

# Working safely with chemicals and fuels on farms

**MARCH 2015**



**This good practice guideline helps farmers comply with the health, safety and environmental laws for chemicals and fuels.**

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**ACKNOWLEDGEMENTS**

WorkSafe New Zealand (WorkSafe) would like to acknowledge and thank the stakeholders who have contributed to the development of this guidance. In particular, WorkSafe would like to thank the Environmental Protection Authority (EPA) for working closely with us.

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# **FOR SAFE FARM CHEMICAL AND FUEL USE, THE PERSON IN CHARGE MUST:**

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**Give people handling the chemicals and fuels safety information and training**

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**Make sure everyone handling the chemicals and fuels knows the hazards and how to keep safe**

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**Make sure chemicals and fuels are stored and used correctly**

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**Have procedures for managing emergencies.**

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## INTRODUCTION

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### IN THIS SECTION:

- 1.1 Health and safety on farms
- 1.2 Person in charge
- 1.3 Staying safe with chemicals and fuels - where to start

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Farmers use a wide range of chemicals and fuels in their daily work to increase productivity and grow high quality produce. Many of these substances are dangerous to people, animals and the environment and must be handled, used and stored with care.

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Many chemicals and fuels are hazardous substances and are controlled under the *Hazardous Substances and New Organisms Act 1996* (HSNO).

This document gives guidance on the main controls set under HSNO for chemicals and fuels, including:

- > pesticides
- > herbicides
- > fertilisers
- > veterinary medicines
- > cleaning products, like dairy sanitisers
- > post-harvest sanitisers
- > petrol, diesel and liquefied petroleum gas (LPG).

There may be other chemicals used on farms that are hazardous substances controlled under HSNO, like animal poisons or oils and degreasers used in workshops. These are not included in this document. More information is available from WorkSafe New Zealand and the Environmental Protection Authority – see Chapter 9, Further Information.

More information on chemicals used on farms is available in the *New Zealand Standard NZS 8409: Management of Agrichemicals*. It is available from Standards New Zealand – See Section 9, Further Information.

## 1.1 HEALTH AND SAFETY ON FARMS

Everyone who employs or contracts farm workers or who controls a farm must make sure they are kept safe. Workers on a farm also have a role to play in keeping themselves and their workmates safe. HSNO works together with the *Health and Safety in Employment Act 1992* (HSE), which aims to prevent harm to all people at or near a workplace.

Under HSE an employer must:

- > identify all significant hazards on the farm
- > eliminate the hazards if possible
- > isolate the hazards if they can't be eliminated
- > minimise hazards if they can't be eliminated or isolated
- > monitor hazards in the workplace, which may include monitoring workers' health
- > record significant hazards in a hazards register
- > include workers in health and safety decisions
- > provide health and safety information, safety gear and training for workers.

You can find everything you need to know about making your farm a safer place for everyone on the Safer Farms website – [www.saferfarms.org.nz](http://www.saferfarms.org.nz). It includes guidance on all aspects of farm safety and an easy-to-use toolkit.

## 1.2 PERSON IN CHARGE

HSNO requires a person in charge at all workplaces to manage hazardous substances. On a farm this will normally be the farm owner or manager. They must make sure that the farm complies with all the rules set under HSNO. This guideline is for the person in charge on the farm.

## 1.3 STAYING SAFE WITH CHEMICALS AND FUELS - WHERE TO START

### INFORMATION - LABELS AND SAFETY DATA SHEETS

The first places to look for information on staying safe are the product labels and safety data sheets (SDSs) for the chemicals and fuels.

Manufacturers and suppliers must only sell correctly labelled substances. The label gives information on the product's hazards and how to manage them.

You need an up-to-date SDS for every hazardous substance on your farm. If you don't have a SDS, or the one you are using is more than five years old, get a new one from your supplier. Your supplier must provide you with compliant and up-to-date SDSs for your chemicals and fuels.

SDSs contain important information about:

- > first aid
- > storage
- > cleaning up spills
- > the right safety gear.

Staff must know where SDSs are kept and be able to get to them easily and quickly.

### HAZARD CLASSIFICATIONS

Under HSNO, chemicals and fuels are classified according to their hazardous properties. Hazardous substances may have one or more of the following hazardous properties:

- > explosive - hazard class 1
- > flammable - hazard classes 2, 3 and 4
- > oxidising - hazard class 5

- > toxic - hazard class 6
- > corrosive - hazard class 8
- > toxic to the environment (ecotoxic) - hazard class 9.

The hazard classification is important for identifying which rules apply to your chemicals and fuels and what you need to do to manage them. The hazard classifications may be in section 2 of the SDSs for your chemicals and fuels.

### LIST YOUR HAZARDOUS SUBSTANCES

You need to make a list, or inventory, of all the hazardous substances you have, the amounts you have and their hazards. This will help you work out which HSNO rules apply on your farm. An example inventory form is available on the hazardous substances website - [www.hazardoussubstances.govt.nz](http://www.hazardoussubstances.govt.nz).

This guideline introduces the key safety rules you need to follow under HSNO - but it can't give you all of the answers. What you need to do will always depend on what substances you use and store. Some of the rules, such as whether you need a location test certificate, only apply if you use or store amounts of chemicals and fuels over a set amount, or threshold. You can use the *HSNO Calculator* on the hazardous substances website to work out whether you need to comply with these rules - [www.hazardoussubstances.govt.nz/hsno-calculator](http://www.hazardoussubstances.govt.nz/hsno-calculator).

Individual chemicals and fuels may have additional rules that need to be followed, such as whether or not you can aerially apply an insecticide. To find out all of the rules for chemicals and fuels you use, check their approval. You can check the approval by looking up the approval number on the *Approved hazardous substances with controls database* on the EPA website - [www.epa.govt.nz](http://www.epa.govt.nz). The HSNO approval number should be in section 15 of the SDS.

You should also check with your local and regional councils, as there may be rules under the *Resource Management Act 1991* (RMA) that you need to follow.

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## **RISKS AND HAZARDS**

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### **IN THIS SECTION:**

- 2.1 Health effects**
- 2.2 Environmental effects**

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## This section provides information about the health and environmental risks of chemicals and fuels used on farms.

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Farmers use a wide range of hazardous substances. The range of risks and hazards is just as large. It is essential that you check the label and SDS of all chemicals and fuels on the farm to find out:

- > if the substance is poisonous (toxic), and how poisonous it is
- > how to protect yourself, your staff and other people
- > about first aid
- > what effects the substance will have on the environment
- > how to stop impacts on the environment.

### 2.1 HEALTH EFFECTS

Many chemicals and fuels used on farms are poisonous and can damage your health over time. You may not realise you have been affected until it is too late. Chemicals and fuels can cause serious, long-term health damage if you breathe them in, get them on your skin or in cuts, if they get into your mouth or if you accidentally inject yourself.

Health effects can include skin rashes, asthma and long-term damage to your nervous system. The most poisonous chemicals can cause unconsciousness and even heart failure. Some farm chemicals may cause cancer.

Petrol can cause short term poisoning effects such as dizziness, feeling sick and headaches. It can also cause skin rashes. Long-term exposure can result in damage to your nervous system and cancer.

