	4
Material Risk Band:	Very Low Risk
Priority Risk Score:	2



Material Comments: Asbestos high level pipework flange gaskets above sliding doors.

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Material Assessment Record

Site Address:	Building 5 Hanger L2 & Annexes Type 2, Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS	Client Name:	NMSI Wroughton
		Project Number:	NMSI-207b

Sample ID:	300968	Survey Type:	T 2
Sample Number:	Item 2	Product Type:	Asbestos cement
Product:	Cement sleeve	Damage:	Low damage: Scratches or marks
Area:	(5) Hanger L2 & Annexes	Treatment:	Asbestos cement sheets etc
Floor:	Ground floor	Asbestos Type:	Chrysotile
Room:	S05.G-1	Identification:	Identified
Surveyor Name:	M.Allen	Quantity:	1 Linear Metre
Drawing Ref:	Item 2	Accessibility:	Difficult Accessibility
Asbestos ?	Yes		
Date:	12 June 2007		
Next Inspection:	11 June 2008		
Analysis:			

Material Risk Score:	4
Material Risk Band:	Very Low Risk
Priority Risk Score:	3

Action: Remove by a licenced contractor

Material Comments: Asbestos cement pipework expansion sleeve (x2) protruding through wall

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Material Assessment Record

Site Address:	Building 5 Hanger L2 & Annexes Type 2, Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS	Client Name:	NMSI Wroughton
		Project Number:	NMSI-207b

Sample ID:	300969	Survey Type:	T 2
Sample Number:	Item 3	Product Type:	NADIS
Product:	Insulation	Damage:	NADIS
Area:	(5) Hanger L2 & Annexes	Treatment:	NADIS
Floor:	High Level	Asbestos Type:	NADIS
Room:	S05.G-1	Identification:	Identified
Surveyor Name:	M.Allen	Quantity:	
Drawing Ref:	Item 3	Accessibility:	Difficult Accessibility
Asbestos ?	No		
Date:	12 June 2007		
Next Inspection:	Not Applicable		
Analysis:			

Material Risk Score:	0
Material Risk Band:	NADIS
Priority Risk Score:	N/A

Action: No Action Required

Material Comments: Non-Asbestos 'econite' insulation to high level redundant water pipe

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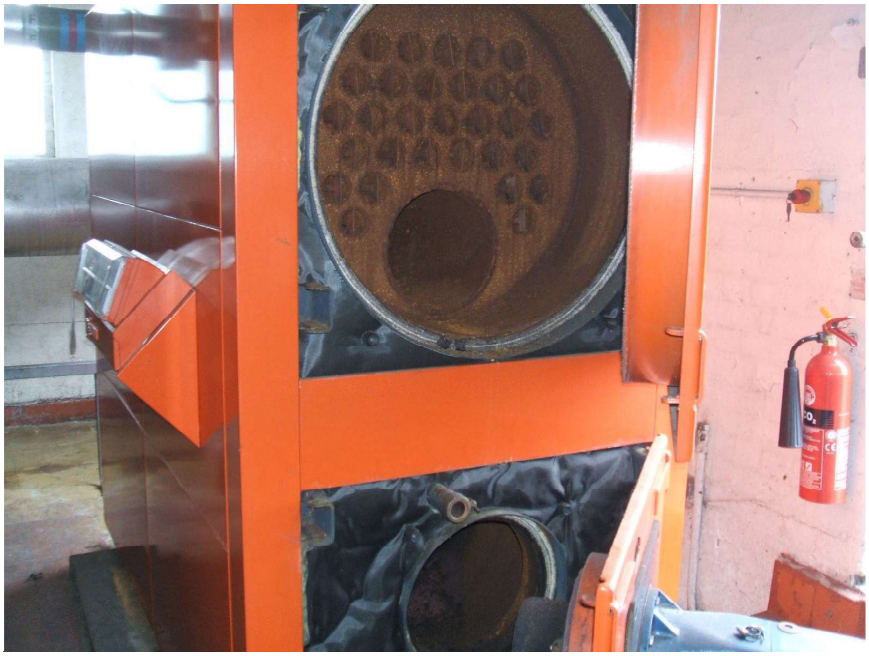
Material Assessment Record

Site Address:	Building 5 Hanger L2 & Annexes Type 2, Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS	Client Name:	NMSI Wroughton
		Project Number:	NMSI-207b

