



ASBESTOS STANDARD SYSTEMS OF WORK



HAMPSHIRE ENVIRONMENTAL SERVICES

ASBESTOS STANDARD SYSTEMS OF WORK

Author	Checked	Issue Date	Issue Number
DC	KB	03.10.14	Issue 7 Rev 1

Introduction

These Standard Systems of Work have been developed for tasks that are considered to be everyday risks to employees of the company. They are significant risks, but because of experience and competence they are dealt with by the following standard systems. Copies of these systems will be laminated and held in a plastic file available on site.

Method statements and other documentation will refer to the standard system but they must be relevant for them to be used, or a specific risk assessment/method statement will be produced before the work commences.

Any updates or amendments will be communicated across the company by the Director.

Asbestos Standard Systems of work cover the following:

- G01 Hand Tools
- G02 Use of Electrical Equipment
- G03 Mobile Elevating Work Platform (MEWP)
- G04 Lightweight Tower Scaffolds
- G05 Safe Use of Ladders, Steps and Trestles
- G06 Safe Use of Scaffolds
- G07 Crane Man Basket

- A01 Taking Asbestos Samples
- A02 Asbestos Cement: Hand Removal
- A03 Asbestos Cement: Mechanical Removal
- A04 Removal of Asbestos Floor Tiles with of Asbestos Adhesive
- A05 Removal of Asbestos Floor Tiles
- A06 Surface Picking of Asbestos
- A07 ASBE Bag
- A08 Asbestos Insulation Board – No Enclosure
- A09 Asbestos Insulation Board –Enclosure
- A10 Asbestos Wrap & Cut
- A11 Asbestos Lagging
- A12 Sprayed Limpet/ Flock
- A13 Textured Coating Removal – Concrete
- A14 Textured Coating Removal – Plasterboard ceiling
- A15 Cleanliness Inspections

Appendix Confirmation of receipt and understanding of this document.

G01

Hand Tools

Risks:

Operative: Electric shock, Cuts, Eye injury, Dust, Hearing loss

Others: Electric shock, Cuts, Eye injury, Dust

Safety Equipment: as necessary

- Gloves to EN388 standard
- Eye protection to EN166 standard
- Hearing protection EN 352 –3 standard
- Respiratory protection to P3 EN149 standard

Safety Measures

- Always use the correct tool for the job, if not sure, ask.
- Before using a tool check it over, if defective don't use.
- Keep blades sharp and clean, look after the tools.
- Wear the necessary safety equipment, don't chance it.
- All power tools will be subject to routine inspections and should be regularly tested.
- Plan where you lead will go and try not to trip people up.
- An electric shock on the ground is bad enough, but 10 meters up a ladder is fatal.
- If possible, use 100V AC power tools.
- Protect all 240v AC power tools with a residual current device.

G02

Use of Electrical Equipment

Risks:


Operatives: Shock, burns, falls from height, fire, and explosion

Others: Hit by falling object, fire, explosion

Safety Equipment:

- 240/100V AC transformers
- Insulated footwear
- Residual current devices
- Double insulated tools

Safety Measures:

- Only use 110V AC updated tools and equipment, double insulated indicated by symbol .
- Always use a 30s/30mA RCD (separate or included in connector).
- Check appliance before use for:
 - Damage to the tool body (cracks to casing, bits missing)
 - Damage to lead (cuts, abrasions, deterioration) or plug
 - Cable secure in plug cord grip
 - Signs of overheating on plug
- Operatives trained in the action needed if someone receives an electric shock.
- All portable and moveable electrical equipment tested regularly, particularly extension leads.
- Place 240/110V transformer close to power outlet.
- Electrical wires are not interfered with unless a competent electrician has confirmed that they are dead, supply fuses removed and locked away.
- Do not use tools and equipment if there are concerns.
- Maintenance log in use to record results of tests and next test date.
- Use insulated ladders when working in the vicinity of electrical circuits.

