



## On farm pesticide storage (minor storage)

[The following material has been taken from the Agriculture Victoria web site](#)

This is a guide for the storage of Agricultural Pesticides classified as 'Minor Storage' according to the **Australian Standard AS 2507 – 1998**. Most farms will have quantities and types of chemical that will not exceed this classification. When quantities exceed 1000kg or Litres combined, there are additional specifications which must be met and complied with, such as the **Dangerous Goods Act 1985 and Dangerous Goods (Storage and Handling) Regulations 2012**.

### Introduction

The Victorian Workcover Authority is responsible for regulating the safe storage of Agricultural and Veterinary Chemicals in Victoria. Farmers have legal obligations to assess and manage risks associated with agricultural and veterinary chemical storage on farm. Regular assessment and management of risks associated with storing agricultural and veterinary chemicals will provide a safe environment for those working in the area.

Minor storage structure and construction requirements

### Types of storage

The construction of a storage area for agricultural and veterinary chemicals may be:

- An outdoor storage area with a security fence that may have a roof
- A free-standing, roofed building
- A room, enclosure or area within a building
- A building that is attached to another building.



Figure 1 Farm chemical storage shed

### Separation of the minor storage area

Storage of pesticides must be located at least:

- 15m from the boundary property, 10m from buildings occupied by people or livestock, 3m from unrelated work areas, offices and amenities
- 3m from flammable materials and fuel storage, 5m from any watercourse, body of water, drain or sewer.

## Construction of a minor storage area

The minor storage area should:

- Be fire resistant and structurally sound
- Be protected against extreme heat and exposure to sunlight
- Have floors made from concrete or other material which is impervious and resistant to chemical erosion
- Provide a method for containing spills ie: bunding
- Be located in an area that is safe from flooding or inundation, and is also not in the immediate catchment of a dam or waterway
- Be securely lockable
- Have clear access to avoid hazards whilst carrying chemicals
- Have sturdy, non absorbent shelving that is adequate to store chemicals without stacking.



Figure 2 Inside chemical storage shed

## Segregation of minor storage

Some types of pesticide and veterinary chemicals should be segregated from other chemicals and from each other to ensure cross contamination cannot occur if there is a leaking container or spill.

Therefore:

- Liquids should be stored as close to floor level as practicable to reduce the risk of breakage or spillage
- Liquids should not be stored above solids to avoid any damage or contamination of other products through leakage
- Flammable products should be segregated from non-flammable products by at least 3m.
- Veterinary chemicals must be segregated from all other chemicals
- Scheduled poisons should be segregated according to their schedule.

## Ventilation and handling precautions

Ventilation of the storage facility must prevent a build up of chemical vapours. The areas used for handling, filling and decanting chemicals must have additional ventilation to ensure a safe working environment.

## Containing spills

Spills can be contained by constructing a bunded area or sloping floor that drains to a containment pit or tank.

The method used for containing spills must be capable of containing 25% of the total liquid stored. A spill kit containing the following materials must be kept in the storage area:

- Absorbent material ie: 'kitty litter'
- Hydrated lime
- Shovel and broom
- Containers for storage of contaminated substances used to treat a spill.

Contaminated substances used to treat spillages should be disposed of in consultation with the local municipal waste disposal authority or the Environmental Protection Authority (EPA).

## Safety showers and eyewash facilities

A safety shower and eye wash facility should be installed in an area that is quick and easy to access in case of an emergency. Such facilities should not be located inside the storage area. The water supply will need to be adequate for a minimum of 15 minutes of full water flow.

## Operational and personnel safety

**Control of entry:** All storage areas must be secured to prevent unauthorised access, including children accessing the storage area via windows or vents. Only authorised personnel should have access to storage area, including the keys. Persons other than employees should be accompanied at all times or should be aware of the hazards present.

## Signage

On the entry point there should be a sign stating:

- "Chemical Store Keep Out" – "Authorised Staff Only"
- "No smoking" "No naked flames"
- On the inside of the chemical store there should be signs stating "No Smoking" as well as one indicating the location of the "Spill Kit"

## Equipment

Equipment and machinery such as personal protective equipment (PPE), first aid kit, spill kit, fire fighting equipment, mixing equipment and spray applicators should be checked on a regular basis to ensure everything is fully stocked and operational.

## Site upkeep

- The area within 3m of any storage area of agricultural and veterinary chemicals should be well maintained ensuring it is free from combustible materials such as vegetation or pallets
- Any rubbish or empty containers need to be properly decanted and disposed of
- All warning signs shall be clearly visible at all times.

## Job knowledge and training

People with responsibility for storage areas need to be familiar with the hazards associated with chemical storage and use.

A thorough understanding of Material Safety Data Sheets (MSDS) relating to the chemicals stored on site and what actions need to be taken in the case of an emergency is essential.

Those in charge should also be trained in cleaning up spills and fire fighting techniques as well as familiarising themselves with the equipment used.

## Personal Protective Equipment (PPE)

- Should be located near but not inside the chemical store, as this may lead to contamination of PPE
- Any dirty equipment should be kept separate while waiting to be cleaned or disposed of
- PPE needs to be appropriate to the chemical being used/stored. Information about appropriate PPE can be found on the chemical label and MSDS. Examples of PPE are overalls, rubber boots, elbow length rubber or PVC gloves, chemical goggles or face shield, PVC apron and suitable respirator
- Charcoal filters must be regularly replaced and must be stored in a suitable air-tight container when not being used.

## First Aid kit

An appropriate first aid kit should be kept in a clean, easily accessible area.

## Fire equipment

An appropriate extinguisher should be placed directly outside the store and be easily accessible.

### Material Safety Data Sheets (MSDS)

The MSDS contains additional information about the chemical and details of the first aid requirements of a chemical.

Current MSDS must be obtained and held for all products found in the chemical store. MSDS must be easy to access in case of an emergency.

## Inventory of chemicals

A copy of the inventory must be kept separately from the storage area for emergency purposes. The inventory should be updated every three months, including quantity and trade names of chemicals.

## Hazard identification

Completing a hazard assessment is important to understand any potential hazards and risks involved. This includes:

- The volume of chemicals stored
- The height of stacking chemicals
- Segregation of materials with different hazards.

The Victorian Workcover Authority can provide further information regarding hazard identification.

## Emergency plan

An emergency plan should be in place in case of a spill, fire, explosion, leak or other emergency. All staff should be fully trained for these scenarios and made aware of the procedures and the equipment to use in case of an emergency. Emergency contact numbers and assembly areas should be clearly signposted and known to all staff.