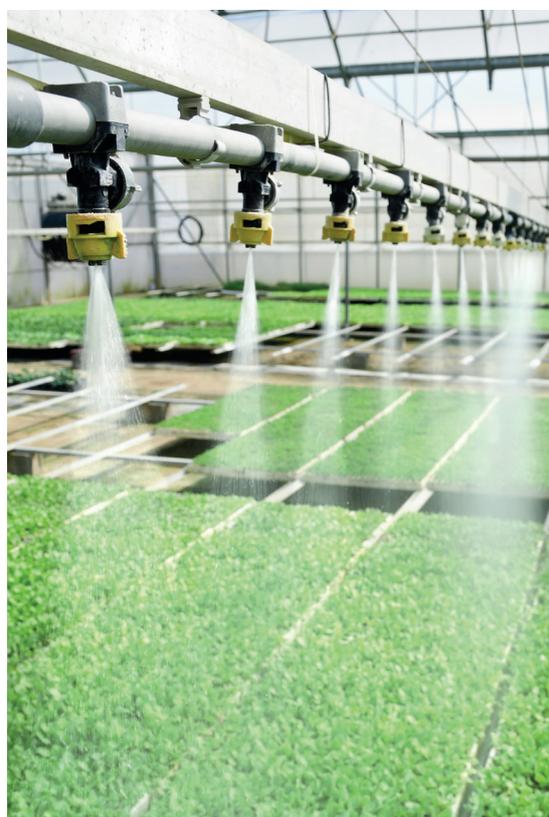
Diesel can cause skin rashes and irritation to the eyes, nose and throat. It may also cause cancer.

### 2.2 ENVIRONMENTAL EFFECTS

Many farm chemicals and fuels are harmful to the environment (ecotoxic). They can pollute waterways and kill fish, animals, insects (like bees), and vegetation (like native bush). They can also cause long-term contamination of soil.

Fertilisers can pollute water bodies by increasing nutrient levels. This can lead to excessive weed and algal growth, reducing the amount of oxygen in the water. This affects fish and other animals.

Fuel and chemical storage must comply with the RMA as well as HSNO. Check with your council for their specific requirements.



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## TRAINING AND CERTIFICATES

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### IN THIS SECTION:

- 3.1 Approved handler  
test certificates
- 3.2 Training

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**You must know about the chemicals and fuels you use on your farm and the risks they pose. You must be trained to use them. You need to be certified to use the more hazardous chemicals and fuels.**

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### **3.1 APPROVED HANDLER TEST CERTIFICATES**

An approved handler is someone who is certified to use very hazardous substances. To become an approved handler you must show that you have practical experience using and handling the chemicals and fuels used on the farm and you know about:

- > the hazards of the chemicals and fuels used and how to protect people and the environment
- > the operating equipment, safety gear and protective clothing needed
- > what to do in an emergency
- > the HSNO legislation and relevant Codes of Practice and how these apply to the chemicals and fuels used.

An approved handler test certificate is issued by a test certifier. A test certifier is an independent service provider who is recognised as an industry expert and has been approved by WorkSafe to issue test certificates. You can find a test certifier on our website - [www.worksafe.govt.nz](http://www.worksafe.govt.nz). Approved handler test certificates are valid for five years.

Depending on the type of chemical or fuel and how it's used, an approved handler may need to:

- > handle the hazardous substance themselves
- > give guidance to others who are handling the hazardous substance
- > be present when the hazardous substance is used (corrosive and toxic substances)

- > be available, for example by phone, to give advice (flammable and oxidising substances).

You will need training to get the skills and knowledge needed to be an approved handler. This could be on the job training or through an industry training organisation. You can use a written record from a work supervisor or training provider to show a test certifier that you meet the requirements to be an approved handler. Assessment forms are available on the WorkSafe website.

#### **IS AN APPROVED HANDLER NEEDED?**

Whether an approved handler is needed depends on the type and amount of chemicals and fuels used. You can use the *HSNO Calculator* to work out which substances you need an approved handler for. It is likely that an approved handler will be needed for some chemicals and fuels you use, but not for others.

#### **FUELS**

If your farm is larger than four hectares and you store less than 2000 litres of petrol you do not need an approved handler.

You need an approved handler if your farm is:

- > smaller than four hectares and you store more than 100 litres of petrol
- > larger than four hectares and you store more than 2,000 litres of petrol.

You do not need an approved handler for diesel. For LPG an approved handler is needed if you store more than 100 kg.

FERTILISERS

Depending on the amount and type of fertiliser used you may need an approved handler.

You need an approved handler if you have more than:

- a. 500 kg or litres of a class 5.1.1B oxidising fertiliser
- b. 1000 kg or litres of a class 5.1.1C oxidising fertiliser
- c. any amount of a class 6.1C toxic fertiliser.

VETERINARY MEDICINES

Whether you need an approved handler for veterinary medicines depends on the type and amount you use and how they are applied.

You need an approved handler for:

- a. 250 kg or litres, or more, of class 3.1B flammable products, in containers larger than five litres
- b. 500 kg or litres, or more, of class 3.1B flammable products, in containers up to and including five litres
- c. any amount of class 6.1B or 6.1C acutely toxic substances
- d. 10 kg or litres, or more, of class 6.7A carcinogenic products.

PESTICIDES AND HERBICIDES

Whether an approved handler is needed for pesticides and herbicides depends on what products you use and how you use them.

Figure 1 shows the decision process for pesticides and herbicides.

You need an approved handler for products that are:

- > highly toxic to people
- > toxic to the environment (ecotoxic) and applied using wide dispersive methods, which can affect other properties, such as boom spraying or air-blast application from a vehicle.

IS AN APPROVED HANDLER NEEDED?

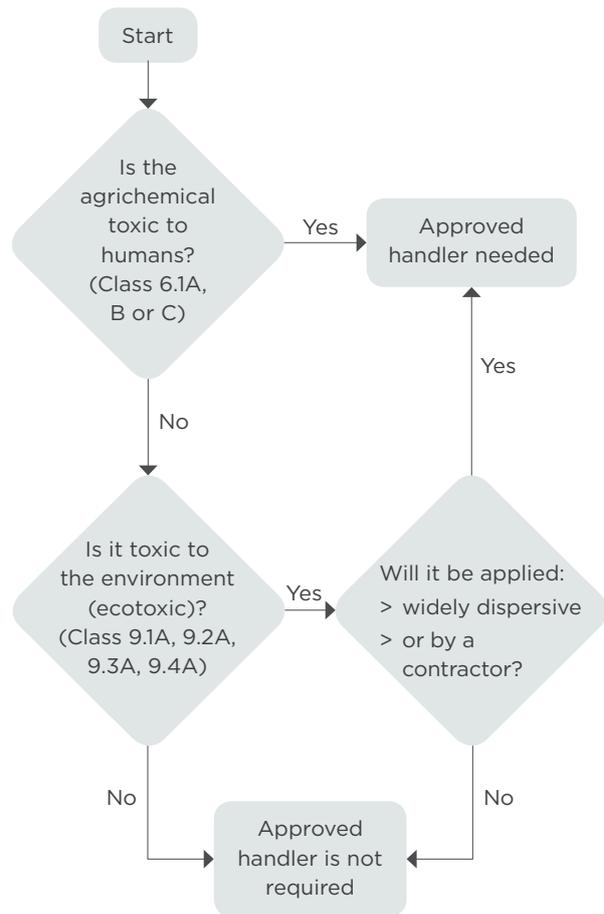


Figure 1: Approved handler requirements for pesticides and herbicides

WHAT IF CONTRACTORS USE CHEMICALS AND FUELS ON THE FARM?

If chemicals or fuels need an approved handler, contractors must be certified to use them. Contractors must be approved handlers for ecotoxic products whether they are applied by wide dispersive methods or not.

