Public Record Office Victoria

PROS 11/01

Storage Standard

Guideline

5

Records Storage

Version Number: 1.0

Issue Date: 11/12/2014

Expiry Date: 11/12/2019

Victoria

Table of Contents

Copyright Statement

Disclaimer

The State of Victoria gives no warranty that the information in this version is correct or complete, error free or contains no omissions. The State of Victoria shall not be liable for any loss howsoever caused whether due to negligence or otherwise arising from the use of this Guideline. This Guideline does not constitute, and should not be read as, a competent legal opinion. Agencies are advised to seek independent legal advice if appropriate.

Acknowledgements

The Public Record Office Victoria would like to acknowledge the valuable contribution of State Records Authority of New South Wales and National Archives of Australia, whose storage standards, specifications and guidelines were key references during the development of this Guideline.

1.   Introduction

1.1.   Purpose

This guideline has been produced to assist organisations in meeting the principles of *PROS 11/01 Storage Standard* and associated Specifications.[1]

1.2.   Scope

The intended audience for this Guideline is any organisation including government agencies, APROSS service providers, community organisations and other bodies that store and manage permanent or temporary records of organisations as defined within the *Public Records Act 1973* Section 2.

1.3.   Related Documents

Risk Assessment

PROV's risk methodology outlined in *PROS 10/10 G6 Strategic Management Guideline 6: Records and Risk Management*[2] will provide the fundamentals for developing a risk assessment. *PROS 11/01 G2 Storage Guideline 2: Implementing a Storage Programme*[3] also provides some advice on this subject.

Relation to Standards Documents

This Guideline must be read and implemented in conjunction with Public Record Office Victoria (PROV) Standards and associated documentation, including appropriate Retention and Disposal Authorities (RDAs).

Systems supporting records identification should meet *PROS Standard 11/09 Specification 1 Control*,[4] Section 2.1 Metadata and Section 2.3 Tracking.

The Standard, Specifications and other Storage Guidelines associated with this Guideline are detailed below (see Figure 1):

---

[1] *PROS 11/01 Storage Standard* and associated Specifications may be downloaded from PROV's website:
<http://prov.vic.gov.au/government/standards-and-policy/storage>.
[2] *PROS 10/10 G6 Records and Risk Assessment Guideline* can be downloaded from our website
<http://prov.vic.gov.au/government/standards-and-policy/all-documents/pros-1010-g6>.
[3] *PROS 11/01 G2 Implementing a Storage Programme Guideline* can be downloaded from our website
<http://prov.vic.gov.au/government/standards-and-policy/all-documents/pros-1101-g2>.
[4] *PROS 11/09 Control Standard* and associated Specifications may be downloaded from PROV's website:
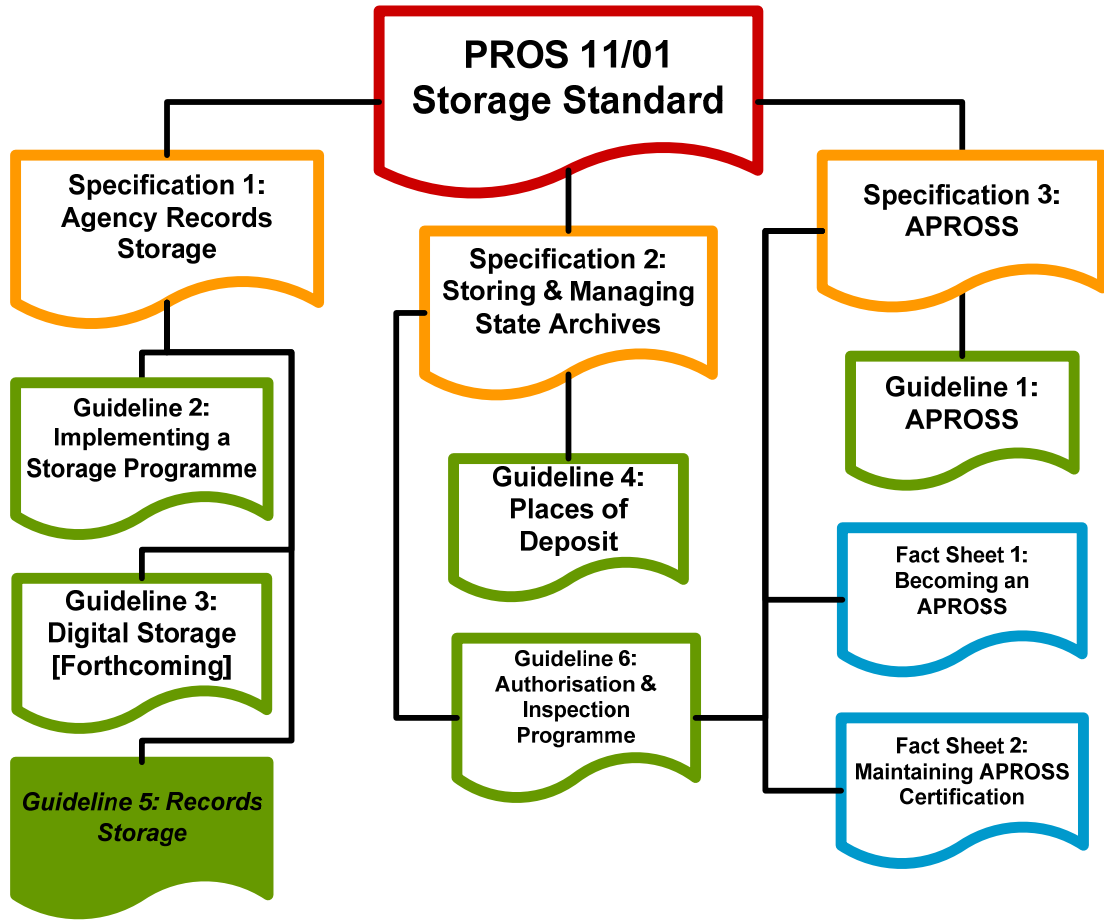<http://prov.vic.gov.au/government/standards-and-policy/control>.

Figure 1: Relationship Diagram

2.   Location and Construction

2.1.   Planning for Records Storage

The physical integrity of records can be affected by exposure to fires, floods, earthquakes, and hazards like dangerous industries and vandalism. A risk assessment should be undertaken before your organisation purchases or leases a building, designates an area to be used for records storage, or authorises a building for records storage. This is to ensure that risks and dangers to records are determined and the strategies required to mitigate identified risks are implemented. The key areas to cover within the assessment are:

- Building construction
- Building services and equipment
- Public safety
- Security
- Risk management systems.

The locality should be investigated thoroughly in order to identify risks. The proximity of a records storage facility to known risks should be calculated as part of the assessment process. Once potential hazards in the locality have been identified, estimates of how far the site should be located away from each known hazard will pinpoint the most suitable area to locate the facility or area.

All identified risks should be recorded in the organisation's risk register and reviewed on an annual basis. Any risks to records identified in the assessment processes undertaken should be managed in accordance with the organisation's risk management process as well as documented in the counter disaster reaction and recovery plan for records.