G03

Mobile Elevating Work Platforms (MEWP)

Risks:

Operatives: Overturning, collapse, head strike

Others: Hit by overturning/collapse or item dropped, trespass

Safety Equipment:

- Hardhat to EN: 397 if any risk of head strike
- Harness and lanyard

Safety Measures:

- Only trained operatives who hold certificates of competence will operate this type of equipment. The equipment will only be hired from a reputable hire company who will provide certificates of examination required under the Lifting Operation and Lifting Equipment Regulations. If it is a scissor lift a check will be made that the scissor mechanism is guarded.
- The area where the platform is to be sited will be firm and level with a clear working area around.
- All non-authorized persons will be excluded from the work area and around the base. The area around the base will be declared a hardhat area when the platform is operational. If the MEWP is being used where people may enter the danger area fencing or barriers will be erected.
- Operatives will not overreach from the platform where necessary the platform will be repositioned.
- If the platform is carrying loads the total weight including the operatives will be considered before commencing.
- Before the platform is used the operatives will familiarise themselves with the controls and ensure people on the ground are aware of the emergency including lowering procedures.
- When the platform is not in use it will be secured to prevent unauthorised use, normally the keys removed and secured away.
- In normal operation the platform will not overhang the boundaries of the work site if it is required, then the person in charge will produce a specific risk assessment.
- Harnesses will be worn and clipped on in boom / cherry picker machines
- The method statement will state whether harnesses are required for platform / scissor lifts
- Diesel MEWP give off fumes and should not therefore be used within enclosures or poorly ventilated areas unless they are externally vented.
- If used inside enclosure the equipment must be thoroughly cleaned and inspected by an analyst usually during the 4 stage clearance before being removed from the enclosure.

G04

Lightweight Tower Scaffolds

Risks:

Operatives: Falls, Electrocution, Collapse, overturning, Hand injury

Others: Trespass, Falls, Collapse

Safety Equipment:

- Gloves to EN388 standard
- Hard Hat to EN397
- Safety footwear to EN345

Safety Measures:

- These items will only be hired from a reputable company and the height required will be known before ordering.
- When you accept delivery, there must be a set of instructions for the tower.
- Anyone who assembles or dismantles this equipment will be trained. The manufacturer's instructions will be available and consulted before assembly or alteration.
- Each component is to be in good order and any damaged or defective parts will not be used
- The scaffold will only be assembled on a flat hard surface and the levellers will not be used to gain extra height, blocks bricks, or timbers are not good enough. Ensure the brakes are used and turned outwards.
- The guardrails will always be used to protect the working area. Do not overreach move the tower. Towers will only be moved from the base and nobody will be on the working platform until newly positioned and secured.
- Tower scaffolds do have a maximum weight, the item will become dangerous if overloaded, refer to the manufactures safety limits, if you do not know ASK. Always try to tie the tower to a solid structure if possible.
- As a general rule of thumb the towers height should not exceed externally 3 times the narrowest width of the base or 3.5 if internally. If sheeting or netting is used or adverse weather is expected, the height will need to be reduced. The use of outriggers may allow extra height. The exact height etc of the tower will be on the instructions from the hire centre
- The tower scaffold must be checked by a trained person, normally the supervisor before use.
- If the tower scaffold is used as a fixed scaffold in one place for over a week it must be inspected and records kept.

G05

Safe use of Ladders, Steps and Trestles

Risks:

Operatives: Fall from height

Others: Struck by falling object

Safety Equipment:

- Rope or straps for lashing ladder
- Footwear that provides a good grip
- Shoulder bag or belt for carrying tools (hands free)
- Trestle toe boards and guardrails (over 2m)
- Safety equipment required for asbestos removal – see relevant Standard System of Work.

Safety Measures:

- All ladders, steps and trestles are subject to regular maintenance checks
- All ladders, steps and trestles to be inspected for damage, loose rungs/steps, cleanliness (no grease, oil or mud) before use. Clean as necessary.
- Set on firm, level ground at 75° to the horizontal.
- Ladders properly secured at the top – to be footed whilst securing takes place.
- Do not over reach, move ladder or steps.
- Place steps at right angles to the work area, ensuring fully open with retaining mechanism locked.
- Have safe method of moving tools/equipment to keep hands free.
- Establish exclusion zone beneath work area.
- Ladders used with scaffolding must reach 5 rungs past working platform or have a secure hand hold a meter up post step off point.
- Operatives trained in basic ladder safety.
- If working in the area of live electricity that cannot be isolated, insulated ladders should be used.

G06

Safe Use of Scaffolds

Risks:

Operatives: Fall from height

Others: Struck by falling object

Safety Equipment:

- Hard hats to EN397 standard
- Safety footwear
- Safety equipment required for asbestos removal – see relevant Standard System of Work.

