Decontamination is the physical and/or chemical process of reducing contamination to minimise the risk of further harm occurring and the risk of cross-contamination.

**Decontamination area**

Decontamination arrangements should be in place and communicated to personnel before any work in the hazard zone, except where there is an immediate life risk.

All decontamination should take place on-site to avoid spreading asbestos. In exceptional circumstances, personnel may need to continue decontamination off-site; following cleaning, a thorough visual inspection of any area used should be conducted to check for the presence of any dust.

The visual inspection is the most important assessment. If there is no visible dust/material then there is unlikely to be no significant risk.

When considering the site of the decontamination area the incident commander should:

- Establish routes of access to and egress from the building
- Establish sufficient distance from the hot zone to the decontamination area to ensure that no airborne contamination can reach the decontamination area (while remaining close enough to contain any decontamination run off to the initial site and limit the spread of asbestos)
- Determine numbers of personnel requiring decontamination
- Consider location of the BA entry control point
- Take wind direction into account
- Establish the location of the pump and availability of hose reels for washing off and damping down
- Consider the slope of ground and drainage
- Where possible, use a hard standing with good vehicular access
- Take into account weather conditions and the welfare of personnel

**Decontaminating chemical protective clothing wearers**

Chemical protective clothing wearers should be decontaminated using standard wet or dry methods as appropriate.

**Decontaminating breathing apparatus wearers in structural firefighting PPE**

Use a standard procedure. Breathing apparatus wearers should:
• Carry out visual inspection of each other for any exposed skin or hair, noting any areas/locations they find
• Vacuum each other with class H BS 8520-3:2009 vacuum cleaners that have true or absolute high efficiency particulate arrestor filters. Dry decontamination using a vacuum cleaner is [c1] [RM2] normally the appropriate first step in decontamination although it is not a complete decontamination process, particularly in wet and/or windy conditions. It should be followed by wet decontamination. Fire and rescue services should ensure that suitable equipment for decontamination is readily available;
• Damp down all areas of personal protective clothing to ensure that any particles cannot become airborne. They should start at the highest point (i.e. helmet) and work down, paying particular attention to folds and creases in the PPE
• Gently remove debris and dust using water spray, sponges, cloths, etc
• Remove helmets
• Gently wash off and wipe BA facemask and dampen fire hood
• Wash off boots and gloves
• Step into the undressing area or bag (in the dirty area)
• Remove contaminated gloves and don disposable gloves
• Remove firehood and BA set; the method used to remove the BA set must ensure that no residual contamination can be inhaled by the wearer
• Remove tunic
• Roll down overtrousers over boots, ensuring that they are inside out
• Carry out secondary check for contamination of skin and hair
• Thoroughly wash any areas found on either the initial inspection or this secondary inspection
• Carry out inspection of the clothes layer under the structural firefighting PPE. If any clothes are believed to have been contaminated, they must be damped down and removed.
• Step out of dirty area and into the decontamination clean area
• Remove disposable gloves and deposit in dirty area

All contaminated clothing and equipment must be assessed and cleaned appropriately. Generally, hard items can be wiped and rinsed clean. Soft or textured items may require a more thorough cleaning process. Fire and rescue services should decide on appropriate decontamination procedures for their specific PPE, RPE and other equipment in liaison with local competent cleaning contractors, and add this to their asbestos standard operating procedures.

Contaminated protective clothing that cannot be disposed of must be placed in dust tight bags and washed by a specialised laundry.

Where contamination is heavy or the number of wearers is large, this process can be enhanced by using decontamination operatives wearing appropriate RPE and PPE, based on a risk assessment of the hazards and the likelihood of cross-contamination between wearers and operatives.

**Decontaminating firefighters wearing respiratory protective equipment (other than breathing apparatus) and structural firefighting PPE**

This level of decontamination should only be considered for lower hazard asbestos incidents (i.e. asbestos cement and textured coatings) and personnel who have not been involved in hot zone.
When decontaminating, the principle should be to vacuum/wet/wash/wipe areas that are visibly contaminated (e.g. dirt, dust, debris etc), or areas that are known to have contacted asbestos-containing materials (e.g. boots and gloves).

**Procedure**

- Make a visual inspection for any exposed skin or hair that has been visibly contaminated and note any areas/locations if they are found
- Remove and rinse helmet
- Wash off and sponge-wipe the areas of personal protective equipment that are visibly contaminated or have been touched by ACM
- Wash off gloves
- Wash off boots
- Wash any areas of skin or hair with visible contamination thoroughly
- Remove the RPE.

If the incident commander, hazardous materials adviser or decontamination director has any doubt about the effectiveness of the decontamination procedure, or the asbestos hazard level, the decontamination procedures for breathing apparatus (BA) wearers in structural firefighting PPE should be used.

**Assessment of the effectiveness of decontamination of lower hazard asbestos (i.e. asbestos cement and textured coatings only)**

If decontamination has effectively cleaned all visible deposits (dirt, dust, debris etc.) from personal protective equipment and other equipment then no further decontamination action should be necessary.