If you employ a contractor to do work on your farm, you must make sure that they have the correct approved handler certificate.

## 3.2 TRAINING

The person in charge must make sure that everyone using chemicals and fuels is trained and, if needed, have approved handler certificates. Employers have a duty under HSE to train employees, or make sure someone who is trained supervises them, so they can do their work safely.

### WHERE CAN YOU GET TRAINING?

You can get training from experienced staff in the workplace or through training providers. Practical skills and theory courses are available from a number of providers, either in a classroom or by correspondence. Formal training needs to meet minimum standards such as those set out by the New Zealand Qualifications Authority (NZQA).

There are assessment forms on the WorkSafe website that set out what is needed to become an approved handler. You should make sure that any training you do covers this and that your test certifier will recognise the course.

There are a number of formal training providers. Two common examples are GROWSAFE™ and FarmSafe™. Other industry groups such as Rural Contractors, Responsible Care New Zealand and chemical suppliers also provide training. You can get more information on suitable training by contacting the Primary Industry Training Organisation.

### GROWSAFE AND APPROVED HANDLER TRAINING

Regional councils set rules about applying farm chemicals in their regional plans. All regional councils require compliance with the *Standard for the Management of Agrichemicals NZS 8409*. Most regional plans also require commercial farm chemical users to have GROWSAFE certification.

The GROWSAFE course is based on NZS 8409. If you complete this course, you will meet the requirements to comply with regional plans and get your approved handler test certificate. More information is available on the GROWSAFE website – [www.growsafe.co.nz](http://www.growsafe.co.nz).

Regional council and HSNO rules may require different certification. For example, you may need a GROWSAFE certificate to use some chemicals under your regional council's rules, which you don't need approved handler certification for. Whether you need GROWSAFE certification, an approved handler certificate or both depends on the type and amount of chemicals you have and your regional council's rules. It is important that you check the HSNO and council rules to make sure you have the required certification.

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## **SAFETY GEAR AND MONITORING**

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### **IN THIS SECTION:**

- 4.1 Safety gear**
- 4.2 Monitoring exposure**

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Everyone working with chemicals and fuels must make sure they wear the right safety gear – also called personal protective equipment or PPE. Employers must provide the right safety gear. Employers must also monitor exposure to hazardous substances.

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#### 4.1 SAFETY GEAR

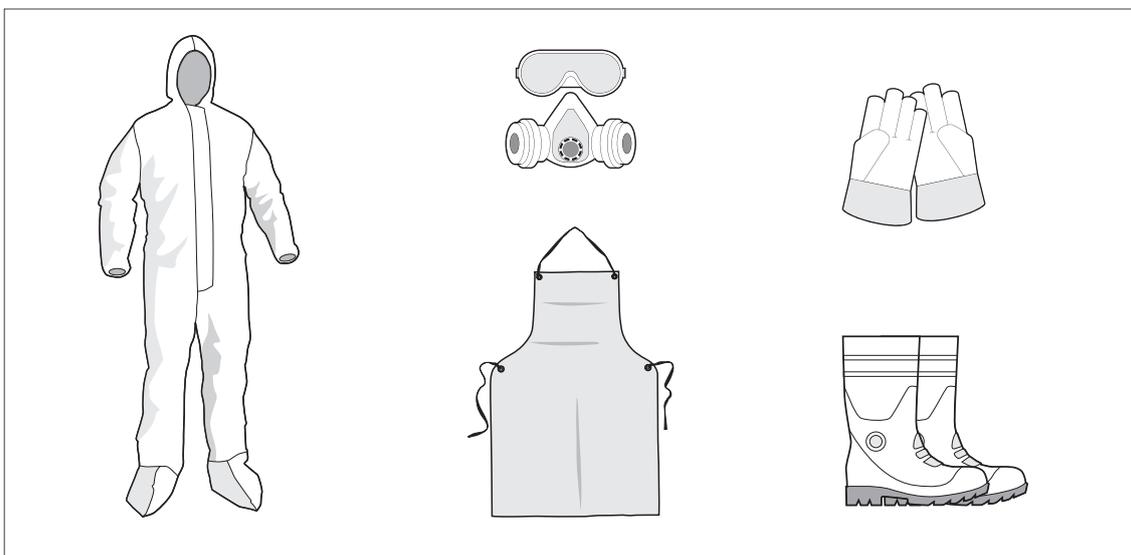
The safety gear needed will depend on the product you are using and the job you are doing. You may need different safety gear for:

- > mixing
- > handling
- > applying
- > cleaning application equipment
- > cleaning up spills.

Read the product label and SDS before using fuels and handling, mixing or applying farm chemicals, and follow the instructions. The label will tell you the hazards of the product and the precautions that you need to take.

The SDS will include information about what safety gear you need. Ask your safety equipment supplier for advice and take the SDS with you. You are likely to need:

- > chemical resistant gloves
- > chemical resistant goggles or full face mask
- > overalls
- > a respirator with the correct filter or cartridge
- > chemical resistant footwear.



Make sure that your safety gear is right for the chemicals and fuels you use. For example, if you need a respirator make sure it is the right type and if it needs a filter or cartridge they are the right ones. Check the product SDS and ask your safety equipment or chemical supplier.

It is important to make sure that your skin is covered when handling chemicals and fuels. A tee-shirt, shorts and jandals won't protect you.

Make sure your safety gear fits properly. If it doesn't fit, it won't protect you. You must also look after your safety gear and replace it before it wears out – damaged safety gear won't protect you. Clean your safety gear at the end of the day and store it securely.

You should always wash your hands, arms and face after working with farm chemicals, especially before:

- > eating
- > drinking
- > smoking
- > going to the toilet.

Once you have finished using farm chemicals for the day remove the clothes you were working in, have a shower or bath with soap and water, shampoo your hair, and put on clean clothes. Wash your work clothes separately from other clothes before wearing them again.

## 4.2 MONITORING EXPOSURE

If workers on the farm may be exposed to hazardous substances through their work, it's important that their health and the workplace are frequently monitored. This is so you can check that the minimisation techniques you have adopted, including safety gear, are sufficient and the health of your staff is protected.

Personal air monitoring is an example of workplace monitoring. The results of air monitoring may be compared to workplace exposure standards (WES). A WES is the level of a substance in the air that is believed to be safe for nearly all workers repeatedly exposed, day after day, to that substance. The values are usually calculated based on exposure over eight hours, 15 minutes or, in some cases, instantaneous exposure. You must make sure that your staff are not exposed to levels of hazardous substances that exceed a WES. You should contract a specialist, such as an occupational hygienist, to monitor hazardous substances in the air and compare the results to a WES.

You also need to monitor your workers to check whether exposure to hazardous substances is damaging their health. You must make sure that workers understand what the monitoring involves, why it is needed, and have their consent before monitoring them. Health monitoring might include monitoring blood or urine, or testing respiratory function. An occupational health professional, such as an occupational health nurse must carry out health monitoring.

See WorkSafe's guidance *Managing health and safety: A guide for farmers* for more information.

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## **STORING CHEMICALS AND FUELS**

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### **IN THIS SECTION:**

- 5.1 Storage location and construction**
- 5.2 Suitable containers**
- 5.3 Incompatibles**
- 5.4 Signs for storage areas**
- 5.5 Location test certificates**
- 5.6 Stationary container test certificates**

You must store your chemicals and fuels safely and securely to avoid leaks or spills and protect people, animals, the environment and property.

Store the smallest amount of chemicals and fuels you can. This makes it easier to manage what you have and may save you money on compliance costs. You must also comply with local and regional council rules for storing chemicals and fuels.