Safety Measures:

- Ensure scaffold is fully boarded and erected by competent contractor in accordance with their method statement.
N.B. scaffolders should half board and guardrail their working lifts as they go up and down! And hook themselves on with their harnesses
- Ensure that before work starts a signed handover certificate is obtained from the scaffolder and the scaffolding is inspected.
- Arrange for the scaffold to be inspected weekly by a competent person and obtain a signed inspection report.
- If scaffold subject to high winds or collision with moving vehicle, scaffold to be inspected by competent person before further use.
- If taking over scaffold ensure it has been inspected within the last seven days and a certificate has been issued.
- Do not alter the scaffold in any way unless you are a competent scaffolder

G07

Crane Man Basket

Risks:

Operatives: Craneage and falls of men and materials

Others: Craneage and falls of men and materials

Safety Equipment:

- Hardhat to EN 397
- Ear Protection to EN 352
- High Visibility/Coats/Jackets/Vests to EN 471 Class 1
- Safety footwear with protected toe and midsole to EN 345
- Overalls
- Gloves to EN388 or more specific
- Full body harness EN 361

Safety Measures:

- The standard risks of craneage – overturn, collapse, etc, will be dealt with in a Method Statement for the lift. The crane will be suitable for man riding, i.e. will have a dead man's handle and power lower and will have been inspected in accordance with LOLER within the last six months.
- If necessary, a mechanism to prevent spin will be used, e.g. tag line.
- The Man Basket is a purpose designed lifting accessory that will be within test under LOLER within the last six months.
- Equipment will be strapped or secured so that tools, e.g. hammers, cannot fall.
- The operative will harness to the hook or crane rope, i.e. there is redundancy in the system so that if the man basket fails the operative is still attached to the crane.
- Use will be restricted to specified persons. Communications will be ensured between crane driver and man basket and ground as required.

A01

Taking Asbestos Samples

Non Licensable Work specific exclusion in Control of Asbestos Regulations 3.2

Risks:

Operatives: Fibre release, falls, cuts

Others: Fibre release

Safety Equipment:

- Respirator to P3 Standard EN149 minimum
- Dustproof overalls/overshoes (dependant on type and number of samples)
- PVA spray
- Small mist sprayer and AS strip

Safety Measures

Because of the risk of exposing both the sampler and any other people it is important to follow this simple procedure for taking samples. HSG264 gives further guidance:

- Anyone not involved in the sampling should be excluded from the immediate area
- The person taking the samples should have received asbestos awareness training and training in how to safely take samples
- The sampler should be wearing as a minimum a disposable respirator to EN149 P3 in accordance with their face fit test
- Depending on the degree of contamination of the surrounding area or that to be created by the sampling, then consideration should be taken regarding wearing a Tyvek coverall/overshoes.
- Access will normally be via hop up, or steps. Sometimes additional height will be needed and assessed.
- The area under where the sample is to be taken should be covered with polythene to collect any debris
- The sample should be taken using a small mist spray and as strip where the breakage or core is taken from and should be double bagged in sealable sample bags.
- The area where the sample has been taken from must be sealed using PVA spray or tape or other decorative finish as required by the client.
- The polythene must be cleaned using a wet wipe and this be disposed of as waste.
- A Type H vacuum should be available for emergency de-contamination.

Expected fibre release:

Previous work and guidance predicts levels about 0.05 f/ml of air the above system is used

A02

Asbestos Cement: Hand Removal

Non Licensable Work under Control of Asbestos Regulations 3.2

- exposure sporadic and low intensity
- and below Control Limit
- fibres firmly linked to matrix

Risks:

Operatives: Fibre release, work at height, manual handling

Others: Fibre release, Trespass

Safety Equipment

- Respirator (P3) EN149 Standard
- Dustproof overalls
- Gloves to prevent physical
- Wellington Boots or
- Industrial Shoes with steel toecaps

Safety Measures:

Anyone involved in this work must have had asbestos awareness training and training specifically in how to do this work.

- All non-asbestos material will be removed from the working area and unauthorised persons excluded.
- If necessary for cleaning purposes plastic sheeting will be laid securely on the floor.
- As access arrangements will vary with each site, they will be identified specifically. **Under no circumstances** will anyone work on an asbestos cement fragile roof without the use of secured crawling boards with handrails and safety nets. A safe system of work is required for working at height.
- Where sheets have securing bolts (normally J bolts) they will be cropped or cut and the whole sheet removed without damaging it. If the sheet is whole and in good condition it will be placed within a skip / lorry or a vehicle with a sealed back compartment. This must be sealed from the driver and passengers and there should be nothing else in the back.
- If the sheets edges are loose or it is broken, the sheet will be dampened or PVA applied before removal and then wrapped within thick gauge plastic sheeting before being placed within the covered skip/ lorry or vehicle.
- If the sheet has to be broken, this will only be carried out as a last resort after both sides of the sheet have been dampened.
- If the sheet has to be cut then it should if possible be carried out with hand tools and a gelling agent such as wallpaper paste, if not the lowest possible speed tools should be used. If power tools are used they should have extraction attachments to a vacuum with an H type filter. Operatives should be trained in manual handling techniques and gloves should be worn when handling the sheets.
- Use wet rags to clean equipment, access platform, ladders etc and place in covered skip.
- Coveralls and RPE should be removed in accordance with training, leaving masks until last and wet wipes used to clean exposed skin.
- Visually inspect equipment, working platform and surrounding area to make sure properly decontaminated.