Risk Category	Risk	Treatment Option	Description
Natural Disaster	Storage facility is within known flood plain. A flood may inundate the facility resulting in loss of records, inability to deliver core services, damage to facility and loss of organisational reputation	Changing the likelihood of the risk	- Maintain an effective disaster recovery plan for both digital and physical records. - Business Continuity Plan is maintained - Digitise vital records and move vital records to locations within storage facility that will be unlikely to be affected by floods
Environmental Damage	Environmental conditions fluctuate in storage areas resulting in loss or damage to records, mould and pest infestations and potential health risks to staff members	Changing the likelihood of the risk	- Monitor and record environmental conditions - Ensure staff members liaise with conservators - Ensure integrated pest management system is in place

Table 1: Example of Risk Register Section on Record Storage related Risk

Dedicated Storage

It is preferable that records storage areas and facilities be dedicated to the storage of records. The main reasons for creating a dedicated space for records are to:

- Avoid additional risks (for example, if chemicals were stored in the area the risk of contamination would be heightened; if computers were stored in the area the risk of theft would be greater)

- Restrict access to the area more rigorously (for example, if furniture and stationery are stored in the area more people would require keys or access passes).

If Holding State Archives on behalf of PROV

For those organisations which are storing and managing State Archives on behalf of the Keeper of Public Records, records storage must be physically separated from areas such as other building areas or loading docks (see *PROS 11/01 Specification 2 Storing and Managing State Archives* Requirement 13).

Experts (for example, architects, shelving contractors and/or logistics and warehousing), standards and PROV staff members should be consulted when storage areas or facilities for State Archives are designed or built or when an existing building is to be refurbished for this purpose. PROV endorsement must be sought for any new plans for storage areas and facilities (see *PROS 11/01 Specification 2 Storing and Managing State Archives* Requirement 2).

2.2.   Storage Facilities

All storage facilities should meet the Building Code of Australia that applied at the time of construction and associated codes and standards. It is also advisable for organisations to check Australian and International Standards and Guides for requirements of relevance to records storage facilities.

Risk	*Research*	*Possible Mitigation*
Risk of damage to, loss of, or inability to access and use records as a result of the location of the storage area or facility	Check newspapers and other literature to determine any known local problems Inspect the site and its surrounds Examine local government records, such as contour and flood maps Discuss the site with those with local or specialist knowledge	Choose a location that is away from known hazards such as: • Heavy atmospheric pollution • Hazardous industries, vandalism and flight paths • Flood plains, rivers and creeks, land liable to subsidence • Strategic installations such as fuel depots or munitions factories • Bush fire prone areas Modify an existing building to ensure risks are removed or minimised Ensure buildings are constructed of steel, reinforced concrete or concrete blocks to maximise integrity, security and fire resistance Construct walls separating storage and office spaces of fire resistant material Modify existing services and practices (for example not storing records on or below the ground floor, changing security and access arrangements) Undertake building maintenance

Risk	Research	Possible Mitigation
		Implement protective mechanisms such as: • Detection and suppression systems and security systems • Boxes or secure packaging for all records and fire proof safes for vital records Develop and implement policy and procedures to address risks in practices or service provision, including a counter disaster plan for records and recordkeeping systems

Table 2: Location Risk Table

Risk	Research	Possible Mitigation
Risk of damage to or loss of records as a result of the building construction	Inspect the building and its surrounds thoroughly Discuss the building with those with local or specialist knowledge	Ensure the building has good drainage: • Choose a pitched rather than a flat roof to minimise rooftop water collection and possible leaks • Regularly check guttering and avoid box guttering to minimise possible leaks • Pipes for drainage do not pass through storage locations to minimise possible water or waste damage to records Check to ensure door and window frames properly seal and will not let water into the building Insulate the building to assist in controlling temperature and relative humidity within the storage areas Ensure the building is • Suitable for the type or records being stored. • Soundly constructed of appropriate materials to prevent risk of damage due to exposure to the elements, fire, or vermin infestation • Secure from intruders and those with inappropriate access • Adequately protected from fire

Table 3: Building Construction Risk Table

Risk	Research	Possible Mitigation
Risk of accidental damage to records as a result of the building design or use	Inspect the building, spaces used and its surrounds, including drainage Check building plans Discuss the building and potential storage areas with relevant experts (such as the facilities manager, building maintenance staff, structural engineers, fire inspectors and disaster management experts)	Ensure that: • All electrical wiring passes through conduits • Adjacent activities pose no threat to records • Records located under plumbing, water pipes, sprinklers or drainage pipes are in storage containers and that regular inspections and maintenance of plumbing services is undertaken • Records are not co-located with the following: • Chemical storage areas • Flammable materials • Electrical plants • Overhead pipes or plumbing • Kitchens and washrooms • Machinery • Air conditioning units or plants

Table 4: Building Design and Use Risk Table

2.3.   Storage Areas

Records should not be stored in attics or basements unless measures have been taken to mitigate risks. These areas of a building do not meet the requirements of the Standard without improvements or rectification work being undertaken.

Measures should be introduced to ensure that steps are taken to protect records if compromises regarding a building or storage areas must be made. For example, if records are stored in a basement, then the basement should be waterproof and well ventilated, humidity levels should be managed so that mould is not encouraged, and storage shelving must be raised off the floor by 100-150 mm as a flood disaster precaution. It may be necessary to remove or relocate records to a safe environment until all identified risks have been mitigated.

If records are held in office areas such as at desks or near work areas, rather than in designated storage areas, care should be taken to minimise potential damage to records while considering the needs of employees. For example, as with storage areas, records should not be stored under windows or around the edges of a building as it is generally warmer in those spaces. Covering the window, which would help to protect the records, may have a negative impact on the employees so using shelving with pull down covers may be preferred.

Area of Concern	*To Minimise Risk to Records*
Rooms / equipment	Storage rooms or equipment should be lockable and access controlled (if records are located in office spaces lockable shelving, such as shelving with pull down covers, could be used to control access and give protection)
Furnishings / floor covers	Furnishings and floor coverings should not be made of materials that will attract insects
Aisles	The arrangement of storage areas and shelving units should allow for ventilation Consider wheelchair access, trolley movement and access for ladders and other factors when deciding the width of aisles Provide an area for sorting new records received and returned retrievals to ensure aisles are not blocked
Waste	Any waste or structural obstacles should be removed promptly
Walls	Fire rated walls should divide records storage areas from non-storage areas such as work spaces Subdivide large storage spaces into smaller units by the use of dividing fire resistant walls to increase fire protection, maintain environmental conditions at constant levels and improve security
Doors	Doors to storage areas should be lockable, fire resistant, wide enough to allow for the movement of trolleys, and kept closed If doors need to be kept open during use, then they should be fitted with magnetic devices designed to automatically close doors upon activation of the building fire alarm/detection system
Ceilings and floors	Ceilings should be high enough to allow a 500mm clearance between the top of shelves and fire sprinkler heads to ensure that the sprinklers are not accidentally activated It is **vital** to ensure that the load bearing capacity of the floor is adequate to cope with full shelves of records (it is strongly recommended that **a structural engineer calculates and recommends floor-loading requirements** based on the density and quantity of the materials stored) Materials used for walls, ceilings and doors should be hard-wearing and not likely to shed dust or grit Internal structures should be in good condition and not emit substances, such as acidic gases, when they decompose or are subject to fire
Windows	Buildings or rooms used for records storage should not have windows or skylights and west facing windows should be avoided as they present dual dangers to records from heat and light If there are windows or skylights, measures should be taken to prevent natural light from entering, such as fitting windows with: • Heavy curtains, shutters or blinds, preferably of heat reducing fabric, to reduce or eliminate illumination • Screens to prevent ultra violet light from entering • Ultra violet filtering film

Table 5: Storage Area Risk Table

3.   Preservation and Safety

Preservation and security of records helps to ensure that the records can continue to be accessible and readable for the duration of their retention period. The storage environment, including the construction and location of storage facilities and shelving layout, has a profound impact on the preservation of records.

