

What to do when a spill occurs

Minor liquid spills

- ▶ Make sure you are safe – put on protective clothing, including gloves, goggles, respirator, gumboots and overalls as needed before dealing with the spill.
- ▶ Stop the flow of the spill by righting the container, replacing the lid or shutting off the valve.
- ▶ Don't move a leaking container – you may risk making the spill larger or contaminating other areas.
- ▶ DO NOT wash away remaining chemicals as this will cause pollution of soil and water.
- ▶ Contain the spill.
- ▶ Make a mound around the spill with dry absorbent material.
 - cover the spill with more absorbent material.
 - wait for a short time until all the liquid has been absorbed.
 - with a broom sweep from the outside to the centre, use more absorbent material if liquid is still present.
- ▶ Shovel all the absorbent material into a container for disposal.

Major liquid spills

- ▶ Try to contain the spillage as best as you can without placing yourself in danger.
- ▶ Cover or form mounds of absorbent material around any open drains, streams, ponds or manholes that are close to the spill.
- ▶ Call the **Emergency Services 111** and Environment Canterbury's Pollution Hotline:
 - (03) 366-4663 North of Rakaia
 - (03) 688-3320 South of Rakaia
- ▶ Try to keep upwind of the spill in case there are any noxious fumes.
- ▶ Keep people away from the spill.

Contact your city or district council to find out where it can be safely disposed of.

For further information

Code of Practice for Management of Agrichemicals

NZS8409:2004 Management of Agrichemicals is the main source of information for safe responsible and effective agrichemical use. You can get a copy from Standards New Zealand. See www.standards.co.nz or call 0800 STANDARDS.

Growsafe training

GROWSAFE® courses are based on the NZS 8409: 2004. Standard. Those using agricultural chemicals should attain the GROWSAFE® Introductory Certificate. Those who have the responsibility to manage and direct the use of agrichemicals including the store should hold the GROWSAFE® Applied Certificate. See www.growsafe.co.nz or details of these courses or call 0800 GROWSAFE

Your agrichemical supplier is the first place to check for information, or at least give you advice on where you can get it.

Hazardous Substance and New Organism Legislation

www.hsno.govt.nz

This is a dedicated HSNO website which explains how HSNO works and who is effected. The website also has information about all the various agencies that manage different aspects of the Act, including links to their web sites.

www.ermanz.govt.nz

The Environmental Risk Management Authority (ERMA) is an independent body established under the HSNO Act. Information on the HSNO Act, regulations, policy and administration can be obtained from ERMANZ.

Agrichemical Storage on Farms

It is important that agrichemical storage areas are carefully maintained and well managed. If not, land and water ways can be polluted.

Have you seen any of these on your property?

- unrinsed containers and drums lying around the back of the yards
- dead grass around the storage shed
- unlabelled containers in the storage shed
- agrichemicals being stored in the pump shed
- old rusty drums with no bottoms

If you have, then the information in this sheet will give you some best practice advice on how to store agrichemicals safely.

The advice provided in this sheet is consistent with HSNO controls, but you should check with other information sources such as the label, Safety Data Sheets, your supplier, or ERMA to make sure you are meeting HSNO requirements for the specific agrichemicals that you store (see the further information box at the end of this sheet).

The Health Safety and Employment Act 1992 places a responsibility on employers to identify hazards, then eliminate, isolate or minimise the hazard.

Storage of agrichemicals may present a hazard (e.g. human exposure to fumes in the store), so the hazard must be eliminated (e.g. by ventilating the store).

What does the law say?

The Resource Management Act 1991 makes it illegal to discharge any contaminants into water either directly or through land contamination without a resource consent (unless this is permitted by a rule in a regional plan). Therefore any spills or leaks from your agrichemical store that get into soil or water could cause an offence under the RMA and could result in heavy fines.

The Hazardous Substances and New Organisms Act 1996 puts in place controls on storage of hazardous substances including requirements for:

- emergency management
- tracking of hazardous substances
- test certification for stores with hazardous substances
- "approved handler" qualifications for people dealing with hazardous substances. The controls that need to be applied depend on the hazard classification for each substance (e.g. is it flammable or toxic).

Most of the agrichemicals used on your farm will be hazardous substances so you will need to become familiar with HSNO requirements.



Siting your chemical store

Your chemical storage area should be sited away from:

- wells and waterways
- flood prone areas
- busy, high traffic parts of a property
- hazards such as incinerators or welding equipment.

Construction

Your chemical store should be:

- lockable and secure
- made of non-combustible materials
- protected from direct sunlight
- large enough to allow for segregation of incompatible chemicals
- well ventilated
- clearly labelled with **No Smoking** and an orange **HAZCHEM 2WE** Agrichemicals sign
- bunded and have an impervious floor so that any spills are contained within the storage area.



Where flammable substances are stored, the store may be considered a **"hazardous substance location"** under the HSNO Regulations. Specific fire ratings apply and a fire extinguisher will be required. A **"hazardous substances location"** is like the old dangerous goods store and requires a hazardous substances test certificate. Check with your supplier or the information sources at the end of the sheet to make sure you are meeting HSNO requirements.

Bunding/secondary containment

Secondary containment means a system that will contain any spills from the primary container (e.g. the can of agrichemical). It has always been the best practice approach to have some form of secondary containment around storage areas.

HSNO now makes it a legal requirement for the amount of agrichemical stored not to exceed set quantities. It is likely that most of the agrichemicals used on your farm will be either toxic or ecotoxic, so under HSNO if there is more than 100 litres being stored, then some form of secondary containment is required.