Expected fibre release:

Previous work and guidance predicts levels about 0.01 f/ml of air if the above system is used.

A03

Asbestos Cement: Mechanical Removal

Non Licensable Notifiable Works

- **exposure sporadic and low intensity**
- **and below Control Limit**
- **fibres firmly linked to matrix**

Risks:

Operatives: Fibre release, operation of plant, falls from access equipment

Others: Fibre release, contact with plant, Trespass,

Safety Equipment

- Respirator with a FFPS3 filter EN149 standard
- Dustproof overalls
- Wellington Boots or
- Industrial boots with steel toecaps

Safety Measures:

- All non-asbestos material will be removed from the working area and unauthorised persons excluded.
- Anyone involved in this work must have had asbestos awareness training and training specifically in how to do this work.
- If necessary for cleaning purposes plastic sheeting will be laid securely on the floor.
- The operator of the plant will be trained to CITB or equivalent standard and wearing the safety equipment, unless the cab gives them the same protection. The Machine will have a roll protection system and cab protection to comply with PUWER. The sheets to be collapsed will be dampened down and kept damp, normally using fine misting of water from a fire engine or a hose line mounted on a scissor lift. There is a fine balance between suppressing the fibre release and flooding! Using the arranged system of collapse the driver will bring down all sheets onto the floor.
- Once the mechanical collapse has finished the asbestos material will be carefully loaded into a covered skip/ lorry again using a fine misting of water. Final clean will be by hand after the driver has scraped the surface. For this the operatives will wear disposable masks and coveralls.
- This system of work does not take account of anybody going on top of the roof, which will not normally happen. If people have to go on to the roof a separate risk assessment and method statement will be produced.
- All plant and equipment will be rinsed off before leaving site. The method statement will detail any specific steps to be taken.
- Use wet rags to clean equipment place rags in covered skip.
- Personal decontamination is as per training – i.e. coveralls taken off and reversed and mask left on until last.
- Visually inspect equipment and surrounding area to make sure properly decontaminated.

Expected fibre release:

Previous work and guidance predicts about 0.01 f/ml of air.

A04

Removal of asbestos floor tiles with asbestos adhesive

Non Licensable Work under Control of Asbestos Regulations 3.2

- **exposure sporadic and low intensity**
- **and below Control Limit**
- **fibres firmly linked to matrix**

Risks:

Operatives: Fibre release

Others: Fibre release

Safety Equipment

- Respirator with P3 to standard EN1149 fitted
- Dust proof overalls
- Wellington boots
- H-type vacuum
- Asbestos warning signs
- Waste sacks
- Decontamination Unit

Safety Measures:

- All non-asbestos containing material will be removed from the work area.
- Anyone involved in this work must have had asbestos awareness training and training specifically in how to do this work.
- Wearing dust proof overalls and Respirators with FFP3 filters, the tiles will be removed either by using Hand tools e.g. large scrapers, shovels or if the tiles prove difficult to remove, 110v power tools such as a Kango with wide shovel heads attached. Shadow Vacuuming will be done if power tools are used. Under no circumstances are tools that use an Abrasive action to be used.
- Once the tiles have been removed they will be bagged in clear asbestos waste sacks and taken to an approved disposal site.
- The work area will be cleaned with a Type H vacuum.
- Overalls will be disposed of as Contaminated Waste.
- Personal and site decontamination will be via a type H vacuum. Depending on the client's requirements, the floor surface will be appropriately treated e.g. covering with boards or self-levelling floor screed.

