

Information Management Advice 46 Treating Records with Mould

Introduction

When hard copy records are stored for long periods of time, it is important that you check them regularly for mould, particularly if we have been experiencing prolonged wet or humid weather. Mould can be detected by the presence of powdery material, multi-coloured pigmentation, staining or a musty odour. Mould left unchecked can devastate records rendering them unusable. It can also pose a serious health risk.

What is mould?

Mould is a generic name often applied to various types of fungi that grow on the surfaces of materials such as fabrics, paper, food and leather. They are multicellular organisms that send filaments through the materials they grow on and produce enzymes to break down their food. Moulds reproduce through the production of small spores which are carried through the air and deposited on surfaces – these spores are in the air all the time and cannot be eliminated from storage areas. Given the right conditions these spores will germinate and grow.

What do I do if I find mould in my records storage area?

1. Determine the extent of the problem

Look to see how many records are affected.

WARNING: Mould can pose a serious health risk, so safe handling of infested material is essential. Certain types of mould cause lung, skin and eye irritation and each person can have different sensitivities. People who suffer from allergies, asthma or respiratory problems should not attend to mould infestation.

2. Determine if the mould is dead or alive

Live mould is more difficult to remove and will smear easily. Dead mould looks powdery and will not smear. Also if the paper feels dry to touch, the mould is likely to be dormant. If the mould is alive it also indicates that the environmental conditions of the storage area continue to be unacceptable.

3. Contact the Government Information Strategy Unit

Report the outbreak, detailing the quantity of mould and whether or not it is still living (see *Notification of Incident form* on the GISU website, or call 03 6165 5581). In conjunction with GISU you will need to decide whether you will treat the infestation yourself or bring in contractors.

Removing mould can be difficult, dirty, and time consuming. Mould remediation should not be undertaken lightly – especially where large quantities of records are affected.

Treating mould

Safety First

Obtain respiratory masks, plastic gloves and eye protection before you start work on the records. Ensure your mask is rated for mould spores.

Preparing the work space

Find a clean, dry, well ventilated work space away from other people (Quarantine area). Assemble the equipment you will need to do the task

Equipment	Supplier
P3 dust, mist and fume respirator/mask	Occupational Health & Safety Suppliers
Plastic gloves (Nitrile are best)	Occupational Health & Safety Suppliers
Butcher's paper	Artist's supply store
Container with lid or sealable plastic bags (for disposing of used gloves, cloths etc)	Recycle a glass jar or zip lock bags or purchase from supermarket
Rubbish bags	Supermarket
HEPA filtered vacuum cleaner	HEPA filters can be fitted to many brands of vacuum cleaner
Methylated spirit or Ethanol	Supermarket/Hardware store
Wiping cloths	Supermarket
Brushes, such as a paint brush with soft bristles	Hardware
Large plastic bags or airtight plastic tubs	Hardware
Muslin or pantyhose	Supermarket/variety store

Move the infected records to the Quarantine area

Care must be taken when moving mouldy items as the smallest movement can cause spores to generate which will spread the mould through your collection. Gently place affected materials into plastic bags or airtight plastic tubs and move them to the Quarantine area. Do not leave damp items in these containers overnight or longer.

Lay the infected items on butchers' paper placed on tables or trestles in the Quarantine area. The humidity will need to be kept below 50% in order to dry the records sufficiently.

To confirm the mould is dead, brush the surface of the mould with a small brush – if it is powdery it is likely to be dead. If it is slimy or smears – it is likely to be still alive. If the items are damp they should be dried. Spread items out as much as possible to air them.

Removing the mould

Once thoroughly dry, mouldy records must be vacuumed with a HEPA (High Efficiency Particulate Air) filtered vacuum cleaner. The filter ensures that the spores are not re-circulated around the room. Do not use the brush attachment that comes with the vacuum cleaner as it will get dirty and hold the spores. Instead, use a soft brush such as a paint brush to brush the dust and spores into the cleaner nozzle (brushes should be cleaned with soap and hot water at the end of each day).

Work on a clean, flat and un-cluttered surface. Working on Butcher paper is a good idea as it can be replaced regularly when it gets soiled preventing re-contamination.

Great care must be taken not to get too close to the surface of the record causing it to be 'sucked' up. This can cause serious damage – tears and losses. To reduce the suction, muslin or 'pantyhose' material can be stretched over the end of the nozzle with an elastic band (this also prevents the paper from being sucked into the machine). An additional safeguard is to reduce the size of the nozzle by using flexible plastic tubing stuck into the end of the nozzle.

Returning the records to storage

Shelves where mouldy items were stored will need to be thoroughly cleaned before the items can be returned to the shelves. Shelves should be vacuumed thoroughly and then wiped with a 70% solution of Methylated Spirit or Ethanol. Allow the shelves to dry thoroughly before returning records.

After cleaning, items should not return to storage conditions with high relative humidity, as there is a good chance the mould will return.

Prevention is better than cure!

State Records Guideline No 11 - Physical Storage of State Records details the desired conditions for records storage.

It is a good practice to check records storage areas, particularly secondary storage areas, after a period of heavy rain or humidity.

Further Advice

For more detailed advice, please contact:

Government Information Strategy Unit
Tasmanian Archive and Heritage Office
91 Murray Street
HOBART TASMANIA 7000
Telephone: 03 6165 5581
Email: gisu@education.tas.gov.au

Acknowledgements

- State Records NSW - *Conservation Tip No. 5*
- State Library of NSW - *Dealing with Mould*

Information Security Classification

This document has been security classified using the Tasmanian Government Information Security classification standard as PUBLIC and will be managed according to the requirements of the Tasmanian Government Information Security Policy.

Document Development History

Build Status

Version	Date	Author	Reason	Sections
2.0	April 2015	Christine Woods	Template	All
1.0	June 2013	Deborah Drinkell	Initial Release	All

Amendments in this Release

Section Title	Section Number	Amendment Summary
All	All	Document imported into new template

Issued: June 2013

Ross Latham
State Archivist