

## **HANDLING & STORAGE**

#### Maintenance of labels and identification markers

It is very important in the management of unused chemicals to maintain the labels on the containers.

Labels should be protected from damage by avoiding exposure to sunlight and moisture. If damage has occurred ensure to keep the label from the original container to help with identification and disposal.

A back-up information system can be achieved by making a permanent unique information mark on each container and then recording this into a chemical register.

It is recommended that you also include safety directions, first aid methods and warnings.

#### **Permanent markers**

Marking a container, especially a rusty metal tin without a carrying handle, can be difficult! Some ways of making identifying marks/labels are:

- Using paint on the container
- Writing with a permanent felt pen on plastic containers
- Making a soft metal tag (perhaps cut from a drink can), wiring it on and marking with a sharp metal object such as a nail
- Wiring on a plastic tag and marking it with a felt pen.

## Recording label and other information

In the case of certain chemicals, (e.g. arsenic), it is important to record the chemical form of the material or the full chemical name, because certain variations are disposed of in different ways. Keep information, where available, on active and other ingredients.

Precautions may need to be taken in relation to fire risks if a large quantity of similar chemicals is stored.

Where little information is available, record and copy as many details as possible, as other people may know the chemicals commonly used at the time.

#### Mixing of chemicals

Identical chemicals should only be mixed if absolutely necessary because people involved in the mixing of chemicals are at risk of exposure.

Unwanted chemicals should not be mixed, even if it appears to be the same product.

The solvent used in each chemical compound may differ and there is a constant danger of chemical reaction. This mixing of incompatible chemicals can lead to violent reactions such as a fire, explosion, spatter of hot materials or a release of chlorine or ammonia gas.

# Storage/compatibility

How compatible chemicals are is a major consideration in storage.

The Australian Code for the Transport of Dangerous Goods contains some excellent incompatibility charts for dangerous goods.

As a rule, any unknown chemical should be treated as if it were incompatible with every other chemical in storage.

Care should be taken with flammable materials as well; never use a torch or match to read the labels on chemical containers!

## **Storage conditions**

To get the most suitable conditions for storage, users should ensure that:

- The surrounding land around a storage site is cleared of vegetation and rubbish to minimise the risk of fire.
- The storage area should be separated from people and water courses and above flood height.
- There should be good security procedures to prevent any unauthorised access
- There is a good access point and an easy exit
- Access to emergency equipment (e.g. fire extinguishers) is unblocked
- Adequate space is available for racks and separation of compatible chemicals
- Protected from direct sunlight
- Appropriate shelving is on hand to minimise breakages
- A bund (a wall around chemicals to contain potential spills) is present, in the case of liquids
- Adequately supplied with water for washing
- Separate from office or other work areas
- Constructed of non-combustible materials
- Good natural ventilation
- Equipped with flameproof electrical equipment.

## **Containment/ Spillage tips**

To minimise the spread of spillage, other containment measures can be used with minimal expense, such as:

- A quality, hole-free plastic bag around a small bottle
- Small containers stored in a cut-down plastic or steel drum
- A sheet metal tray with or without a plastic liner
- A sheet metal tray with absorbent material
- Sheet plastic over an earth bund or block wall.

## **Emergency procedures**

An immediate evacuation of all people in or near the chemical spill area must take place in the case of a spill or similar chemical emergency.

Only those people wearing protective equipment should return to deal with the situation.

<u>Some useful emergency equipment includes</u>; a shovel, absorbent material (such as activated charcoal, hydrated lime or dry sand), containers to hold the absorbent material or other leaking containers and protective clothing, including gloves, respirator, boots and eye protection.

# **Emergency Training**

If the emergency procedures indicate that people are to evacuate, the emergency training required is very basic; the most important factor is emphasising the need for personal safety.

#### Cleaning up the mess

Clean-up procedures should be in place in case of any spillage or fire.

Unprotected persons attempting to clean up a chemical spill or control a fire are putting their lives at risk.

An odour or visible signs of a chemical in the air may alert people to the risks of inhalation and skin absorption is a significant risk which should not be overlooked.

Avoid using large quantities of water, (unless in the case of fire), or excessive quantities of clean -up material, as these add to the bulk of the material to store for disposal.

#### Personal health and safety

When handling farm chemicals, you should take the following precautions:

- Avoid contact with chemical or inhaling vapour
- Wear PVC gloves when handling containers
- Wash hands immediately after handling containers, with soap and warm water
- Do not eat, drink or smoke in the storage area
- Immediately attend to any cuts or abrasions incurred while handling chemicals
- Take care when removing protective clothing and ensure your skin doesn't come in contact with contaminated surfaces.
- Wash protective equipment after every use and store in clean, dry and hygienic conditions
- Ensure to launder lightly soiled clothing separately from other items and store contaminated clothing for disposal.

# **Clearing sales**

Advice from the Australian Pesticide and Veterinary Medicines Authority (AVPMA) on the offering of chemicals for sale at property clearing sales may be in breach of sections of the Agricultural and Veterinary Chemicals Code Act (1994), as well as state or territory legislation.

The issues are wide and varied but include potential risk to humans, animals, and Occupational Health and Safety.

These risks are considered high due to the unknown dangers associated with taking ownership of unknown, unqualified, mixed or wrongly labelled chemicals at clearing sales.

There are fact sheets available which may be useful for agents and vendors. Visit Fact Sheets under the Resource section of the ChemClear website.