A05

Removal of Asbestos Floor Tiles

Non Licensable Work under Control of Asbestos Regulations 3.2

- exposure sporadic and low intensity
- and below Control Limit
- fibres firmly linked to matrix

Risks:

Operatives: Fibre release

Others: Fibre release

Safety Equipment

- Disposable mask P3 standard EN149
- Dust proof overalls
- Wellington boots
- H-type vacuum
- Asbestos warning signs
- Waste sacks

Safety Measures:

- All non-asbestos containing material will be removed from the work area.
- Anyone involved in this work must have had asbestos awareness training and training specifically in how to do this work.
- Wearing dust proof overalls and disposable masks the tiles will be removed either by using large scrapers or if the tiles prove difficult to remove, 110V Kango with wide shovel heads attached will be used.
- Under no circumstances will tools that use an Abrasive action are to be used.
- Once the tiles have been removed they will be bagged in clear asbestos waste sacks and taken to an approved disposal site.
- The people carrying out the work will decontaminate themselves by either the use of wet wipes or vacuuming their selves of using an H-Type vacuum.
- Overalls, Disposable Masks and protective Gloves will be disposed of as Contaminated Waste.
- Depending on the Clients requirements, the floor surface will be appropriately treated e.g. covering with boards or self-levelling floor screed.

A06

Surface Picking of Asbestos

Non Licensable Work under Control of Asbestos Regulations 3.2

- exposure sporadic and low intensity
- and below Control Limit
- fibres firmly linked to matrix

Risks:

Operatives: Fibre release, adverse weather conditions

Others: Fibre release

Safety Equipment:

- Disposable mask P3 standard EN149
- Dust proof overalls
- Wellington boots
- H-type vacuum
- Footbath
- Asbestos warning signs
- Barrier tape
- Waste sacks
- Water sprayer

Safety Measures:

- Anyone involved in this work must have had asbestos awareness training and training specifically in how to do this work.
- Wearing dust proof overalls, Wellington boots and respiratory protection, put up barrier tape and asbestos warning signs around the contaminated area.
- Place the footbath at the entry/ exit of the contaminated area, this is the only way in and out of the area.
- If it is a large area needing to be cleared of asbestos it is advised to break it into small sections. This may be achieved by making a grid using rope.
- Once picking has started, any pieces of asbestos that are found will be sprayed with a P.V.A and water solution, to suppress the asbestos fibres and put into clear waste sacks
- Before the waste sacks get too full they will have the air removed, sealed and stored in an arranged secure area.
- When the surface pick has been completed, wash Wellington boots in the footbath at the exit.
- All overalls, tape, ropes etc used will be placed within the waste sacks and disposed off as contaminated waste.

Expected fibre release:

Previous work and guidance predicts levels of <0.01f/ml.

A07

ASBE Bag

Non Licensable Work under Control of Asbestos Regulations 3.2

- exposure sporadic and low intensity
- and below Control Limit
- fibres firmly linked to matrix

Risks:

Operatives: Asbestos Exposure

Others: Asbestos Exposure

Safety Equipment:

Appropriate RPE / PPE for asbestos as per method statement

Safety Measures:

- Establish a separation zone around the work site.
- Inspect the area to be stripped and surrounding 3 meters.
- Carefully seal any damaged area with polythene.
- Put Asbe bag onto the pipe, zip it up and tape over the zip.
- Put tools into bag and seal the bag onto the pipe using plastic cable ties.
- Put a string of needles into the bag and conduct injection.
- Strip off lagging and clean up pipe spraying down bag, pipe and debris continuously.
- If stripping an area for wrap and cut, strip at least 50mm of pipe and tape polythene wrapping back onto the exposed edge of the asbestos.
- Remove tools into glove, twist and tape end. Cut off the "tool" bag.
- Remove the Asbe bag and seal.
- Remove overalls and place into waste sack with Asbe bag and seal.
- Decontaminate respirator and tools with a damp cloth.

Expected fibre release:

Previous work and guidance predicts levels of <0.01 f/ml.

A08

Asbestos Insulation Board (AIB) - No Enclosure

Non Licensable Notifiable Works

- exposure sporadic and low intensity
- and below Control Limit
- fibres firmly linked to matrix

Risks:

Operatives: Asbestos Exposure

Others: Asbestos Exposure

Safety Equipment:

Appropriate RPE / PPE for asbestos as per method statement

Safety Measures:

An assessment will be made on the condition of the AIB, position, the debris/dust on it and whether it can be removed whole from its original position without interfering with it in any way. If there is any doubt that the works cannot be carried out safely and correctly within HSE guidelines an enclosure will be used for its removal.