Sample ID:	300970	Survey Type:	T 2
Sample Number:	Item 4	Product Type:	NADIS
Product:	Rope	Damage:	NADIS
Area:	(5) Hanger L2 & Annexes	Treatment:	NADIS
Floor:	Ground floor	Asbestos Type:	NADIS
Room:	S05.G-2	Identification:	Identified
Surveyor Name:	M.Allen	Quantity:	10 Linear Metre
Drawing Ref:	Item 4	Accessibility:	Medium Accessibility
Asbestos ?	No		
Date:	13 June 2007		
Next Inspection:	Not Applicable		
Analysis:			
Action:	No Action Required		

Material Risk Score:	0
Material Risk Band:	NADIS
Priority Risk Score:	N/A



Material Comments: Non-Asbestos fibreglass rope seals to boiler access doors

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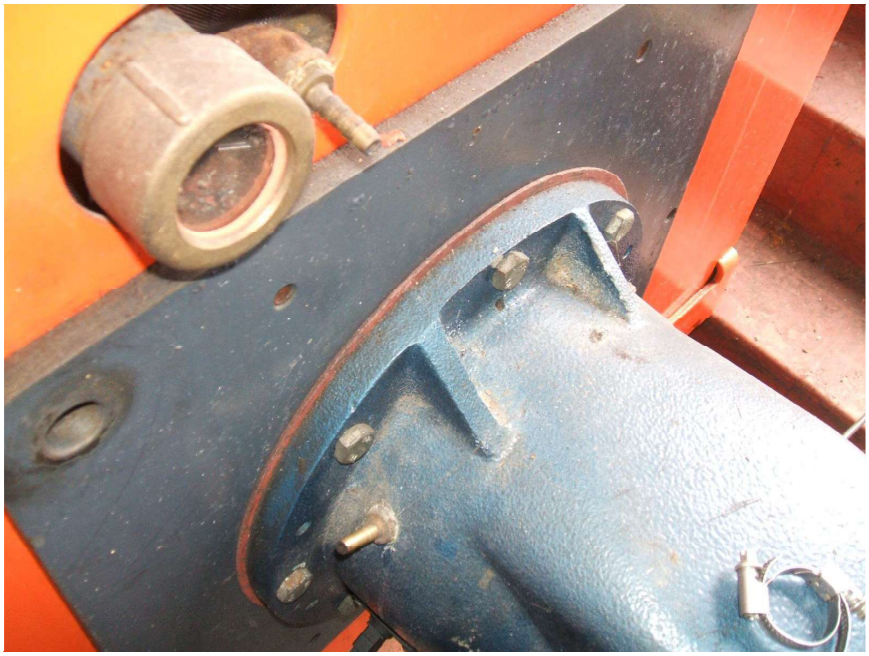
Material Assessment Record

Site Address:	Building 5 Hanger L2 & Annexes Type 2, Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS	Client Name:	NMSI Wroughton
		Project Number:	NMSI-207b

Sample ID:	300971	Survey Type:	T 2
Sample Number:	Item 5	Product Type:	NADIS
Product:	Gasket	Damage:	NADIS
Area:	(5) Hanger L2 & Annexes	Treatment:	NADIS
Floor:	Ground floor	Asbestos Type:	NADIS
Room:	S05.G-2	Identification:	Identified
Surveyor Name:	M.Allen	Quantity:	1m2
Drawing Ref:	Item 5	Accessibility:	Easy Accessibility
Asbestos ?	No		
Date:	13 June 2007		
Next Inspection:	Not Applicable		
Analysis:			