To protect and preserve an organisation's records and to ensure staff members continue to work in a safe environment identify preservation risks and implement strategies that reduce those identified risks.

There are a number of key risk categories which need to be assessed when identifying preservation risk (see Table 6).

Category	Concern	Possible Record Preservation Risks
Environmental	Without controlling humidity or temperature levels or other key environmental systems and controls there will be an ongoing deterioration in the condition of records	Ineffective or no environmental controls Ineffective or no monitoring and maintenance of the environment or environmental controls Inadequate airflow and ventilation of storage areas and facilities Untrained or unqualified staff members
Storage Management	The allocated space and storage medium will impact upon the preservation of records	Allocated storage is unfit for purpose Containers are not fit for purpose
Handling	The ineffective handling of records by all users will have a detrimental impact on the records. Handling includes: • Retrieval and return process • Handling and transport equipment • Containers • Staff member knowledge and awareness	Retrieval and return processes are inadequate Transporting and transport equipment are either ineffective or staff members are unaware of the proper procedures Poor packing of containers
Staff Knowledge and Expertise	Inexperienced or ill-informed staff members can pose a significant risk to records and to staff member safety	Unsafe work practices being applied Inappropriate preservation activities being applied

Table 6: Preservation Risk Table

3.1. Preservation

The long-term preservation[5] of records will be dependent upon a number of factors, including temperature and humidity levels, protection from pests, the effective management of any mould-affected items, air quality and the effects of natural light.

The term conservation is commonly used in conjunction with preservation but is actually a component of preservation.[6] Only staff members with the appropriate training should undertake conservation treatments on records. Repairs to records should only be carried out under the supervision of a conservator and in consultation with PROV.

Records are created in a variety of formats: paper, microforms, photographs, moving images, sound recordings, maps, drawings or electronic records. Many of these formats require special storage environments and equipment to ensure their ongoing preservation.

Standards for Environmental Conditions

There are a number of different standards (both local and international) that establish a range of environmental conditions that will, if effectively maintained, protect the integrity of the records for as long as they are required.

> Sites storing and managing State Archives will need to ensure their environmental conditions are in accordance with standards detailed below.

PROV recognises two key documents as suitable bases for establishing the environmental levels in storage areas or facilities:

- ISO 11799 Information and documentation – Document storage requirements for archive and library materials[7]

- National Archives of Australia (NAA) – Standard for the Physical Storage of Commonwealth Records.[8]

The above documents address conditions for a variety of record formats.

Organisations must not allow records to become damaged or unusable during their retention period, as a result of ineffective or negligent storage management, including the prevailing or fluctuating environmental conditions, disaster events, poor maintenance or malicious

---

[5] Preservation is described in a number of different ways including:
- Processes and operations involved in ensuring the technical and intellectual survival of authentic public records over time.
- Protection of cultural property by minimising deterioration, whether chemical or physical.
- As a broad function that includes various other components, such as conservation, storage, copying and handling.

Descriptions of preservation can be found in Australian Standards (http://www.saiglobal.com), the Australian Institute for the Conservation of Cultural Material guidance (http://www.aiccm.org.au), and information provided by National Archives of Australia (http://www.naa.gov.au).

6 Conservation is described as:
- Those activities that involve direct interaction with the records and which are carried out by professional conservators
- Actions that prevent damage and loss to cultural heritage.

[7] International Organization for Standardization 2003, *ISO 11799 Information and documentation - Document storage requirements for archive and library materials*, ISO, Geneva, Switzerland.

[8] National Archives of Australia 2002, *Standard for the Physical Storage of Commonwealth Records: Appendix: Guidelines for Records Storage* accessed August 2014 <http://www.naa.gov.au/Images/standard_tcm16-47305.pdf>.

damage (see *PROS 11/01 S1 Agency Records Storage* Requirement 16 for agencies, and *PROS 11/01 S3 APROSS* Requirements 16 & 17 for APROSS facilities).

Environmental Conditions

Environmental conditions within storage areas and facilities have a major impact on the preservation of physical records and the rate with which they will deteriorate. Temperature and humidity are two of the most vital components in a records storage programme. When major fluctuations in temperature and humidity levels occur, moisture is absorbed and released frequently, causing deterioration to records.

Environmental conditions include temperature and humidity, light, air quality, and magnetic fields.

Condition	Description	Possible Mitigation
Temperature and Humidity	Moisture is a requirement in many deterioration reactions and is crucial to the germination and growth of mould[9] Temperature[10] and humidity[11] levels should remain as stable as possible to minimise cost to the agency for conservation work to records for the duration of their retention period Monitoring the temperature and humidity within the storage area or facility is critical and allows you to know: • What is happening in the storage area or facility • When the storage area or facility is undergoing major fluctuations; the change in season (for example, spring to summer), or a period of wet weather after dry weather, are particularly important times • If air-conditioning is working appropriately in the storage areas • Which storage areas function well and are stable and which ones are not (this will allow you to determine which storage areas to use for records of archival or long term value)	Appropriate building design and construction such as being made of materials which respond slowly to the external climate Using air conditioning Installing a Building Management System (BMS) to control and monitor temperature and humidity, security, fire protection, lighting and air quality Locate the storage area or facility in an area not prone to major changes in temperature or humidity Insulation from the external climate, for example put insulation batts into ceilings, floors and walls Use portable dehumidifiers, silica gel or moisture absorbing crystals, and ceiling fans to regulate humidity and provide good ventilation
Light	Storage areas should not have external windows or skylights as all forms of light can damage records Lighting should not be more than necessary for storage activities, such as record retrieval and replacement, inspection of storage areas and	Prevent sunlight entering storage area, by covering windows and skylights Use movement-activated or time-limited lighting in storage areas, so there is lighting only when required Store records in boxes to reduce their exposure to

---

[9] See Appendix One: Managing a Mould Infestation.
[10] Temperature helps to determine the rate of chemical change in materials and is also an important factor in biological and physical deterioration.
[11] Relative Humidity (RH) affects the rate of deterioration.