- Operatives wearing the correct personal safety equipment (dust proof overalls, respirator and Wellingtons) will commence work.
- The area will be isolated off all other people
- 1000 gauge polythene will be used to provide a drop sheet for the works
- Where possible the fixing Nails or screws will be located eg with a magnet, exposed and removed. The board will be carefully removed using shadow vacuuming techniques and the remaining structure be vacuumed and have PVA applied.
- If the fixings cannot be removed, the board will be carefully broken. The removed bits will now be sealed up in a waste sack which will have air excluded. The area will then be vacuumed ensuring all traces of the Asbestos are removed.
- When removed the AIB will be placed into red waste sacks marked with the correct code and symbol as required under the Carriage of Dangerous Goods Regulations, air excluded, sealed and stored in an arranged area. Whole sheets that are too large to put into red sacks will be enclosed in 1000 gauge polythene and sealed.
- Operatives will then decontaminate using the type H Hoover

Expected fibre release:

Previous work and guidance predicts levels of up to 0.1 f/ml.

A09

Asbestos Insulation Board AIB – Enclosure

(Refer to site specific risk assessment)

Risks:

Operatives: Asbestos Exposure

Others: Asbestos Exposure

Safety Equipment:

Appropriate RPE / PPE for asbestos as per method statement

Safety Measures: Enclosure

- Operatives wearing the correct personal safety equipment (dust proof overalls, respirator and Wellingtons) will commence work in the enclosure
- If the fixings are nails, the board will be carefully broken. The removed bits will now be sealed up in a waste sack which will have air excluded.
- If lucky by the board being fixed by screws they will be located eg with a magnet, exposed and removed. The board will be carefully removed using shadow vacuuming techniques
- When removed the back of the AIB will be sprayed and placed into red waste sacks marked with the correct code and symbol as required under the Carriage of Dangerous Goods Regulations, air excluded, sealed and stored in an arranged area. Whole sheets that are too large to put into red sacks will be enclosed in 1000 gauge polythene and sealed.
- Nail Holes - When nail holes may have been contaminated we will drill out to ensure all traces are removed.
- When ready to move the red waste sacks into the dirty end of the air lock, vacuum all the debris from the out side of the bag. Double bag removing all the air. Place the double bagged asbestos waste into the clean end of the air lock ready for disposal into a secure area e.g. Skip, sheeted lorry or sealed van.
- Operatives will then decontaminate.

Expected fibre release:

Previous work and guidance predicts levels of up to 5 f/ml.

A10

Asbestos Wrap & Cut

(Refer to Site specific risk assessment)

Risks:

Operatives: Asbestos Exposure

Others: Asbestos Exposure

Safety Equipment:

Appropriate RPE / PPE for asbestos as per method statement

Safety Measures:

An assessment will be made on the condition of the asbestos, position, the debris/dust on it and whether it can be removed whole from its original position without interfering with it in any way. If there is any doubt that the works cannot be carried out safely and correctly within HSE guidelines an enclosure will be used for its removal.

- This work will be conducted in an enclosure unless the thermal insulation is in good condition. If in good condition we will establish a separation zone around the work site
- Wearing safety equipment (respirator and dust proof overalls), check the condition of the insulation which is to be wrapped and cut.
- If it is in poor condition, vacuum using a H. type filter remove the asbestos residue and lightly spray using a water sprayer with surfactant until damp.
- The lagging should be wrapped. The options are either to use 1000 gauge polythene and 3 inch tape or in some circumstances it may be easier to use cling film eg if the pipe is in good condition
- The pipe work should be examined for suitable breaks in the insulation. This could be where there is a flange which may be unbolted, or where there are brackets attaching the pipe to the wall.
- The pipe work is to be divided into manageable sections (remembering weight, length and route out of the worksite) and labelled using asbestos warning signs.
- If there is no enclosure, using an Asbe bag. The lagging will be removed leaving a gap in the asbestos of at least 50 mm of clean pipe to enable cutting of it.
- If the initial wrap was with Clingfilm, the pipe may need to be wrapped with 1000 gauge polythene when it has been brought down to ground level
- The wrap and cut pipe will then be placed in a sealed skip or secure area ready for disposal.
- Vacuum the area where the pipe was removed. Clean all equipment in a bucket of water and allow to dry.
- Decontaminate as normal

Expected fibre release:

Previous work and guidance predicts levels of up to 0.2 f/ml.