Material Risk Score:	0
Material Risk Band:	NADIS
Priority Risk Score:	N/A

Action: No Action Required



Material Comments: Non-Asbestos gasket seal to boiler burner flange

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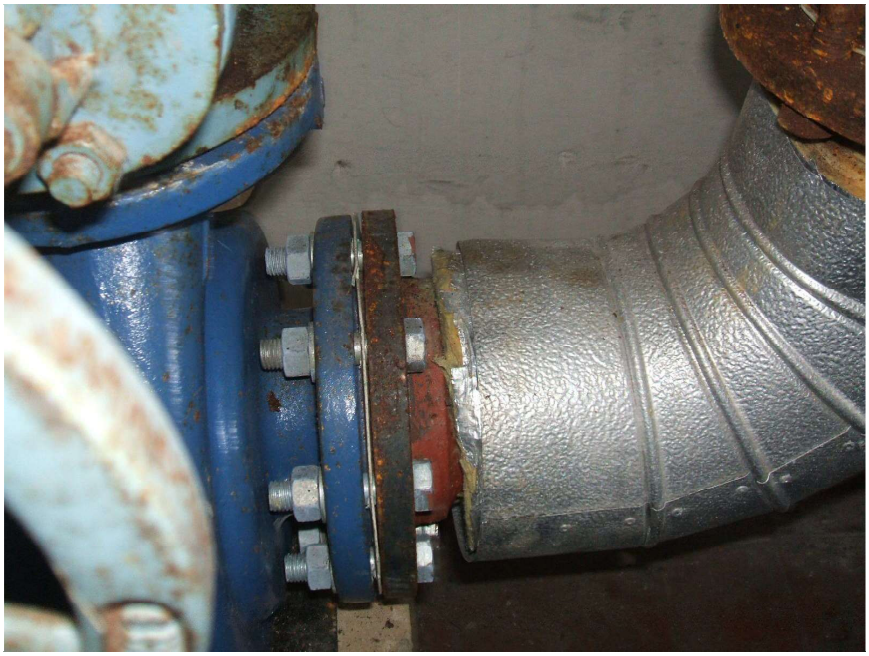
Material Assessment Record

Site Address:	Building 5 Hanger L2 & Annexes Type 2, Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS	Client Name:	NMSI Wroughton
		Project Number:	NMSI-207b

Sample ID:	300972	Survey Type:	T 2
Sample Number:	Item 6	Product Type:	Gaskets
Product:	Gasket	Damage:	No visible damage
Area:	(5) Hanger L2 & Annexes	Treatment:	Composite asbestos materials
Floor:	Ground floor	Asbestos Type:	Chrysotile
Room:	S05.G-2	Identification:	Identified
Surveyor Name:	M.Allen	Quantity:	1m2
Drawing Ref:	Item 6	Accessibility:	Difficult Accessibility
Asbestos ?	Yes		
Date:	13 June 2007		
Next Inspection:	12 June 2008		
Analysis:			

Material Risk Score:	3
Material Risk Band:	Very Low Risk
Priority Risk Score:	2

Action: Encapsulate, Label and Inspect



Material Comments: asbestos gaskets to various pipe and valve flanges (x12)

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Material Assessment Record

Site Address:	Building 5 Hanger L2 & Annexes Type 2, Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS	Client Name:	NMSI Wroughton
		Project Number:	NMSI-207b

Sample ID:	300973	Survey Type:	T 2
Sample Number:	Item 7	Product Type:	Gaskets
Product:	Gasket	Damage:	Low damage
Area:	(5) Hanger L2 & Annexes	Treatment:	Composite asbestos materials
Floor:	Ground floor	Asbestos Type:	Chrysotile
Room:	S05.G-2	Identification:	Strongly Presumed as previous sample
Surveyor Name:	M.Allen	Quantity:	1m2
Drawing Ref:	Item 7	Accessibility:	Difficult Accessibility
Asbestos ?	Yes		
Date:	13 June 2007		
Next Inspection:	12 June 2008		
Analysis:			

Material Risk Score:	4
Material Risk Band:	Very Low Risk
Priority Risk Score:	2

Action: Encapsulate, Label and Inspect

Material Comments: Asbestos gasket to various pipe and valve flanges (x12) (Strongly presumed as item 6)

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Material Assessment Record

Site Address:	Building 5 Hanger L2 & Annexes Type 2, Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS	Client Name:	NMSI Wroughton
		Project Number:	NMSI-207b

Sample ID:	300974	Survey Type:	T 2
Sample Number:	Item 8	Product Type:	NADIS
Product:	Toilet Seat	Damage:	NADIS
Area:	(5) Hanger L2 & Annexes	Treatment:	NADIS
Floor:	Ground floor	Asbestos Type:	NADIS
Room:	S05.G-7	Identification:	Identified
Surveyor Name:	M.Allen	Quantity:	1m2
Drawing Ref:	Item 8	Accessibility:	Easy Accessibility
Asbestos ?	No		
Date:	13 June 2007		
Next Inspection:	Not Applicable		
Analysis:			