### 5.1 STORAGE LOCATION AND CONSTRUCTION

Chemical and fuel stores should be located in an area that is:

- > flood-free
- > away from wells, streams or other water bodies
- > soundly constructed, well ventilated, and set up so that any leak or spill will be contained.

The chemical store should be well ventilated and made of non-combustible materials. Storage areas for flammable chemicals and fuels must be well ventilated and at least:

- a. 20 metres from habitable buildings, like houses or sleepouts
- b. six metres from combustible materials, like hay barns or fuel stores.

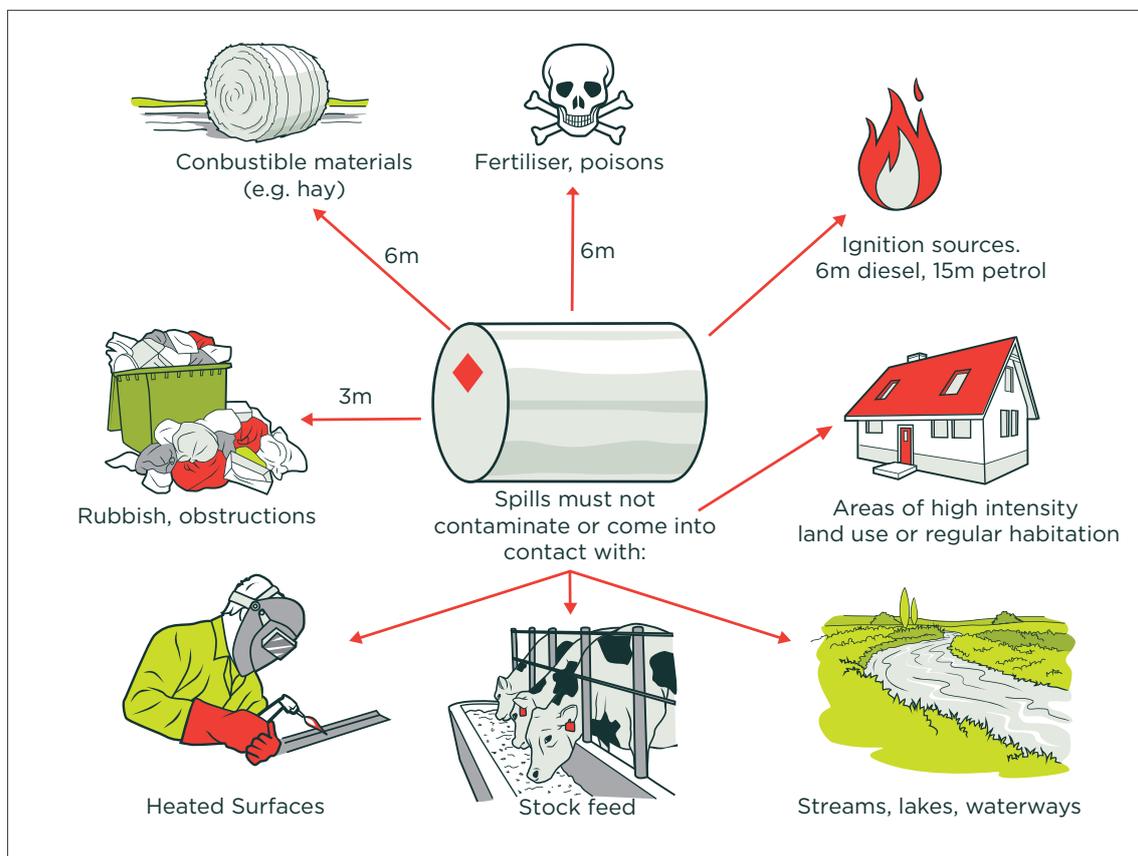


Figure 2: Required fuel storage distances

All chemicals and fuels that need an approved handler test certificate must be locked away when not in use. Keys to locks should be kept out of the hands of children and unauthorised people. It's good practice to lock away all chemicals and fuels, not just ones that require an approved handler.

### 5.2 SUITABLE CONTAINERS

You should keep chemicals and fuels in their original packaging that is in good condition. Don't buy them if the packaging is damaged. If the packaging becomes damaged, or you need to transfer chemicals or fuels to smaller containers, make sure that you use clean containers that will not react with the chemical. You must label the new containers so it's obvious which farm chemical or fuel they contain.

Never store chemicals or fuels in food or drink containers. It's too easy for people, especially children, to get confused about what is in the container. Eating or drinking farm chemicals or fuels can cause serious harm to people.

Always keep lids on your chemicals and fuels. You should check the containers in your store regularly to make sure they are in good condition.

### 5.3 INCOMPATIBLES

Not all hazardous substances can be stored together safely. Different types of substances can cause a fire or explosion if they come into contact with each other. These substances are described as incompatible. They must be stored separately so that they can't mix if a leak or spill happens.

The SDS for your product will tell you which substances it should be kept away from. Table 1 gives some general guidance.

HAZARDOUS SUBSTANCE TYPE	KEEP AWAY FROM
Flammable gases (class 2.1.1)	Flammable aerosols (class 2.1.2); flammable liquids (class 3); class 4 substances; oxidising substances or organic peroxides (class 5).
Flammable liquids (class 3)	Flammable gases and aerosols (class 2); class 4 substances; oxidising substances or organic peroxides (class 5).
Oxidising substances (class 5.1)	All other types of chemicals (including organic peroxides).
Organic peroxides (class 5.2)	All other types of chemicals (including oxidisers).
Acids	Alkalis

Table 1: Incompatible hazardous substances

It's likely that you will have some incompatible products on your farm. Most farms store and use fuels, which are flammable. It is also likely that you will have other flammable products, like some pesticides. You may have products that are oxidisers, like ammonium nitrate fertilisers and some veterinary medicines.

### 5.4 SIGNS FOR STORAGE AREAS

Warning signs are vital for the safety of workers, visitors to the farm and emergency services. Signs give important information about what to do and who to contact in an emergency. They are essential for emergency services to decide how to deal with a fire, natural disaster or accident. The New Zealand Fire Service is trained to recognise hazardous substances signs. They will use different tactics depending on the identified hazards. The emergency services rely on signs for their own safety. The person in charge has to make sure that the right signs are posted where they need to be.

### WHEN YOU NEED SIGNS

Signs are needed when you store chemicals and fuels above certain amounts. However, it's good practice to always have signs. For example, you will need signs if you store more than:

- 50 litres or kg of some toxic pesticides, such as paraquat and Counter 20G
- 100 litres or kg of some ecotoxic products, such as diazinon
- 3,000 litres or kg of an oxidising fertiliser, such as calcium nitrate
- 250 litres of petrol in drums or containers, or any amount of petrol in bulk tanks
- 1,000 litres of diesel or kerosene.

Check the *Approved hazardous substances with controls* database or *HSNO Calculator* to see if you need signs.

### WHERE TO PUT SIGNS

Signs must be displayed in all storage area entrances, including vehicle access points, and should be at eye level. They must be close to the storage area but not so close that people come across hazardous substances before being warned.

If your storage area is in a room inside a building, display signs at the building entrance and at the entrance to the room. If chemicals and fuels are stored in an outdoor area, signs must be displayed immediately next to the storage area.

Don't post signs in places where they may be hidden. For example:

- > beside doors or gates that cover the sign when they are opened
- > above doors, or anywhere the sign may be concealed by smoke in an emergency.