A11

Asbestos Lagging

(Refer to site specific risk assessment)

Risks:

Operatives: Asbestos Exposure

Others: Asbestos Exposure

Safety Equipment:

Appropriate RPE / PPE for asbestos as per method statement

Safety Measures:

- An enclosure will be created and placed under negative pressure.
- Operatives wearing the correct personal safety equipment (dust proof overalls, powered respirator and Wellingtons) will commence work.
- Check re heat of the pipe work / boiler – it should be “cold”
- The lagging will be injected with Surfactant the method statement will identify the closeness of the needles there length and soak time required.
- Only when the lagging is fully wetted will it be stripped from the pipes/vessel. Any dry spots that are found whilst stripping will be dampened down using a water sprayer and re-injected until thoroughly wet.
- The pipes/vessel will be thoroughly cleaned of all asbestos debris.
- If the plant underneath the lagging is hot, be aware of possible scalding.
- Once the asbestos has been removed it will be placed into red asbestos waste (marked with the correct code and symbol as required under the Carriage of Dangerous Goods Regulations) sacks, air excluded, sealed and stored in an arranged area.
- When ready move the red waste sacks into the dirty end of the three stage waste lock, vacuum all the debris from the out side of the bag or wipe down using a water and PVA mixture. Move into the middle section of the air lock and double bag using clear polythene and removing all the air. Seal and wipe down using water and PVA. Mixture. Place the double bagged asbestos waste into the clean end of the waste lock ready for disposal into a secure area e.g. Skip, sheeted lorry or sealed van.
- All surfaces will be vacuumed within enclosure,
- All tools will be cleaned in a bucket of water including the injection equipment and allow to dry.
- Operatives will then go through the decontamination procedure.

Expected fibre release:

Previous work and guidance predicts levels of up to 3 f/ml.

If the pipes are hot and this is not detailed in the method statement, contact the office to discuss the matter, the method statement should detail hot works. The added risks with hot working will be dealt with ie shorter working times in the enclosure, cooling air entering enclosure, etc.

A12

Asbestos: Sprayed Limpet / Flock

(Refer to site specific risk assessment)

Risks:

Operatives: Asbestos Exposure

Others: Asbestos Exposure

Safety Equipment:

Appropriate RPE / PPE for asbestos as per method statement

Safety Measures:

- An enclosure will be created and placed under negative pressure.
- Operatives wearing the correct personal safety equipment (dust proof overalls, powered respirator and Wellingtons) will commence work.
- The coating will be injected with Surfactant the method statement will identify the closeness of the needles there length and soak time required.
- The asbestos will be scraped off with hand tools
- The method statement will explain if there are any additional stages in the removal – eg if it is from AC roof sheets on a demolition site, there may be an additional visual inspection carried out to allow a lock down spray to be applied
- Once the asbestos has been removed it will be placed into red asbestos waste (marked with the correct code and symbol as required under the Carriage of Dangerous Goods Regulations) sacks, air excluded, sealed and stored in an arranged area.
- All surfaces will be vacuumed within enclosure.
- Tool will be cleaned in a bucket of water including the injection equipment and allow to dry.
- Operatives will then go through the decontamination procedure,

Expected fibre release:

Previous work and guidance predicts levels of up to 4 f/ml.

A13

Textured Coating removal – Concrete

(Refer to site specific risk assessment)

Risks:

Operatives: Asbestos Exposure

Others: Asbestos Exposure

Safety Equipment:

- Respiratory protection to FFP3 standard
- Dustproof (Type 5) coveralls
- Safety footwear that is cleanable

Safety Measures:

- An enclosure will be created with polythene to segregate the area. A two stage will be created at the entrance to the enclosure and operatives should decontaminate within the airlock on existing the work area. Within the inner stage operatives will vacuum overalls and wash footwear and wipe RPE. RPE and PPE will be removed and stored in the outer stage.
- Operatives wearing the correct personal safety equipment (dust proof overalls, powered respirator and Wellingtons) will commence works.
- There are various wetting options that may be used – Exotec Gel appears to work in some circumstances – steam in others. When the material has been loosened by steam gently scrap the material back.
- Any waste will be double bagged in asbestos waste sacks, and stored in a secure area/skip. Any remaining debris or waste materials within the enclosure will be cleaned using appropriate a type H vacuum and surface wipes.
- When the supervisor is satisfied that as much of the coating has been removed as possible then the enclosure will be removed and a visual inspection will be carried out and a certificate issued.

Expected fibre release:

Previous work and guidance predicts levels of up to 0.1 f/ml.