Material Risk Score:	0
Material Risk Band:	NADIS
Priority Risk Score:	N/A

Action: No Action Required

Material Comments: Non-Asbestos toilet seat

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SECTION TEN

PRIORITY ASSESSMENT RECORD

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Priority Assessment Record

KAD Environmental Consultancy Limited

Site Address:	Building 5 Hanger L2 & Annexes Type 2, Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS
Client Name:	NMSI Wroughton
Project Number:	NMSI-207b

Sample ID:	300967
Sample Number:	Item 1
Product:	Gasket
Area:	(5) Hanger L2 & Annexes
Floor:	Roof level
Room:	S05.G-1
Surveyor Name:	M.Allen
Drawing Ref:	Item 1
Asbestos ?	Yes
Date:	12 June 2007

Priority Comments:

Priority Assessment Algorithm			
Assessment factor	Variable(s) selected	Score for each variable	Overall score
Normal Occupant Activity:			
Main type of activity in area:	Periodic disturbance	2	average
Secondary activities for area:	Periodic disturbance	2	2
Likelihood Of Disturbance:			
Location:	2 Large rooms or well-ventilated areas	1	
Accessibility:	1 Usually inaccessible or unlikely to be disturbed	0	average
Extent/Amount:	Small items strings gaskets	0	0
Human Exposure Potential:			
Number of occupants:	None	0	
Frequency of use of area:	Monthly	1	average
Average time area is in use:	<1 hour	0	0
Maintenance Activity:			
Type of maintenance activity:	Minor disturbance	0	average
Frequency of maintenance activity:	Unlikely to be disturbed	0	0

Total Priority Assessment Score:		2
Material Assessment Score (supplied by surveyor):	Very Low Risk	4
Total of Material and Priority Assessment Scores:		6

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Priority Assessment Record

KAD Environmental Consultancy Limited

Site Address:	Building 5 Hanger L2 & Annexes Type 2, Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS
Client Name:	NMSI Wroughton
Project Number:	NMSI-207b

Sample ID:	300968
Sample Number:	Item 2
Product:	Cement sleeve
Area:	(5) Hanger L2 & Annexes
Floor:	Ground floor
Room:	S05.G-1
Surveyor Name:	M.Allen
Drawing Ref:	Item 2
Asbestos ?	Yes
Date:	12 June 2007

Priority Comments:

Priority Assessment Algorithm			
Assessment factor	Variable(s) selected	Score for each variable	Overall score
Normal Occupant Activity:			
Main type of activity in area:	Periodic disturbance	2	average
Secondary activities for area:	Periodic disturbance	2	2
Likelihood Of Disturbance:			
Location:	2 Large rooms or well-ventilated areas	1	
Accessibility:	1 Usually inaccessible or unlikely to be disturbed	0	average
Extent/Amount:	<=10 m2 or <=10 m pipe run	1	1
Human Exposure Potential:			
Number of occupants:	None	0	
Frequency of use of area:	Monthly	1	average
Average time area is in use:	<1 hour	0	0
Maintenance Activity:			
Type of maintenance activity:	Minor disturbance	0	average
Frequency of maintenance activity:	Unlikely to be disturbed	0	0

Total Priority Assessment Score:		3
Material Assessment Score (supplied by surveyor):	Very Low Risk	4
Total of Material and Priority Assessment Scores:		7

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Priority Assessment Record

Site Address:	Building 5 Hanger L2 & Annexes Type 2, Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS
Client Name:	NMSI Wroughton
Project Number:	NMSI-207b

Sample ID:	300972
Sample Number:	Item 6
Product:	Gasket
Area:	(5) Hanger L2 & Annexes
Floor:	Ground floor
Room:	S05.G-2
Surveyor Name:	M.Allen
Drawing Ref:	Item 6
Asbestos ?	Yes
Date:	13 June 2007

Priority Comments:

Priority Assessment Algorithm			
Assessment factor	Variable(s) selected	Score for each variable	Overall score
Normal Occupant Activity:			
Main type of activity in area:	Rare disturbance	0	average
Secondary activities for area:	Rare disturbance	0	0
Likelihood Of Disturbance:			
Location:	3 Rooms up to 100 m2	2	
Accessibility:	3 Easily disturbed	2	average
Extent/Amount:	<=10 m2 or <=10 m pipe run	1	2
Human Exposure Potential:			
Number of occupants:	None	0	
Frequency of use of area:	Infrequent	0	average
Average time area is in use:	<1 hour	0	0
Maintenance Activity:			
Type of maintenance activity:	Minor disturbance	0	average
Frequency of maintenance activity:	Unlikely to be disturbed	0	0