HSNO regulations specify the capacity of the secondary containment system, and this varies depending on the individual container size and the total volume stored. As a rule of thumb for small scale on-farm storage secondary containment should be large enough to contain 110% of the total volume of liquid stored. To meet the specific HSNO requirements refer to the information sources at the end of this sheet.

Bunding is a way to achieve secondary containment. A common way of bunding a concrete floor is to form a hump around the edges of the storage area. Other methods of providing secondary containment include storing:

- small bottles of chemicals in thick plastic bags
- small containers in cut-down plastic or steel drums
- containers in sheet metal trays with or without a plastic liner.

Whatever material is used to provide secondary containment, it must be impervious to, and compatible with the chemicals being stored. Further information on secondary containment can be found in NZS8409:2004 Management of Agrichemicals.

Positioning of chemicals in the store

Where you place chemicals within the store can reduce the risk of spills and accidents.

You should store:

- large liquid containers at floor level
- powders, granules and other dry formulations above liquids
- vaccines and other heat sensitive products under refrigeration
- drums no more than two high.

Some products must be segregated in the storage areas. Keep insecticides and fungicides away from herbicides, drenches away from dips and fumigants away from other chemicals. Your chemical supplier should be able to provide you with information on chemical compatibility.

Always store the following substances in a separate building from agrichemicals:

- fertilisers
- fuels and lubricants
- pool chemicals
- any animal or human feedstuffs
- explosives.

Packaging

Packaging of a chemical acts as the first line of defence against spills and leaks. As part of the maintenance of your storage area you should regularly check the following:

- all containers are in good condition
- lids are kept on when not in use
- any leaking containers are inside an oversized container (ideally made of the same material).
- no soft drink or food containers are used for storage.

Labelling and product information

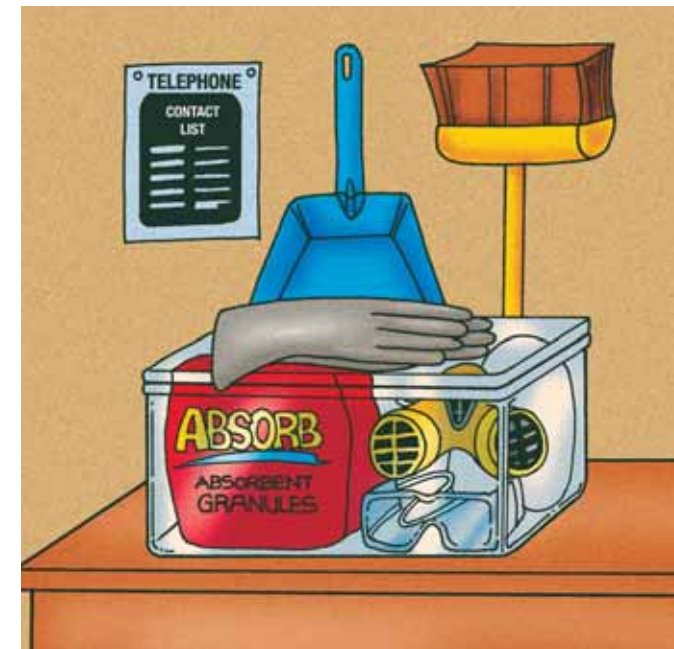
The label on an agrichemical container has useful information on storage and handling. HSNO requires that every agrichemical must have a label and this should include either the schedule heading (e.g. Poison), or the correct pictogram for the chemical. Usually, for agrichemicals these will be class 6 (Toxic) and class 9 (Ecotoxic).

If old labels deteriorate or fall off, put on new labels. If you can't get a replacement label make sure the identification is as permanent as possible. For example:

- wire-on a plastic tag and label it with a felt pen, or
- use a permanent marker or paint on the container.

Other information sources for each agrichemical are:

- Safety Data Sheets (SDS) contain useful information on the handling, storage, tracking and disposal requirements.
- Product Safety Cards (PSC) are a one page summary of the SDS. Ask your supplier for one when you purchase agrichemicals.



Keeping records of chemicals in the store

HSNO Emergency Management Regulations require that an accurate record of what is in the store must be kept and that this information must be available within 10 minutes.

HSNO has tracking requirements for certain substances which means further record keeping including: quantity, location, the identity of the approved handler (if one is required) and how the substance was disposed of.

A manifest, which is a complete list of all the hazardous substances held in store, is a useful tool for maintaining records. Quantities coming in and out of the store should be recorded to ensure that the manifest is kept up to date.

Any records of chemicals stored should always be kept in a safe place away from the storage shed. For detailed information on how to maintain a manifest refer to NZS8409:2004 Management of Agrichemicals.

Be prepared for a spill or an emergency

There is always a risk of an accident when you use or handle chemicals. The potential harmful effects of a chemical spill can be greatly reduced by having the correct equipment on hand and using it effectively.

Make sure that anyone on your property that uses chemicals knows what to do in an emergency. A simple procedure sheet on the wall of the store can help. This should include all the relevant emergency phone numbers.

Emergency equipment and spill kit

For a small chemical store you should have:

- broom
- shovel
- small dustpan and fine brush for powder spills
- protective clothing, including gloves, respirator, boots and eye protection
- absorbent material such as dry sand or soil, or a commercial absorbent material (available from your normal safety supplier)
- containers to hold the contaminated absorbent material or a leaking container.