### WHAT TO PUT ON SIGNS

Signs must be big enough so they can be read from 10 metres away. Signs must tell people, in plain English or pictograms:

- > that the storage area contains hazardous substances
- > the hazards of each product in the store
- > the precautions needed to manage them safely
- > what to do and who to contact in an emergency.

Figure 3 is an example sign that shows the requirements for a flammable, toxic and ecotoxic substance. More details on signs for storage areas are available on the WorkSafe website.



Figure 3: Example sign

## 5.5 LOCATION TEST CERTIFICATES

If you store flammable or oxidising substances, like fuels, some fertilisers, pesticides or veterinary medicines on your farm you may need a location test certificate. Whether you need one depends on the amount and type of products you store. A location test certificate shows that your storage area is safely managed according to the HSNO rules. Location test certificates are issued by test certifiers.

### FLAMMABLE SUBSTANCES

If your farm is larger than 4 hectares and you store 2000 litres or less of flammable substances (total of fuels, solvents and other products), you won't need a location test certificate if your storage location meets the following requirements.

All above ground tanks, drums or containers where flammable substances are stored must be:

- > designed, constructed and installed according to the HSNO rules
- > in a bund or located so that spills will not flow into any water bodies or pose a risk to any buildings.

Above ground tanks must be:

- > at least 20 metres from houses or other buildings made of combustible materials
- > at least six metres from combustible materials, such as hay barns or fuel stores.

Drums or other containers of flammable substances must be:

- > smaller than 250 litres
- > secure, so that unauthorised people can't get to the chemical or fuel
- > at least 15 metres from houses or other buildings made of combustible materials
- > in a well-ventilated building or out in the open.

If your flammables storage location does not meet these requirements, you are likely to need a location test certificate. You should contact a test certifier to discuss the requirements for your farm.

If you store petrol in below ground tanks you will need a location test certificate.

**OXIDISING SUBSTANCES**

You will need a location test certificate if you have more than:

- a. 50 litres or kg of a 5.1.1A highly oxidising substance
- b. 500 litres or kg of a 5.1.1B oxidising substance
- c. 1,000 litres or kg of a 5.1.1C oxidising substance

- d. 3,000 litres or kg of a 5.1.1C oxidising fertiliser on a farm larger than 4 hectares.

**5.6 STATIONARY CONTAINER TEST CERTIFICATES**

All tanks larger than 250 litres that contain hazardous substances must comply with the HSNO rules\*. Some larger tanks must have stationary container test certificates to show they meet the legal requirements. Stationary container test certificates are issued by test certifiers.

The type and amount of substances you store determine whether your tanks need stationary test certificates. Table 2 shows the tank content and sizes that need test certification.

SUBSTANCE	TANK SIZE
any hazardous liquid*	below ground tank larger than 250 litres
any hazardous liquid* that is not class 3.1A or 3.1B	above ground tank larger than 5,000 litres
Petrol (class 3.1A)	above ground tank larger than 2,500 litres
petrol	above ground tank larger than 50 litres and connected to a stationary engine
diesel	above ground tank larger than 5,000 litres
diesel	above ground tank larger than 60 litres and connected to a burner
diesel	above ground tank larger than 500 litres and connected to a stationary engine

**Table 2:** Stationary container test certificate requirements

\* Except for tanks containing a solid substance or products with the classifications 6.1E, 6.3A, 6.3B, 6.4A, 9.3 or 9.4 only.

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## TRACKING

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### IN THIS SECTION:

- 6.1 What needs to be recorded?
- 6.2 Transferring tracked chemicals

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**Tracking is recording what happens to hazardous substances during their life cycle, from manufacture or import through distribution, to use and disposal. Only the most hazardous substances need to be tracked.**

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You should check the product labels and SDSs to see if your farm chemicals need to be tracked. Examples of products that need tracking are the insecticides Lorsban and Gaucho.

In most cases tracked products must only be used by an approved handler, or by someone under the direct supervision of an approved handler. They must be kept under lock and key when not in use.

### **6.1** WHAT NEEDS TO BE RECORDED?

Tracking records must include:

- > the name and amount of the product
- > the exact location of the product
- > name, job title and contact details of the approved handler
- > details of the substances the approved handler certificate is issued for
- > every use of the product, where it was used, any movements of the product and how much has been used
- > details of any transfer of the product to another place, like a neighbour's farm
- > details of the product and its container's disposal, including how much, how, when and where it was disposed of
- > the unique identifier (if it has one) of the package the product was taken from.

The unique identifier is an exclusive serial number for an individual package or container of a chemical. Including it in the tracking records allows the life cycle of individual packages to be tracked.

Tracking records must be kept in easily understandable written form and be located so they are available to the approved handler or any enforcement officer within 10 minutes. You must keep tracking records for one year after the substance is transferred to another user or for three years after disposal.

A spray diary is a good way of keeping your tracking records. You may need to keep a spray diary for other reasons, like getting access to overseas trade markets. You don't need to duplicate recording the information; your spray diary can be your tracking record if it includes the required information.

### **6.2** TRANSFERRING TRACKED CHEMICALS

You may wish to transfer tracked chemicals to a different place, like a neighbour's farm. If you do this you must make sure that there is an approved handler at the farm who will take responsibility for the chemical.

When transferring a tracked product you must record:

- > what was transferred
- > how much and when it was transferred
- > details of the approved handler it is going to.

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## EMERGENCIES

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### IN THIS SECTION:

- 7.1 Be aware of the risks and hazards
- 7.2 Prepare for an emergency
- 7.3 Controlling spills
- 7.4 Secondary containment
- 7.5 Fire extinguishers

Even the most safety conscious farm can have an emergency. It's important to make sure that you know what to do, and plan for an emergency.

### 7.1 BE AWARE OF THE RISKS AND HAZARDS

You must read and follow the instructions on the product label and SDS. The label and SDS will give you information about:

- > the product's hazards
- > first aid
- > what to do if there is a fire
- > what to do if there is a spill.

You must notify WorkSafe about any workplace accident that causes serious harm. This includes accidents resulting in loss of consciousness or acute illness caused by exposure to any substance. Full details of serious harm and reporting requirements are available on the WorkSafe website - [www.worksafe.govt.nz](http://www.worksafe.govt.nz)

### 7.2 PREPARE FOR AN EMERGENCY

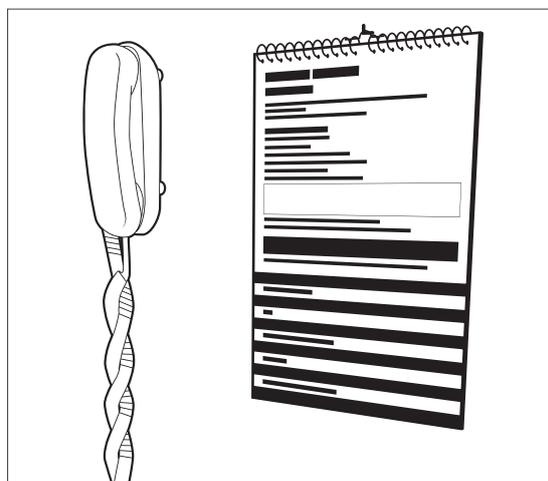
You must be prepared for an emergency regardless of the type and amount of chemicals and fuels you have. Make sure that:

- > you and your staff have planned for and know what to do in an emergency
- > you know what hazardous substances you have - keep your inventory up-to-date and have product labels and SDSs available
- > all hazardous products are labelled and that the label stays readable and on the container.