Total Priority Assessment Score:		2
Material Assessment Score (supplied by surveyor):	Very Low Risk	3
Total of Material and Priority Assessment Scores:		5

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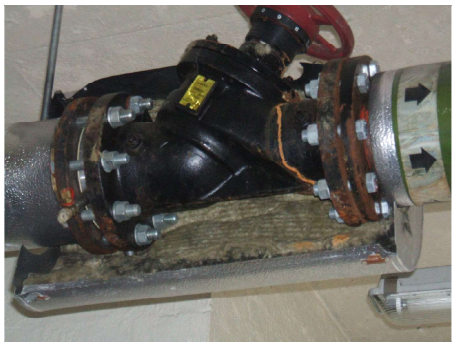
Priority Assessment Record

Site Address:	Building 5 Hanger L2 & Annexes Type 2, Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS	Client Name:	NMSI Wroughton
		Project Number:	NMSI-207b

Sample ID:	300973
Sample Number:	Item 7
Product:	Gasket
Area:	(5) Hanger L2 & Annexes
Floor:	Ground floor
Room:	S05.G-2
Surveyor Name:	M.Allen
Drawing Ref:	Item 7
Asbestos ?	Yes
Date:	13 June 2007



Priority Comments:

Priority Assessment Algorithm			
Assessment factor	Variable(s) selected	Score for each variable	Overall score
Normal Occupant Activity:			
Main type of activity in area:	Rare disturbance	0	average
Secondary activities for area:	Rare disturbance	0	0
Likelihood Of Disturbance:			
Location:	3 Rooms up to 100 m2	2	
Accessibility:	3 Easily disturbed	2	average
Extent/Amount:	<=10 m2 or <=10 m pipe run	1	2
Human Exposure Potential:			
Number of occupants:	None	0	
Frequency of use of area:	Infrequent	0	average
Average time area is in use:	<1 hour	0	0
Maintenance Activity:			
Type of maintenance activity:	Minor disturbance	0	average
Frequency of maintenance activity:	Unlikely to be disturbed	0	0

Total Priority Assessment Score:		2
Material Assessment Score (supplied by surveyor):	Very Low Risk	4
Total of Material and Priority Assessment Scores:		6

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SECTION ELEVEN

SAMPLE ANALYSIS

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Sample Analysis

Asbestos bulk sample analysis is carried out using polarised light microscopy and dispersion staining techniques. Dispersion staining is used to describe the colour effects produced when a particle or fibre is immersed in Cargil fluid having a refractive index near to that of the particle or fibre when view under a microscope using transmitted white light. (Based on HSE publication MDHS 77 – current version)

All samples are analysed by an independent UKAS accredited laboratory.

Client Name:	NMSI Wroughton	Project Number:	NMSI-207b
		Survey Date:	13 June 2007
Site Address:	Building 5 Hanger L2 & Annexes Type 2. Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4	Printed On:	14 July 2007
		Sample Analysis:	Page 1 of 1

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SECTION TWELVE

BULK IDENTIFICATION REPORT

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BULK IDENTIFICATION REPORT

Client:	NMSI Wroughton	**Date Samples Received:**	Between 12/06/07 and 13/06/07
Client Address:	NMSI Wroughton, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS	**Date Samples Analysed:**	
Site Address:	Building 5 Hanger L2 & Annexes Type 2. Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4 9NS		
F.A.O:			**Page 1 of 1**

METHOD USED:

Samples of material referenced below, have been examined to determine the presence of asbestos fibres, using a method of polarising light microscopy and centre stop dispersion staining, based on H.S.E,s MDHS 77. NOTE: We cannot be held responsible for the accuracy and competence of samples taken by third parties. Under these circumstances we cannot be held responsible for the interpretation of the results shown.