Condition	Description	Possible Mitigation
	maintenance activities such as cleaning While light level in excess of 240 lux is harmful to records in most formats, sufficient light levels in work areas are necessary to eliminate eyestrain and other work related-illnesses, and to prevent accidents The following is recommended: • General background 160-240 lux • Routine office work 400 lux • Work with poor contrast (proof reading) 600 lux Luxmetres are expensive to purchase and difficult to use, so only organisations with large collections of records of long term value should be concerned with measuring light intensity	light Use soft and diffused lighting Use low ultra-violet (UV) emitting bulbs or place filters over the lights Install UV filtered fluorescent lighting and timer controlled switches for records that are either deemed to be of permanent value, State Archives or long term temporary Base suitable light levels on requirements in relevant Australian Standards
Air Quality	Air must be able to freely circulate within the storage space to prevent 'pockets' of stagnant air and high humidity; there should also be intake of fresh air It is important that the air entering and circulating through the storage area or facility is 'clean air' and does not contain dust or pollutants which will cause deterioration to records	Good ventilation in the storage area can be achieved by using fans or air conditioning A 'clean air environment' can be achieved through: • Careful selection of the location of the storage area or facility so that its not near heavy industrial locations • Use of filtration systems to exclude dust, sulphur dioxide, carbon monoxide, and pollutants • Placing inflow ducts so that they do not draw in air from car parks or busy roads • Periodically monitoring air quality to check for dust and acidic and oxidising gases
Magnetic Fields	Magnetic fields can distort the data contained in some record formats, such as analogue disks and tapes	Isolate records from magnetic fields, including: • High intensity electro-magnetic fields, such as high voltage power lines • Lightning conductor systems • Electric generators and motors • Electrical wiring

Table 7: Environmental Conditions Risk Table

Condition	Description	Possible Mitigation
Integrated Pest Management (IPM)	Integrated Pest Management (IPM) refers to the combined involvement of conservators, collection or records managers, maintenance staff members and building managers to determine if there is an insect or vermin problem, assess the problem, eliminate the problem and prevent it from happening again An integrated pest management approach is based on a range of preventative measures and includes: • A risk assessment of the storage area or facility to identify possible food sources or environmental conditions which would encourage pests and rodents and any current pest activity • Good housekeeping practices such as regular cleaning and monitoring • Implementing preventative measures to control pests and rodents • Isolating and treating affected records • As a last resort, active intervention measures	Preventative measures[12] include: • Maintaining a cool, dry, ventilated, and clean environment • Prevent the accumulation of rubbish or food • Selecting furnishing materials and floor coverings that do not attract insects • Configure the shelving so that the bottom shelf is 100-150 cm from the floor to enable cleaning and air circulation • Design storage operation so records are inspected for infestation before being placed in storage • Regularly inspect for pests and vermin • Spray the perimeter of the building to discourage pests and vermin • Use pest control traps and baits
Containers	PROV containers are the only ones acceptable when transferring records to PROV (unless prior arrangements have been made) and are available through Archival Survival: <http://www.archivalsurvival.com.au>	Use PROV storage containers as they • Are designed to protect the records from damage • Minimise the weight each contains Avoid storing records on pallets: • Boxes on the lower levels can be damaged under the weight of the boxes of records stored on top of them • It restricts accessibility to the records
Handling	Records of long term value, including those records designated as State archives, need to be handled with great care to ensure that they survive for as long as they are needed	Implement policy and procedures for all users on the handling of records, including: • Measures to ensure records are handled carefully and remain in original order • Supervision and training of Staff members and quality assurance measures to prevent damage
Acclimatisation of records	When retrieving records that have been stored in cooler environments, they must be acclimatised before use or risk causing stress and damage to vulnerable records	Regardless of the record type if you allow a 24 hour acclimatisation period this should prevent any unnecessary stress upon the record

Table 8: Storage Management and Handling Risks Table

---

[12] Also see Appendix Two: Managing a Pest Infestation for additional information on possible methods for treatment of infested storage areas and records.

3.2.   Safety

Safe work practices impact on all aspects of storage, including building location and construction, shelving layout, storage management practices, and maintenance. Risk assessment, mitigation and plans should therefore include consideration of health and safety.

All Victorian employers have responsibilities under the *Occupational Health and Safety Act 2004*. Please refer to WorkSafety Victoria[13] for guidance on assessing and mitigating Occupational Health and Safety risks.

Organisations should refer to documentation produced by WorkSafe Victoria and in particular the publication *WorkSafe Victoria Manual Order Picking: A guide to manual order picking[14]* for information on safe manual handling practices. Safe Work Procedures (SWPs) and Standard Operating Procedures (SOPs) should be produced to support each activity where staff members are at risk.

Equipment should be chosen that reduces manual handling risks to staff members as well as protecting the records, and may include:

- Step ladders, with work platform and spring loaded castors, guard and hand railing
- Ladder with hydraulic lift, guard and hand railing
- Hydraulic lifters and tables
- Transport trolley to move collection items (many different types may be needed)
- Conveyor to transport items.

---

[13] Please refer to the WorkSafety Victoria website for more information: <http://www.worksafe.vic.gov.au>.
[14] WorkSafe Victoria 2007, *Manual Order Picking: A Guide to Manual Order Picking,* accessed August 2014 <http://www.worksafe.vic.gov.au/forms-and-publications/forms-and-publications/manual-order-picking,-a-guide-to>.

4. Identification and Control

All records need to be registered and controlled in a system which allows the records to be identified and tracked otherwise they may become 'lost' due to being moved to storage.[15]

Identification and Control Mechanisms	Possible Mitigation
Tracking	Recordkeeping systems include information on individual record items, the containers that they are stored in, when they have been retrieved or used, and where the records are physically located Tracking occurs regardless of location, and includes identification of how long the records will need to be stored prior to their destruction or transfer (a range of tools such as box lists, bar-coding systems and registers to manage information about physical location of records may be used)
System	Each records storage area has a system of location control that includes the following components: • A unique identifier and label for each container and for all shelving and other storage equipment (for example, plan cabinets) • Identification of the shelf location of all boxes of records in the organisation's recordkeeping system and on consignment documentation for the transfer of records to and from storage[16] • A separate and accurate location index (that is, which records [container number] are stored in which location [shelf / bay number] in the storage area) • Maintenance systems and procedures to ensure that all location documentation is kept up to date
File Audit	Audits are: • Conducted to determine the location of physical files within general office accommodation, storage facilities or areas where records are continually being moved • Supported by organisationally approved procedures and undertaken with a frequency based on organisational need and the effectiveness of systems that track file movements The outcomes of file audits are documented, including details of the number of previously missing files located, files newly discovered to be missing, physical areas or types of records where problems are prevalent, and the amount of time taken to undertake the file audit (this data will help drive changes in organisational policies and procedures, and the behaviour of records users and officers)
Transfer between facilities	Ensure accurate identification and control of the records being moved, including: • An accurate list of what is to be moved where, when and why • Responsibility assigned and checks made to ensure that what has been prepared to be moved and what has been received matches the list of what was to be moved • An accurate list of what has been received, when and where it is now located

---

[15] See *PROS 11/09 Control Standard*. Sections 2.1 Metadata and 2.3 Tracking:
<http://prov.vic.gov.au/government/standards-and-policy/control>.
[16] By 'consignment documentation' what is meant is the documentation for records that were transferred at the same time and from the same organisation as part of the one physical transfer.

Identification and Control Mechanisms	Possible Mitigation
	When multiple organisations are involved in transfers of records from one place to another it may be prudent to negotiate and capture in a contract or agreement exactly which organisation will be responsible for undertaking what checks When a transfer of custody is involved, please refer to the Requirements and Guideline associated with *PROS 10/17 Operations Management Standard*[17]
Transfer of State Archives	Information for agencies on preparing State Archives for a transfer to PROV is located in Fact Sheets and Guidelines supporting *PROS 10/13 Disposal Standard* and associated Specifications: <http://prov.vic.gov.au/government/standards-and-policy/disposal> Once transferred, State Archives are identified and managed in accordance with the Archival Control Model[18] which requires State Archives to be identified in a very specific way Records identified as being State Archives will need to be registered within PROV's archival systems (PROV personnel will work with an organisation holding State Archives to perform the necessary work to complete registration) The process of registration will occur if the records are: • Held by an agency at the time of transfer[19] • At a facility appointed to hold State Archives once appointment has been finalised

Table 9: Identification and Control Measures Table

---

[17] PROS 10/17 Operations Management Standard and associated documents are located on PROV's website <http://prov.vic.gov.au/government/standards-and-policy/operations-management>.
[18] The Archival Control Model is available for download from our website: <http://prov.vic.gov.au/provguide-66>.
[19] Information on transfer of State Archives to PROV is located on our website. See <http://prov.vic.gov.au/government/standards-and-policy/disposal> and <http://prov.vic.gov.au/government/disposal-and-transfer>.