Depending on the amount and type of chemicals and fuels you have you may need to prepare an emergency response plan. For example, you will need an emergency response plan if you have more than:

- a. 100 litres or 100 kg of some toxic pesticides, such as permethrin and phorate
- b. 100 litres or 100 kg of some ecotoxic products, such as acetochlor.

You can check on the *HSNO Calculator* and your products' approvals to see if you need an emergency response plan. An emergency response flipchart is included in the *Hazardous Substances Toolbox*. You can order the toolbox at [www.hazardoussubstances.govt.nz](http://www.hazardoussubstances.govt.nz).



The emergency response plan must have clearly documented procedures to deal with all reasonably likely emergencies, including spills, fire or poisoning. It must include details of:

- > who to contact and warn in an emergency, such as emergency services and people at and near to the farm
- > how people can protect themselves
- > how an injured person will be helped or treated in the emergency
- > who is responsible for the plan and what they will do
- > what you will do in an emergency so that damage and injuries are restricted to the initial area affected, kept to a minimum and eliminated, if possible
- > how decisions are made about what to do and in what order

- > how to get information about the substance
- > what equipment or material will be used to manage the emergency, including what it's for and where it is.

Staff should be involved in producing the plan. You must make the plan available to all employees. Test your emergency management plan at least once a year to check that it works. Testing your plan could be a desktop or simulated exercise. If any problems are identified you need to update your plan. You need to keep records of testing for at least two years.

You must update your plan if you change the chemicals and fuels you use or if there are changes to the staff with emergency responsibilities. If the plan is updated, it must be tested within three months of the change.

Many farms are in remote rural locations. Emergency management plans must take this into account. For example, if the nearest fire station is an hour away the plan must consider this.

### **7.3** CONTROLLING SPILLS

You need to have a plan in place to contain any spill and know how to clean it up. All staff should be trained to deal with spills, and you must have clean-up equipment handy where you store, mix or handle hazardous substances.

You should plan how you will deal with a spill and include this in your emergency response plan. When planning how to deal with a spill you need to consider the chemicals and fuels you have and their hazards. Are they toxic, ecotoxic or flammable?

You also need to consider what impacts a spill could have. Are there people, houses or water bodies nearby? The hazards, and what effects they can have, will influence how you deal with a spill. For example, what equipment you will need to deal with a spill or who needs to be contacted.

Spills are categorised according to the amount and type of product:

- > Major spill:
  - any amount of flammable, very toxic or products that need tracking – product labels will have any of the following warning statements – EXTREMELY FLAMMABLE, FATAL, TOXIC, OXIDISER, or CORROSIVE
  - more than 200 litres of any other chemical or fuel
- > Minor spill – a spill involving less than 200 litres of any other chemical or fuel.

### **WHAT TO DO IF THERE IS A SPILL**

If a spill happens your first priority is the immediate safety of all people present. Is anyone injured? Deal with any casualties before dealing with the spill. You must always consider your own and your staff's safety when dealing with spills.

Identify what has been spilt and what its hazards are. Check your emergency response plan, look for labels and check the SDSs. You can then assess whether it is a major or minor spill.

If you can't identify the substance without putting yourself or others in danger, treat the product as the most hazardous you have on the farm. It's important that you tell others before you tackle any spill clean-up.

### **MAJOR SPILL**

If you have a major spill, don't try to deal with it yourself. Evacuate the area, put barriers up to keep people out and alert the Fire Service. Make sure you have the correct SDSs to give to the responding crew.

If there is a risk of contaminating a water body, contact your regional council's pollution hotline.

#### MINOR SPILL

You should follow these steps to clean up a minor spill:

- > keep people away unless they are dealing with the spill
- > wear the correct safety gear for the product that has been spilt
- > stop the spill or leak at the source if it is safe to do so
- > stop the spill from spreading using absorbent materials such as sand, soil or spill containment socks – remember that spilt farm chemicals or fuels must not be allowed into any body of water, including storm-water drains
- > clean the spill up using your spill kit
- > dispose of all the product and contaminated clean up materials according to the directions on the spilt product's SDS
- > clean your safety gear after use.

The person in charge should assess why the spill happened and review the farm's procedures so that it won't happen again.

#### SPILL KITS

A spill kit contains the equipment and materials you will need to clean up a spill. You can buy them from safety equipment suppliers or make your own to suit your needs. The equipment needed in a spill kit depends on the type and amount of chemicals and fuels you have. All staff need to know where the spill kit is kept, how to get to it and how to use it.

A spill kit should contain:

- > safety gear, like gumboots, gloves, overalls, goggles and respirators
- > spill containment equipment, like drip trays, drain guards or barriers

- > spill handling equipment like a broom and plastic shovel – metal ones could cause sparks, which is dangerous when dealing with flammable substances
- > absorbent materials like dry sand, vermiculite, zeolite or spill containment socks
- > leak proof container to put the waste in for disposal.

It's important to include safety gear in your spill kit, as there may be times when someone entering the area for other purposes discovers a spill and needs protection to contain the spill, or clean it up. Safety gear should be correct for the types of chemicals and fuels on the farm. The amount of safety gear needed will depend on the number of staff on the farm.

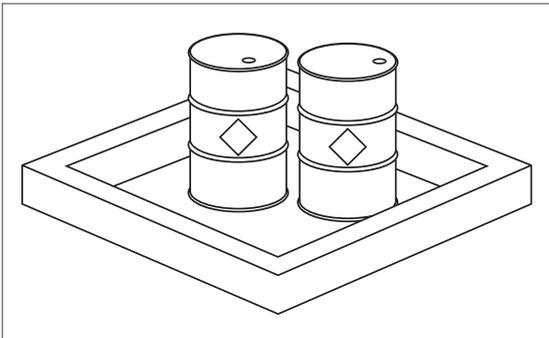
Absorbent materials should be inert, so they don't react with the chemicals being cleaned up. Vermiculite and zeolite are absorbent minerals that work well and cost little. You can buy them from your safety equipment supplier or from DIY or garden retailers. Vermiculite is used in gardening and horticulture and zeolite is sold as cat litter, BBQ absorbent or mineral sponge. They should both absorb around half their volume of liquid. You should make sure you have enough absorbent material for a spill from your largest containers that don't need to be kept in secondary containment.

Spill containment socks are fabric tubes containing absorbent materials that are used to soak up spills before they can spread. You can buy them from your safety equipment supplier, or make them from hessian or canvas sacks filled with absorbent material like vermiculite.

See Section 8: Disposal for guidance on disposing of spilt hazardous substances.

## 7.4 SECONDARY CONTAINMENT

Secondary containment is a physical barrier or container that can hold the contents of tanks or containers that may spill or leak. Secondary containment includes double skin tanks, drip trays, bunds and sumps. You should have secondary containment for your liquid chemical and fuel stores, and where products are mixed or handled. Do not keep incompatible substances (see Section 5.3) in the same secondary containment. You don't need secondary containment for solid chemicals such as powders.



### WHEN DO YOU NEED SECONDARY CONTAINMENT?

Whether you need secondary containment depends on the type, quantity and hazards of the liquid products you store. When you work out if you need secondary containment, and how big it should be, you need to consider the total quantities of all products held in the store. You can use the *HSNO Calculator* or *Approved hazardous substances with controls* database to do this.

Secondary containment is needed for fuel storage if your farm:

- > stores more than 2,000 litres of flammable liquids
- > is larger than four hectares and you store between 1,000 and 2,000 litres of flammable liquids where a spill could endanger buildings or water bodies
- > is smaller than four hectares and you store more than 1,000 litres of flammable liquids for more than 14 days.