Sample Number	Sample ID	Sample Location	Fibre Type
Item 1	300967	Roof level, S05.G-1, Gasket	Chrysotile -
Item 2	300968	Ground floor, S05.G-1, Cement sleeve	Chrysotile -
Item 3	300969	High Level, S05.G-1, Insulation	NADIS -
Item 4	300970	Ground floor, S05.G-2, Rope	NADIS -
Item 5	300971	Ground floor, S05.G-2, Gasket	NADIS -
Item 6	300972	Ground floor, S05.G-2, Gasket	Chrysotile -
Item 8	300974	Ground floor, S05.G-7, Toilet Seat	NADIS -

REPORT RAISED BY:

Signed: ..... Print: .....

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SECTION THIRTEEN

SURVEY DRAWINGS

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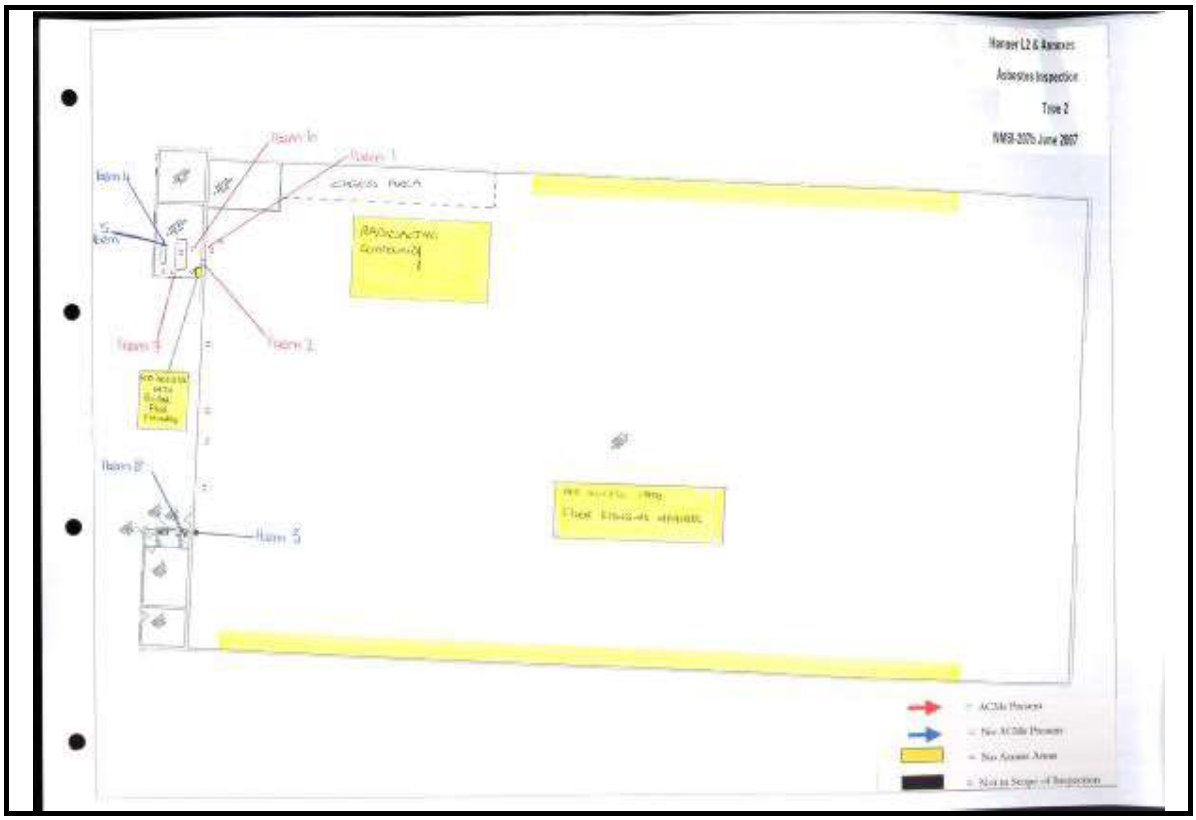
Survey Drawings



Description of Drawing:

This drawing has been produced from the NMSI floor plans that have been provided by Darren Hopkins Estates Manager.

Client Name:	NMSI Wroughton	Project Number:	NMSI-207b
		Survey Date:	13 June 2007
Site Address:	Building 5 Hanger L2 & Annexes Type 2. Science Museum, Hackpen Lane, Wroughton, Wiltshire, SN4	Printed On:	14 July 2007
		Survey Drawing:	Page 1 of 1

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