5. Security

5.1. Building Security

Security needs will differ depending on the physical storage facility building, nature of the organisation, its resources and the records it produces and stores. Controlling access to buildings and storage areas will help to prevent the alteration, destruction, damage or theft of records by ensuring that only those authorised to do so are able to access them. At a minimum, records storage areas and facilities should be intruder-resistant and access-controlled. This may be achieved by using entry controls, intruder alarms, and security guards.

Security risks should be assessed by relevant personnel (such as Facilities Manager, Records Manager, Security Contractors), preferably with the aid of expert advice.[20] Organisations may be able to request site visits from local fire brigade personnel and police to assist in security audits and risk assessments.

Security	Possible Mitigation
Entry Controls	Ensure that: • The exterior doors and windows of the storage area and facility are lockable, control access through electronic access systems or locks, monitor access controls, and that measures to detect breaches and protect records are in place • A register of keys or access passes and policies regarding duplication of keys are in place and maintained, report losses and that the keys or codes are changed when staff members / contractors changes position • Only personnel who have the appropriate approval (such as security personnel, building managers and emergency services) are issued with passes or keys and that external clients or maintenance workers are supervised when they are in records storage areas • Unnecessary or redundant doors and windows are blocked and vulnerable windows are secured with roll down shutters, bars, grills or intruder-resistant glass • Provisions are made for emergency situations, such as having a master set of keys, pass holders' code numbers or other details kept in a secure place away from the records facility Discuss the suitability of control measures with a crime risk management consultant or facilities staff members within the organisation to ensure that they are appropriate to address the identified risk
Intruder Alarms	Install alarms at all storage facilities, whether or not staff members work in the buildings, and use a 'remote' alarm system which sounds at the responsible party's security room or office (to minimise noise pollution) and requires attendance by a security guard Subject procedures and details of security systems to rigorous assessment to ensure any security risks identified have been addressed and include rules for response to the storage facility's alarm (including the minimum response time) are included in the assessment

---

[20] Expert advice would be guidance or advice obtained from those with demonstrated expertise in the area of records storage security.

Security	Possible Mitigation
	Furnish the security firm with an up to date list of the names and after-hours telephone numbers of people who should be alerted if the alarm activates, and who will be expected to attend the premises
Security Guards and Patrols	The organisational policy enables employment of security staff and after-hours patrols, including for unoccupied records storage facilities Determine the need for security personnel by considering: • The nature and importance of the materials held in the store • The location of the facility and surrounding risks including recent incidences of burglary or arson • Good perimeter surveillance and lighting to deter potential intruders and adequacy of alarm systems
Staff Member Responsibilities	Ensure that all staff members, including volunteers and contractors, are made aware of the importance of security within the building and records storage areas, including use of: • Organisational policy and procedures which describe the importance of security including actions Staff Members need to take to maintain it • Training on responsibilities, policy and procedures • Performance audits Have staff members, volunteers and contractors sign confidentiality agreements that set out responsibilities for access and handling of records and observing codes of ethics, and that encourage reporting of any damage or security breaches observed
Security of Records in Transit	To prevent records going missing in transit, ensure that lists are accurate and appropriately checked when transported including when received To protect records being transported, used in the field, or by personnel at home from unauthorised access and disposal, have in place policy and procedures to support records security that cover: • Authorisation process for transporting records between locations • Under what circumstances (if any) staff members may be able to take records home • Directives regarding the security of records, including the use of reputable courier services[21].
Monitoring	Monitoring of security measures may involve checking and assessing alarms, motion detectors, cameras, surveillance equipment, locks and other access controls and checking for new security risks and required action, for example: • If an alarm is temporarily disabled, the organisation may wish to employ a guard or a regular patrol until the alarm is repaired • If security firms are used, their performance should be monitored and, if unsatisfactory, a plan for improvement or the replacement of the firm should be considered

Table 10: Security Risk Table

---

[21] PROV conditions for couriers are located in the The Victorian Government Agency Collection Agent Authority: <http://prov.vic.gov.au/government/standards-and-policy/all-documents/form-government-agency-collection-agent-authority>.

6. Maintenance

The building, its equipment and services will need to be maintained to approved standards, legislation and building codes. Appropriate maintenance will also minimise risks to the records. For example, the effective cleaning and keeping clear of clutter of any records storage area or facility will help the long term maintenance of the records by reducing dust and other contaminants and the likelihood of pest and rodent infestations. It will also help with minimising risks to the safety of the people working in storage areas.

> If an agency has records in an APROSS site the service provider will have the responsibility for ensuring building maintenance and other responsibilities for the site. Agencies should however undertake random spot checks to ensure that records in whatever format remain accessible and readable and to determine any conservation or preservation work needed.

6.1. Maintenance Programmes

Maintenance programmes for records storage involve the ongoing checking and treating of a number of factors that impact on quality of the storage environment through regular inspection and monitoring in accordance with a strategic plan.

Programme Component	Description
Maintenance Plan	The purpose of having a maintenance plan[22] is to ensure that the room or building used to store records is properly maintained so that the conditions required for storage do not deteriorate; Generally, a maintenance plan may cover four areas of maintenance: • Routine maintenance (for example, day to day works, such as cleaning) • Preventative maintenance (for example, pest control or checking for cracks in the walls or ceiling) • Responsive maintenance (for example, fixing faulty lights in a storage space upon receipt of a maintenance request) • Long-term maintenance (for example, replacing the electrical wiring every ten years) A maintenance plan may consist of the following components: • Strategic direction statement or mission statement • Risk assessment of the storage facilities • Inventory of facilities & equipment, how often they need to be checked, and by whom • Schedule of planned maintenance works • Process for requesting unplanned and undertaking emergency maintenance

---

[22] The maintenance plan for the organisation may be part of the organisation's facilities management plan (that is, the facilities management plan includes the storage of records).

