



EXPERT SERVICES ONLINE SOLUTIONS TRAINING

Asbestos & Hazardous Materials Occupational Hygiene Property Risk Health & Safety Environmental Management Contaminated Land Emergency Management

FLOOD DAMAGE RECTIFICATION

THE PRIMARY OBJECTIVE IN REMEDIATION OF FLOOD-DAMAGED PROPERTIES IS TO COMMENCE DRYING AS SOON AS PRACTICABLE, TO MINIMISE THE POTENTIAL FOR MOULD GROWTH AND FURTHER DAMAGE TO THE BUILDING FABRIC.

Floodwaters pose numerous risks and any repair works must consider appropriate management of these risks.

For instance:

- Cloudy water may be obscuring other hazards such as sharp objects, holes, trip hazards
- Floodwaters and water-impacted materials may be contaminated from pathogenic bacteria and sewage
- Debris left by receding floodwaters may be contaminated with hazardous chemicals and asbestos containing materials
- Floodwaters may have moved, damaged, buried or exposed asbestos containing materials, hazardous chemical containers, electrical cabling and wiring, or gas, potable water or wastewater pipework
- Where floodwaters have receded and left sludge, mud and or contaminated standing water in enclosed, unventilated spaces (subfloors, safes, plant rooms etc.), the air quality in these spaces may be compromised; hazardous gases and fumes may create confined spaces which require careful management

Management of General Safety Risks Following a Flood

Once authorities have confirmed it is safe to return to a property, there are several basic safety management approaches which should be implemented prior to commencing any remediation works.

- Verify electricity clearance has been provided before using the power supply
- Verify water and gas supplies have been confirmed as safe by authorities before attempting to use them
- Ensure contractors and those allocated to complete specific clean-up or repair works are suitably trained, qualified and licenced to do so
- Ensure first aid, clean drinking water and hand hygiene facilities are available for those involved in repair works
- Ensure correct PPE is being utilised by workers involved in flood rectification works (for example rubber-soled shoes, gloves, high visibility vests, protective overalls or hazmat suits)



All porous items which have been impacted by floodwaters should be removed and disposed of to promote ventilation and drying of the substructure, and minimise risk of mould growth.

Immediate Actions

The primary objective in remediation of flood-damaged properties is to commence drying as soon as practicable, to minimise the potential for mould growth and further damage to the building fabric.

Immediate actions include the following:

- Remove any standing or residual water by pumping, and/or wet/dry vacuuming
- Remove any large porous or absorbent items from the property (see below)
- Remove carpet or floor coverings to expose floorslabs
- Remove porous wall linings (drywalling, insulation, plasterboard) to 300mm above the upper flood level
- Move large items of non-porous furniture (e.g. metal bookcases, desks, free-standing shelving) away from the walls, and up and off flooring to increase airflow
- If mould growth has not already occurred, promote airflow around the property to reduce trapped moisture and allow wet items to dry. Open doors and windows, open cupboards and use fans or air movers (if power is connected)
- If mould growth has already begun, ensure impacted and non-impacted areas are segregated using containment walls combined with HEPA air filtration to produce negative air pressure in the impacted containment area. Increasing air movement between impacted and non-impacted areas could potentially spread spores and mould contamination to other parts of the building

Furnishings, Fixtures and Fittings

Following major flooding, it is not cost-effective to attempt to salvage many items in a property. All porous items which have been impacted by floodwaters should be removed and disposed of to promote ventilation and drying of the substructure, and minimise risk of mould growth.

This includes the removal of:

- Carpeting and soft floor coverings such as laminates and linoleum
- Soft furnishings (e.g. fabric or foam sofas, rugs, stools)
- Paper items (e.g. books, photographs). Valuable documentation and paper items should be wiped down or vacuumed prior to being photocopied prior to disposal

Where large volumes of valuable or sensitive paper items have been severely compromised by water, freeze-drying in specialist facilities can be used to prevent mould growth and salvage the item. For small volumes of valuable paper items (e.g. photo albums, passports etc.) if power is not available for freeze-drying, placing the item in a ziplock bag and filling with dessicant (e.g. silica gel) will help to dry out the item. Wholesale removal of larger, high value items for offsite cleaning and remediation may be possible in some circumstances, although this can be costly.

Electronic items are almost always unsafe to use or retain once they have become wet and should be disposed of appropriately. Any electrical circuitry (for lighting, electronic locks, data cabling etc.) must be assessed by a suitably qualified electrician to determine what repairs are required prior to use.

Cars, Vehicles, Combustion Engines

Do not attempt to start an engine which has been immersed or inundated with water as mechanical components can become severely damaged. Pistons seize when wet for prolonged periods, carburettors can be damaged, and lubricants and brake fluids can be spoiled.

Electrical circuity in vehicles is also likely to have been damaged by inundation. Brackish or chemically-contaminated water can cause corrosion of components and the chassis.

Where mould growth is apparent, the damage should be assessed by a suitably qualified occupational hygienist or Indoor Environmental Professional (IEP). Likewise vehicle upholstery (seats, seat covers, carpets, floor mats) will require removal, disposal and replacement. A suitably qualified mechanic should assess vehicle damage for repair prior to using or driving the vehicle. This would typically be undertaken as part of an insurance claim by the owner.

Mould Remediation Works

Where mould growth is apparent, the damage should be assessed by a suitably qualified occupational hygienist or Indoor Environmental Professional (IEP), and this specialist should scope the necessary remediation works independently of any remediation works contractor. Remediation works contractors should be suitably qualified and experienced in mould remediation.

For further information on these services go to: greencap.com.au/flood-response



How Greencap Can Assist

Greencap are experienced, industry-recognised experts in mould assessment and post-remediation verification. Unbiased, scientific and independent advice is given at each stage of a remediation project or insurance claim process. Engaging Greencap can greatly assist with not only protecting the health and well-being of the insured, occupants and contractors but also mitigating losses (time, money, reputation). This can serve to prevent litigation and reduce settlement amounts on claims.

Assessment requirements are dependent on the nature of the leak/flood damage event and the client's preferred level of assessment. Greencap offers clients a range of solutions, from a simple visual inspection to a detailed assessment.

Services include:

- Air / Structural Moisture Assessment
- Mould Testing & Risk Assessments
- Post-Remediation Verification
- Mould Awareness Training

For further information on these services go to: greencap.com.au/mould

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