You don't need secondary containment for fuel storage if your farm:

- > is larger than four hectares and you store between 1,000 and 2,000 litres of flammable liquid where a spill won't endanger buildings or water bodies
- > has less than 1,000 litres of flammable liquids
- > is smaller than four hectares and you store more than 1,000 litres of flammable liquids for less than 14 days.

For pesticides and herbicides, you will normally need secondary containment if you have more than 100 litres of products.

Secondary containment is normally needed for veterinary medicines if you have more than:

- a. 100 litres of very toxic or very ecotoxic liquids
- b. 1,000 litres of toxic or ecotoxic liquids
- c. 5,000 litres of oxidising liquids.

You will normally need secondary containment for liquid fertilisers if you have more than:

- a. 100 litres of very ecotoxic liquids
- b. 500 litres of highly oxidising liquids
- c. 1,000 litres of toxic, ecotoxic or corrosive liquids
- d. 5,000 litres of oxidising liquids.

If you store chemicals in intermediate bulk containers (IBC), they should be kept inside secondary containment.

### HOW BIG DOES SECONDARY CONTAINMENT NEED TO BE?

The size of your secondary containment depends on the amount of hazardous products you have and whether they are flammable. Tables 3 and 4 show the size of secondary containment required, as a percentage of the total product volume stored.

STORAGE TYPE	LESS THAN 5,000 LITRES	5,000 TO 10,000 LITRES	MORE THAN 10,000 LITRES
above ground tank larger than 450 litres	110 percent	110 percent	110 percent
below ground tank	100 percent	100 percent	100 percent
containers 60 litres or less	50 percent	2,500 litres	25 percent
containers larger than 60 litres to 450 litres	100 percent	5,000 litres	50 percent

**Table 3:** Secondary containment size – fuels, other flammable products and oxidisers

For example if you have petrol in:

- a. an above ground tank that can hold 3,000 litres, your secondary containment must hold 3,300 litres
- b. a single 200 litre drum, your secondary containment must hold 200 litres, or
- c. ten five litre containers of a flammable pour-on (like Ivomec Pour-On for Cattle), your containment must be able to hold a 25 litre spill.

STORAGE TYPE	LESS THAN 20,000 LITRES	MORE THAN 20,000 LITRES
containers 60 litres or less	25 percent	5 percent or 5,000 litres (whichever is bigger)
containers larger than 60 litres to 450 litres	25 percent or 110 percent of the largest container (whichever is bigger)	5 percent or 5,000 litres (whichever is bigger)
containers or tanks larger than 450 litres	110 percent	110 percent
below ground tanks	100 percent	100 percent

**Table 4:** Secondary containment size – toxic, corrosive and ecotoxic substances

For example, if you have a 200 litre drum of a dairy sanitiser, your containment must be able to hold a 220 litre spill.

### WHAT SORT OF CONTAINMENT DO YOU NEED?

If you are storing a small number of small containers, for example five litres or less, drip trays or individual spill trays that meet the size requirements are suitable.

If you have a lot of containers, drums of product or above ground fuel tanks, you will need a bund. This is a structure around your product store that contains any spills or leaks that may happen. It is effectively a wall or raised lip around your store.

Bunds must be built from an impervious material, such as concrete, that is resistant to the chemicals and fuels stored. They must be able to retain spills and have a means to drain off any rainwater, such as a valve. The valve must be kept closed at all times and only opened for draining uncontaminated water. See Section 8: Disposal for advice on disposing of spilt hazardous substances. If you store flammable products, the bund must be built from fire-resistant materials so it retains its structural integrity in a fire.

Double skin tanks can be used instead of a bund. The outer skin acts as a containment system to hold any spills and must comply with the sizing requirements.

## 7.5 FIRE EXTINGUISHERS

It is good practice to always have fire extinguishers at your fuel or chemical store. You must have fire extinguishers if you store fuels or flammable chemicals above certain amounts.

All staff who work in areas containing flammable substances must know how to use fire extinguishers. They should only use them when it is safe. Do not put yourself or staff in danger to fight a fire – call the Fire Service on 111.

### HOW MANY FIRE EXTINGUISHERS DO YOU NEED?

The number of fire extinguishers you need depends on the flammability and amount of products you store. Most farmers will need at least one, probably two, for fuel stores. You may also need them for large pesticide stores. Check your product SDS for the flammability classification. You can use the *HSNO Calculator* to work out how many you need.

Table 5 shows the amounts of some example products and the number of fire extinguishers needed.

CLASSIFICATION	EXAMPLE PRODUCT	AMOUNT	NUMBER OF EXTINGUISHERS
3.1A	petrol	50 litres	1
		200 litres	2
3.1B	Lannate (flammable pesticide)	250 litres	2
3.1C	diesel	500 litres	2
2.1.2A	LPG	50 kg	1
5.1.1C	calcium nitrate fertiliser	500 kg	2

**Table 5:** Example quantity limits for fire extinguishers

If you store several classes of flammable product you must have the highest number of extinguishers for any single class. The maximum you will need is two. For example – if you have more than 50 litres of petrol and 250 litres of Lannate you will need two fire extinguishers.

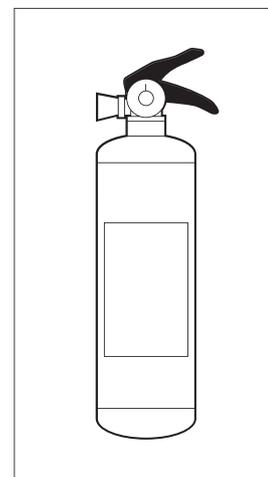
### WHAT TYPE OF FIRE EXTINGUISHER?

You need fire extinguishers which can put out a class B flammable liquid fire and have a rating of at least 30B. You can find this information on the side of fire extinguishers. A two kg dry powder or nine litre foam fire extinguisher meet these requirements.

Fire extinguishers must be tested by an approved tester every five years.

### WHERE TO PUT FIRE EXTINGUISHERS

Fire extinguishers should be fixed somewhere they are easily seen and reached. They should be close to the flammable substance product, but not so close that you can't get to them if there is a fire. They should be no more than 30 metres from the tank or store.



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**DISPOSAL**

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## You must dispose of unwanted or part used chemicals and fuels and their containers properly. This is to avoid possible impacts on people or the environment.

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How chemicals and fuels can be disposed of depends on what they are and their hazards. For example, you may be able to dispose of toxic substances at a landfill site. Flammable substances must not be disposed of at a landfill and may need to be exported for treatment overseas.

The product label and SDS must give information on how to safely dispose of chemicals or fuels. If you don't understand the disposal instructions, or can't comply with them, ask your chemical supplier or the manufacturer or importer for advice. Some manufacturers run product take back schemes.

You can minimise the amount of chemicals you need to dispose of by careful planning. Only buy and store the amounts you will need to use.

Never burn or bury chemicals or containers. Don't tip chemicals onto the ground or pour them down drains or into water bodies.

Your regional council can advise you about disposing of chemicals. It is likely that they will work with the Agrecovery Rural Recycling Programme - [www.agrecovery.co.nz](http://www.agrecovery.co.nz). This programme offers collection of chemicals, containers and drums. There may be a charge for the service, depending on the type and amount of waste.