A14

Textured Coating removal – Plasterboard Ceiling

(Refer to site specific risk assessment)

Risks:

Operatives: Asbestos Exposure

Others: Asbestos Exposure

Safety Equipment:

- Respiratory protection to FFP3 standard
- Dustproof (Type 5) coveralls
- Safety footwear that is cleanable

Safety Measures:

- An enclosure will be created with polythene to segregate the area. A two stage will be created at the entrance to the enclosure and operatives should decontaminate within the airlock on existing the work area. Within the inner stage operatives will vacuum overalls and wash footwear and wipe RPE. RPE and PPE will be removed and stored in the outer stage.
- Operatives wearing the correct personal safety equipment (dust proof overalls, powered respirator and Wellingtons) will commence works.
- The Material will be dampened with a spray surfactant and plasterboard sheets removed as whole as possible. The edge around the ceiling will need to be inspected and any remaining residue removed. All fixings i.e screws and nails will also be removed and holes drilled.
- Any waste will be double bagged in asbestos waste sacks, and stored in an secure area/ skip. Any remaining debris or waste materials within the enclosure will be cleaned using appropriate a type H vacuum and surface wipes.
- Once removal works are complete; all evidence of dust and debris has been removed and the enclosure dismantled, a thorough visual inspection should be carried out and a certificate issued.

Expected fibre release:

Previous work and guidance predicts levels of up to 0.05 f/ml.

A14

Cleanliness Inspections

Risks:

Operatives: Asbestos Exposure (if not performed correctly)

Others: Asbestos Exposure (if not performed correctly)

Prior to air testing by a UKAS accredited laboratory (or in place of this for some non-licensed non-notifiable works) the Supervisor will undertake a thorough visual inspection of the completed work area and surrounding locations to ensure that they are free from all:

- waste remaining in the enclosure;
- visible debris on the surfaces;
- puddles of water, wet patches and leaking pipes;
- evidence that sealant has been applied to exposed surfaces.

Safety Equipment:

- Respiratory protection to FFP3 standard
- Dustproof (Type 5) coveralls
- Safety footwear that is cleanable
- A torch – the torch beam when shone along a surface at a shallow angle is useful in identifying fine settled dust on surfaces; it can also augment the lighting in the enclosure;
- A screwdriver – this is useful for poking behind pipes and into crevices to help inspect these difficult-to-see areas;
- A mirror – this can be useful in inspecting difficult-to-see areas.

Procedure:

- The inspection should be undertaken in a methodical manner for example starting at the top of the area and working down to the bottom in a clockwise direction around the room/area).
- Take photographs to provide evidence of cleanliness wherever possible.
- HSG 248 'The Analysts Guide' gives the following guidance for required standard of the visual inspection as follows:

"6.15 The removal process will have given rise to the spread of asbestos dust inside the enclosure. Residual dust may still remain on any unprotected or inadequately cleaned surfaces. Such dust presents an ongoing risk to building occupants. Therefore a thorough visual examination of all surfaces should be performed. It should involve a close and detailed inspection across all parts of the enclosure kneeling down or using ladders where appropriate (see Figure 6.2). All items should be checked. The inspection can be assisted by using a torch and by running a fingertip across the surfaces to check for presence of fine dust. Awkward or difficult locations must not be excluded. Baglocks and airlocks should be included."

Further Information:

For further guidance refer to pages 26 to 38 of HSG 248 'The Analysts Guide'

A15

Asbestos Insulation Board (AIB) - Encapsulation

Non Licensable Works

- exposure sporadic and low intensity
- and below Control Limit
- fibres firmly linked to matrix

Risks:

Operatives: Asbestos Exposure

Others: Asbestos Exposure

Safety Equipment:

Appropriate RPE / PPE for asbestos as per method statement

Safety Measures:

An assessment will be made on the condition of the AIB, position, the debris/dust on it and whether it can be safely encapsulated. If there is any doubt that the works cannot be carried out safely and correctly within HSE guidelines an enclosure will be used for its removal.

- Operatives wearing the correct personal safety equipment, white type 5 coveralls, half mask (FFP3) respirator and cleanable footwear will commence work.
- The area will be isolated off all other people using signage and where practicable barrier tape
- 1000 gauge polythene will be used to provide a drop sheet for the works as required
- The operatives will firstly vacuum any loose dust from the boards using a type H Hoover
- The boards will then be lightly mist sprayed with sealant administered from a hand held pump up sprayer, the sealant will be allowed to dry and the process repeated until fully encapsulated
- Operatives will then decontaminate using the type H Hoover

Expected fibre release:

Previous work and guidance predicts levels of up to 0.1 f/ml.

Appendix – Confirmation



I confirm that I have received, read and fully understood the current issue of Hampshire Environmental Services' Asbestos Standard Systems of Work.

Name: _____

Position: _____

Signed: _____

Date: _____

Current Issue: Issue 7 Rev 1 _____