Programme Component	Description
Building Inspection	Regular building maintenance inspections could be undertaken by your facilities team or qualified contractors and should include: • Buildings and storage areas, including shelving and containers • Security, fire suppression and prevention • Environmental conditions • Cleanliness and Pests Regularly inspect the building and its surrounds for issues, including: • Cracks or dampness in walls and flaky paint or plaster • Signs of water leaks, spillages, blockages in drains, roofs or gutters, corrosion, pest infestation, mould, damage, or unlawful entry, such as vandalism or broken windows • Light globes not working • Signs of new risks
Monitoring Environmental Controls	The frequency of monitoring and inspections should increase if an irregularity in environmental conditions has been discovered, or if there has been severe storms, high temperatures or humidity, or high winds The following should be used to monitor conditions, particularly if State Archives, vital records, computer disks and tapes or large quantities of audio visual material are being stored: • Whirling hygrometers, also known as psychrometers, may be used for regular monitoring programs and more intensively when concerned about environmental conditions; these devices are accurate, easily portable and less expensive than thermohygrographs • Thermohygrographs, sometimes known as hygrothermographs, record temperature and humidity levels continuously, allowing the stability of the environment to be assessed; indicate patterns of the environmental control; produce charts which can be retained as a permanent record of performance; and provide the basis of diagnosing problems with air conditioning equipment (they are delicate scientific instruments which need to be treated carefully and require recalibrating occasionally, are expensive to purchase, and may sometimes be obtained by hire from larger archives and museums) • Building management systems (BMS) are electronic programs that monitor vital elements such as temperature and humidity, security, fire protection, lighting and air quality and may, if needed, monitor conditions from remote locations (purpose-built repositories, especially those intended for records of long term and continuing value, should investigate building management systems) • Data loggers are compact temperature and humidity monitors which print readings out onto graphs; information can be downloaded to a personal computer (PC) (these tend to be cheaper than thermohygrographs) • Hand held probes and recorders Air conditioning systems must be regularly cleaned, monitored and maintained to ensure that they are performing correctly (Checks should include all aspects of the unit and a regular programme of changing filters should be established to control the air quality)
Maintenance Schedule	A maintenance schedule should be established that details when each of the activities should occur (for an example of a schedule see Appendix Four: Maintenance Schedule) Contracts for building maintenance should include provision for the maintenance factors identified within this Guideline and performance should be regularly assessed

Table 11: Maintenance Programme Components Table

7. Disaster Preparedness and Management

Business continuity and disaster planning may be conducted as part of the organisation's strategic planning or it may feed into recordkeeping strategies and policies.[23]

Risk	Benefit
Asset recovery could focus on replaceable digital equipment rather than records if records are not addressed and prioritised within an endorsed disaster preparedness, management and recovery plan The cost of recovery could exceed the insurance payout for recovery of records (delaying essential recovery actions) if an endorsed disaster preparedness, management and recovery plan failed to take into consideration the cost of recovering vital records Ignorance regarding what actions could be taken to save records could result in vital records being lost when they could have been recovered	Measures needed to prevent further damage occurring after the disaster has happened are known, prepared for, and carried out promptly Prioritisation of recovery actions needed has occurred prior to the disaster to ensure that time and money is spent wisely Action taken during a disaster is prompt and appropriate as people know what to do when and who is responsible for doing what

Table 12: Disaster Recovery Plan Risk and Benefits Table

7.1. Disaster Management Plan

There may already be a programme to address disaster management, business continuity or disaster recovery in place that adequately covers the storage of public records. If not, one will need to be developed.

Programme Components	Description
Disaster Management Plan	A plan for disaster preparedness, management and recovery includes (but is not limited to) the following information: • Names or position titles of those responsible for carrying out particular actions in the event of a disaster • The organisation's vital records (this may be in the form of a vital records register, with information about the location and value of the records, and priority for salvage and recovery in the event of a disaster) • The contact details of people required to respond to the disaster • Insurance details regarding cost of recovery • Names and contact details of companies that can be called to assist with management of and recovery from a disaster, including commercial disaster recovery companies and support

---

[23] More information on records management strategies and policies can be found in *PROS 10/10 Strategic Management Standard* and associated Specification and Guidelines: <http://prov.vic.gov.au/government/standards-and-policy/strategic-management>.

Programme Components	Description
	organisations or groups that can provide assistance in a disaster event
	• What records were stored where, so that the extent of what has been lost can be quickly determined
	• Location and details of disaster bins containing equipment and tools
Processes and Procedures	Processes and procedures should be in place that cover the assessment of records affected by a disaster and the prioritisation of their treatment and include a check to ensure that recommended actions have been carried out as planned
Planning Tools	To help with developing disaster management plans, the Keeper has endorsed tools developed by other organisations (they will need to be adjusted to match the Victorian government jurisdiction):[24] • National Archives of Australia: Disaster Preparedness Manual for Commonwealth Agencies • State Records Authority New South Wales: Counter disaster strategies for records and recordkeeping systems • Heritage Collection Council: Be Prepared: Guidelines for small museums for writing disaster preparedness plan • State Library of Queensland: Counter Disaster Planning: Template for the development of a counter disaster plan for institutions that collect documentary heritage materials
Vital Records	As recovery resources will initially focus on salvaging vital records (records that are vital to ongoing business operations), the disaster recovery plan should include identification and management of vital records[25]
Disaster Tools	A disaster bin is a container or room that has equipment and resources in it that may be needed in the immediate aftermath of a disaster (for example, mops, towels and buckets to soak up water in the event of a flood, fire extinguishers, fire blankets, and fire respirator masks): • The contents will depend on the nature of the environment and the type of disaster anticipated as being likely • A bin provides the benefit of portability • A disaster room provides the benefit of space which can be used to sort through and assess the extent of damage to specific records
Fire Detection and Protection	Appropriate and comprehensive fire detection and protection systems and equipment are important factors for records storage areas and facilities and should be implemented in accordance with the Building Code of Australia and Australian standards[26] Regular fire inspection should be undertaken in a storage area or facility by a qualified fire safety expert to ensure that standards are met and it is safe and it is a good idea to advise the local fire brigade that the building holds flammable records

Table 13: Disaster Preparation and Management Programme Components Table

---

[24] The Disaster Management endorsed tools may be downloaded via PROV's website: <http://prov.vic.gov.au/government/standards-and-policy/storage>.
[25] A vital records register identifies and therefore enables more efficient management of vital records, including State Archives.
[26] Please refer to the relevant Australian and International Standards for fire safety requirements: <http://www.saiglobal.com>.

7.2.   Disaster Response and Recovery Assistance

One of the most difficult aspects in the dealing with any disaster is knowing when and where to start and what to do. Water-based records damage offers the most scope for recovery activities. Fire and pest damage, once it has occurred, leaves little prospect of restoring records. Fire damaged records are almost always also damaged by water.

The preferred option for recovery of water damaged paper based records and in particular State Archives is to undergo the vacuum freezer drying process. Whilst there are other methods of drying (for example, freezing and air drying) they are not as effective in treating the records. Mould is a real threat to records not properly treated.[27]

Assistance

Other than advice, PROV will not be able to provide physical assistance to you in recovering from a disaster event. We can and will provide limited direction on how to proceed in recovering from such an event. There are several disaster recovery companies that can provide assistance in both managing the recovery event to an organisation's storage areas or facilities and undertaking recovery and treatment of affected records in their custody.

Some communities and groups of like organisations have developed agreements to assist each other should disaster events occur. This approach has been successfully undertaken in Ballarat with the establishment of the Ballarat Collections Network:

<http://prov.vic.gov.au/about-us/collaboration/ballarat-collections-network>.

Insurance Cover

Discuss disaster recovery coverage with the insurance company used as they may also have affiliated disaster recovery experts available to assist should such an event occur. If a commercial disaster recovery organisation is procured, first determine the methods they will use to recover records.

It is important to check with the insurer that recovery costs are covered, including clarification of when records may not be covered. For example, an organisation experienced a minor disaster event where its records were damaged by a burst water pipe. This organisation's insurer indicated that that recovery was not covered as the organisation was storing its records in an inappropriate location and had not addressed the risks of that location.

> Records deemed to be State Archive records are covered by PROV insurance with the proviso that the site where the State Archive records are stored meets the requirements of *PROS 11/01 Specification 2: Storage and Management of State Archives.*

---

[27] Please refer to Appendix One: Managing a Mould Infestation.

8.   References

Legislation

Occupational Health and Safety Act 2004

Public Records Act 1973

All current Victorian legislation is available at http://www.legislation.vic.gov.au

Standards

International Organization for Standardization 2003, *ISO 11799 Information and documentation – Document storage requirements for archive and library materials*, ISO, Geneva, Switzerland.

National Archives of Australia (NAA) 2002, Standard for the Physical Storage of Commonwealth Records, NAA, Canberra, ACT, accessed August 2014. <http://www.naa.gov.au/Images/standard_tcm16-47305.pdf>.

Public Record Office Victoria (PROV) 2011*, PROS 11/01 Storage Standard,* PROV North Melbourne, accessed August 2014 <http://prov.vic.gov.au/government/standards-and-policy/all-documents/pros-1101>.

Standards Australia 1990, *Australian Standard AS 1680—1990, Interior lighting,* Standards Australia, Sydney.

Standards Australia 2002, *AS ISO 15489.1 Australian standard on records management*, pt 1, Standards Australia, Sydney.

Standards Australia 2002, *AS ISO 15489.2 Australian standard on records management*, pt 2, Standards Australia, Sydney.

Standards Australia/Standards New Zealand 2009, *AS/NZS ISO 31000: 2009, Risk Management—Principles and guidelines*, Standards Australia/Standards New Zealand, Sydney.

Standards Australia/Standards New Zealand 2011, *AS/NZS 1015 Records Management – Physical Storage)*, Standards Australia/Standards New Zealand, Sydney.

Other Resources

The Australian Institute for the Conservation of Cultural Material (AICCM) 2014, *About Conservation Home Page*, accessed August 2014 <http://www.aiccm.org.au/conservation>

Ling, Ted 1998, *Solid, safe, secure: Building archives repositories in Australia*, National Archives of Australia, Canberra.

Ling, Ted 2008, Buildings & Storage. In *Keeping Archives* 3rd Edition, ed. Jackie Bettington, Kim Eberhard, Rowena Loo and Clive Smith, Australian Society of Archivists, ,p. 70

National Archives of Australia (NAA) 2002, *Storing to the Standard: Guidelines for Implementing the Standard for the Physical Storage of Commonwealth Records*, NAA

Canberra, accessed August 2014 <http://www.naa.gov.au/Images/guidelines_tcm16-47307.pdf>.

National Archives of Australia (NAA) 2013, *Integrated pest management,* NAA Canberra, accessed August 2014 <http://www.naa.gov.au/records-management/agency/secure-and-store/business-continuity-planning/pest-management.aspx>.

National Archives of Australia 2014, *Operational Policy: Conservation*, accessed August 2014 <http://www.naa.gov.au/about-us/organisation/accountability/operations-and-preservation/conservation.aspx>.

Public Record Office Victoria (PROV) 2010, *PROS 10/10 Strategic Management – Guideline 6 Records and Risk Management,* PROV North Melbourne, accessed August 2014 <http://prov.vic.gov.au/government/standards-and-policy/all-documents/pros-1010-g6>.

Public Records Office Victoria (PROV) 2011, *PROS 11/01 Guideline 2 Implementing a Storage Programme,* PROV North Melbourne, accessed August 2014 <http://prov.vic.gov.au/government/standards-and-policy/all-documents/pros-1101-g2>.

State Records Authority New South Wales (SRANSW) 2000 (revised 2004, 2012), *Solutions for storage: guidelines on the physical storage of State records,* SRANSW Sydney, accessed August 2014 <http://www.records.nsw.gov.au/recordkeeping/advice/storage-and-preservation>.

WorkSafe Victoria 2007, *WorkSafe Victoria Manual Order Picking: A guide to manual order picking*, WorkSafe Victoria, Melbourne, accessed August 2014 <http://www.worksafe.vic.gov.au/forms-and-publications/forms-and-publications/manual-order-picking,-a-guide-to>.

Conservation and Preservation: Further Information

There are many online resources which can aid in the development of an understanding of conservation principles and provide practical advice.

The following list is not an exhaustive one, but the resources will provide a solid background in preservation and conservation. The resources contain many links to further information.

National Archives of Australia

<http://www.naa.gov.au/records-management/agency/preserve/physical-preservation/index.aspx>

National Film and Sound Archives Australia

<http://www.nfsa.gov.au/preservation/>

Collections Australia Network

<http://www.collectionsaustralia.net/sector_info_item/3>

State Records Authority of New South Wales

<http://www.records.nsw.gov.au/state-archives/preservation-work/preservation-work>

Australian Institute for the Conservation of Cultural Material (AICCM) –

<http://www.aiccm.org.au/>

Conservation Resource Products

Disaster Response Wheel

The Field Guide to Emergency Response – A vital tool for cultural institutions and the *Emergency Response.*

The Field Guide and the Disaster Response Wheel are available separately or as a combination pack and may be purchased from Conservation Resources: <http://conservationresources.com.au/html/home/products/category.php?cid=30>.

For more information about records storage please contact:

Collection Services
Public Record Office Victoria
Ph: (03) 9348 5600
Fax: (03) 9348 5656
Email: agency.queries@prov.vic.gov.au
Web: www.prov.vic.gov.au

Conservation Resource Products

Appendix One: Managing a Mould Infestation

Mould is a type of fungus and is perhaps the most serious pest which can affect records collections because it spreads rapidly and can destroy the records it attacks. Signs of mould include brown marks, furry stains, a dusty substance, mildew-like growth on paper, white fluffy substance, and a musty odour. Mould will cause staining and weakening of paper and in the worst cases will completely devour it.

There is high potential for mould growth once the relative humidity exceeds 65%. Every attempt must be made to keep humidity below 65%, minimise fluctuations in humidity, and ensure that storage areas have good ventilation.

When faced with a potential mould infestation:

- Do not undertake any cleaning or repair action until PROV has been contacted for advice.

- If the records have to be handled, remember that there are health and safety issues with dealing with mould. Personal protective equipment (PPE), including dust masks, plastic gloves, and eye goggles should be worn.

- If the records have to be handled or transported prior to PROV advice being received, place records into sealed plastic bags or air-tight plastic tubs. **Do not transport them to another location unless they are in air-tight plastic bags or plastic tubs.** Check other records in the location to ensure the infestation has not spread to other records.

- Check that storage environment conditions are not conducive to mould growth (that is, the humidity is below 65%).

When records have been isolated and removed the following should occur:

- Vacuum the shelves and file trolleys

- Clean the storage shelves and file trolleys with a 70% solution of Methylated Spirit or Ethanol.

Before returning records to the storage area, make sure that the environmental conditions are appropriate in the storage space and that humidity levels are below 65%.

Appendix Two: Managing a Pest Infestation

The presence of rats or mice and cockroaches is very obvious. Records will be chewed, there will be droppings and there will be evidence that the paper records are used for nesting sites for rats and mice. Silverfish infestations are only apparent when the habitat is disturbed or items are removed from boxes and examined. Silverfish eat the starch in coated papers (that is, glossy papers) and ink. Evidence of silverfish includes holes in paper and missing letters on documents (that is, the ink has been eaten).

Records, particularly paper records, are an attractive food source for a range of pests and vermin including termites, cockroaches, spiders, silverfish, paper lice, rats and mice. The biggest threats are rats and mice, cockroaches and silverfish.

If you do find evidence of pest activity such as silverfish, termites, cockroaches and other insects you will need to:

- Identify the source of the problem and the severity of the activity

- Undertake actions that will eliminate any future infestations

- Identify records that have been affected by pest activity

- Treat records to remove pest infestations.

Fumigation of the facility or storage area and records should be a *last resort*. If it is necessary to spray to control an infestation, ensure that the pest control agency does not spray the records. It may be necessary to supervise the work. All staff members and visitors should be notified if fumigants are to be used to ensure that they do not go into unsafe areas or come into contact with contaminated surfaces. All affected air conditioning systems and very early smoke detection devices (VESDA) should be shut down while fumigation takes place.

Inspections should look for the presence of pests and vermin within the storage area and facility. Darker and warmer sections of the storage area in particular should be inspected regularly.

If baits, traps, powders and/or sprays have been used, their effectiveness should be monitored.

The best method to eradicate pests from records is to freeze the record and then brush off the dead insects, eggs and faecal matter from each page. **However, never freeze:**

- Records on glass, such as glass plate negatives

- Photographs and film

- Electronic media such as tapes or discs

- Parchment

- Vellum

- Mixed media, for example, wood and metal items

- Painted media, for example, an illuminated or highly decorated manuscript.

Freezing the above types of records may adversely affect the record and create additional stress and damage.

Freezing Records to Remove Pest Infestations

Freezing records should only be undertaken to remove pests, such as cockroaches, termites or silverfish from records. It should not be undertaken to kill mould.

Treatment register and Labelling

A register of all records treated for pest infestations must be kept to keep track of action taken. This may be a hard copy or electronic register and must be filled out before freezing commences. The register will help with the detection of repeating problems.

The register should include:

- Details about the record

- Type of pest infestation

- Date records placed in freezer

- Date records removed from freezer

- Treating officer's name.

Each wrapped item must be labelled with:

- Its number (as determined by the register)

- Brief description

- Date it went into the freezer.

The information contained in the register and on the label helps to ensure that items are placed in the freezer for the appropriate amount of time and to prevent accidental loss of records.

Freezing preparation

Each item must be wrapped in plastic and be completely sealed with tape before being placed in the freezer. This is to prevent freezer burn and condensation build-up on the item when it is removed from the freezer. If condensation occurs within the enclosed item mould could begin to grow. When wrapping objects for freezing:

- Wrap the plastic sheeting or bag tightly around the item to be frozen

- Remove as much air as possible

- Use good quality packing tape to seal, ensure there are no gaps in the packing

- Be aware of the humidity level.

If you are wrapping the records on a day of high humidity, then the paper is trapping or holding a higher water content which may lead to condensation build up on the inside.

Acclimatisation before freezing

To achieve the best kill rate, it's necessary for the insects to have the greatest possible temperature shock (that is, the sudden drop of temperature to below freezing). Items to be frozen must have been at room temperature (above 18 degrees) for at least 2 weeks.

Insects have a type of anti freeze in their make up. It is suggested that the first freezing is the one that depletes their system of this chemical, but pests can still survive. A second round of freezing actually kills them.

Items must be acclimatised to room temperature before freezing.

Freezing temperature and duration

The freezer must be at **-18C or lower.** A standard chest freezer should be able to achieve these temperatures.

The packaging or boxes that housed the affected records will need to be replaced as these will be infested by the insects (they could still be in the fluting of corrugated boxes and have laid eggs there).

If the affected records are permanent records, advice should be sought from PROV before proceeding.

Remember, there are health and safety issues with treating records infested by insects, including insect eggs and faecal matter. Personal protective equipment (PPE), including masks with either a P1 or P2 filter, plastic gloves, apron, and eye goggles should be worn.

Appendix Three: Records on Storage

Research, actions, inspections and decisions regarding storage buildings and storage areas should be documented to:

- Demonstrate that the storage used is secure, adequate, appropriate for the records housed and compliant with the requirements of the Standard
- Identify problem areas for further examination and repair if required
- Improve response ability to any disaster event.

Area	Examples of types of documentation
Location and Construction	Risk assessment documentation, including reports, Risk register and mitigation actions taken Storage plan which details design measures and safeguards that protect records from fire and water influx (from above, below or through walls or openings) Reports (building maintenance and Fire safety logs or inspection reports), including structural engineer's report confirming storage areas and facilities have sufficient floor loading capacity to support records and equipment when at full capacity
Preservation and Environmental Conditions	Reports (including Risk Assessment Reports) which identify the types of records to be stored in each area or facility, the appropriate storage conditions for their retention periods, assessments of the respective storage area or facility and its capacity to provide appropriate storage, and includes reports of monitoring of temperature and humidity in each storage area or facility including documentation of temperature and humidity levels (such as thermohygrograhic logs) Information about the integrated pest management system in the organisation's storage plan and other documentation of pest inspections and monitoring
Safety	Records of service and maintenance of manual handling equipment Safe work practice procedures, Ergonomic assessment, and induction records
Security	Storage plans and assessment reports which include details of security measures implemented to protect records storage areas and facilities, records in transit, and details of appropriate handling and storage of security classified reports Access monitoring and reporting which is included in the storage plan, and access logs which record all entries to the storage areas and facilities and incident reports regarding any unauthorised access to storage areas or facilities; procedures which detail how to store information with different security classifications
Disaster Preparedness and Management	Disaster reaction and recovery plan, testing results and reviews of plan; equipment records and consumable replacement programme Disaster preparedness committee/working group minutes and agendas, personnel training records Any agreements or memoranda of understanding with other organisations that commit the use of resources to support recovery activities

Table 14: Document Type Examples

Appendix Four: Sample Maintenance Schedule

Service	Provider	Contact	Phone	Expected Cost P.A.	Frequency	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Electrical Test & Tag					Yearly					x							
Cleaning					Daily												
External windows & walls					Six monthly	x						x					
High Clean					Six monthly	x						x					
Steam clean carpets					Yearly		x										
Hygiene Services					Fortnightly												
Fire																	
Alarm Monitoring					Daily												
Detectors & FIP					Monthly	x	x	x	x	x	x	x	x	x	x	x	x
Sprinklers					Monthly	x	x	x	x	x	x	x	x	x	x	x	x
Sprinkler test					Six monthly							x					
Extinguishers					Six monthly		x							x			
Warden training & evacuation					Six monthly		x							x			
Emergency training					Yearly		x							x			
Vertical Transport - Lifts					Monthly	x	x	x	x	x	x	x	x	x	x	x	x
Security Alarms/Cameras					Monthly	x	x	x	x	x	x	x	x	x	x	x	x
Electrical																	
Emergency Light Test					Six monthly	x						x					
Thermo scan boards					Yearly		x										
Lighting					Daily												
Pest Control					Fortnightly												
Shelving					Monthly	x	x	x	x	x	x	x	x	x	x	x	x
Environmental Systems					Daily												
Building - External					Monthly	x	x	x	x	x	x	x	x	x	x	x	x
Building - Internal					Monthly	x	x	x	x	x	x	x	x	x	x	x	x
Records - Preservation					Monthly	x	x	x	x	x	x	x	x	x	x	x	x