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## **APPENDICES**

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### **IN THIS SECTION:**

**9.1 Glossary**

**9.2 Further information**

## 9.1 GLOSSARY

TERM	DEFINITION
Approval	<p>All <i>hazardous substances</i> imported or manufactured in New Zealand must be approved under the <i>Hazardous Substances and New Organisms Act 1996</i> (HSNO).</p> <p>Once they are approved they are given an approval number and a set of <i>controls</i> that people using the substances need to follow to help manage the risks associated with the substance. The approval number will generally be found in Section 15 (the Regulatory Section) of your <i>safety data sheet</i> and will be of the format HSR00XXXX.</p> <p>Most workplace <i>hazardous substances</i>, other than pesticides, are approved under a <i>group standard approval</i>. An example of a <i>group standard approval</i> is HSR002662 Surface Coatings and Colourants (Flammable).</p>
Approved handler	<p>An approved handler is someone who has a test certificate that shows they meet the competency requirements for <i>approved handlers</i> specified in some <i>HSNO</i> regulations.</p> <p>This means they are someone who has specific knowledge and experience of how to use particular <i>hazardous substances</i> safely. This person needs to apply to a <i>test certifier</i> to get an approved handler <i>test certificate</i>.</p> <p>Having an approved handler available is one of the <i>controls</i> placed on very <i>hazardous substances</i> under <i>HSNO</i>.</p>
Classification	<p>The properties of a substance are classified according to their <i>hazards</i>:</p> <ul style="list-style-type: none"> <li>&gt; explosive – hazard class 1</li> <li>&gt; flammable – hazard classes 2, 3 and 4</li> <li>&gt; oxidising – hazard class 5</li> <li>&gt; toxic – hazard class 6</li> <li>&gt; corrosive – hazard class 8</li> <li>&gt; toxic to the environment (ecotoxic) – hazard class 9.</li> </ul> <p>Based on the classification, <i>controls</i> are set to manage the <i>risks</i> that arise from these <i>hazards</i>.</p>
Code of practice (HSNO approved)	<p>A code of practice approved under <i>HSNO</i> is a document that provides an approved method of complying with particular requirements of <i>HSNO</i>. Codes of practice are not mandatory; you can use other ways of meeting the legal requirements. However, following a code of practice will give you assurance that you are meeting the <i>HSNO</i> requirements and <i>controls</i> in a way that is legally defensible.</p>
Contractor	<p>A contractor is someone who is engaged to do work on the farm but is not an employee. For example, a chemical spray contractor.</p>
Controls	<p>Controls are obligations or restrictions imposed on a <i>hazardous substance</i>, or on any person in relation to any <i>hazardous substance</i>. They are designed to control the adverse effects of that substance on people or the environment. Controls are placed on substances and people by <i>HSNO</i> and associated regulations and <i>Codes of Practice</i>.</p> <p>The <i>controls</i> for substances differ depending on their <i>classification</i>.</p>
Double skin tank	<p>A tank with <i>secondary containment</i> built in.</p>
Emergency response plan	<p>An emergency response plan is a written document that covers what will be done, and who is responsible for doing each task, in an emergency involving <i>hazardous substances</i> at your workplace.</p> <p>An emergency response plan is a <i>control</i> under <i>HSNO</i>.</p>

TERM	DEFINITION
Farm	In this guideline, means an area of land at least four hectares in size, with an agricultural main purpose. It does not include golf courses or parks.
Fuel	In this guideline, fuel includes petrol, aviation gasoline, racing gasoline, kerosene and diesel.
Group standard approval	Group standards approve a group of <i>hazardous substances</i> of a similar nature, type or circumstance of use.  A group standard sets out <i>controls</i> that enable a group of <i>hazardous substances</i> with similar properties or uses to be managed safely.
Hazard	A hazard is any source of potential damage, harm or adverse effect (including health effects).
Hazardous substance	Under <i>HSNO</i> a hazardous substance is a chemical or mixture of chemicals that has one or more of the following properties: <ul style="list-style-type: none"> <li>&gt; an explosive nature, including fireworks</li> <li>&gt; flammability, for example, petrol, turps, LPG, diesel</li> <li>&gt; ability to oxidise, accelerate a fire, for example hydrogen peroxide</li> <li>&gt; corrosiveness, for example, caustic drain cleaner</li> <li>&gt; acute or chronic toxicity to humans, for example, arsenic</li> <li>&gt; ecotoxicity, can kill living things either directly or by building up in the environment – for example diesel, glyphosate pesticides.</li> </ul>
HSE	The <i>Health and Safety in Employment Act 1992</i> . HSE covers legal obligations to keep people safe at work.
HSNO	The <i>Hazardous Substances and New Organisms Act 1996</i> and supporting regulations. HSNO imposes <i>controls</i> to safely manage <i>hazardous substances</i> .
Incompatible substances	Incompatible substances are substances that must to be kept away from each other to prevent them from mixing and causing a fire or explosion.
Inventory	An inventory is a list of all of the types and amounts of <i>hazardous substances</i> at your workplace.
Location test certificate	A location test certificate certifies that the place where <i>hazardous substances</i> are used and stored is safely managed, according to the rules. <i>Test certifiers</i> issue <i>test certificates</i> .  A location test certificate is a <i>control</i> under <i>HSNO</i> .
Person in charge	Certain <i>HSNO</i> regulations assign duties to the person in charge. The person in charge is the person who is in control of the place, or part of it, where <i>hazardous substances</i> are used, stored or handled.  The person in charge will be the owner, lessee, sub-lessee, occupier, or person in possession of the place, or any part of it. They could also be any other person who, at the relevant time, is in effective control or possession of the place.  The role is similar to the person in control of a workplace under <i>HSE</i> .  In a small workplace the person in charge may be the manager or owner of the business. In a larger operation with multiple locations and activities, several people could be designated persons in charge.
Risk	Risk is the combination of the likelihood of adverse effects occurring and the magnitude of the effects, if they were to occur.

TERM	DEFINITION
<b>Safety data sheet (SDS)</b>	<p>An information sheet that must be supplied when you buy chemicals and fuels. It includes information about:</p> <ul style="list-style-type: none"> <li>&gt; how to safely use and store a <i>hazardous substance</i></li> <li>&gt; first aid</li> <li>&gt; what to do in an emergency.</li> </ul> <p>Safety data sheets are a <i>control</i> under <i>HSNO</i>.</p>
<b>Secondary containment (bundling)</b>	<p>Secondary containment is a system that ensures liquid substances (or liquefiable substances) can be contained if they leak or spill from the container in which they are stored. The system should also enable recovery of a spilt substance.</p> <p>Secondary containment is a <i>control</i> under <i>HSNO</i>.</p>
<b>Stationary container system</b>	<p>A stationary container is any building or part of a building, or vessel supported by or incorporated in any building, which is expressly designed to contain any <i>hazardous substance</i>.</p> <p>A stationary container system is usually a fixed tank including its pipework and fittings.</p> <p>If you have a stationary tank containing a gas or a liquid <i>hazardous substance</i>, you may need a stationary container system <i>test certificate</i>. This certifies that your tank is safe and complies with the rules.</p>
<b>Test certificate</b>	<p>Test certificates are a type of certification issued by <i>test certifiers</i> to show that users of <i>hazardous substances</i> have appropriate <i>controls</i> in place or have the appropriate knowledge and training. You might need a test certificate for people, locations or equipment.</p> <p>Test certificates are <i>controls</i> under <i>HSNO</i>.</p>
<b>Test certifier</b>	<p>A test certifier is an independent service provider approved by WorkSafe to issue test certificates. You can find a list of test certifiers on the WorkSafe website: <a href="http://www.worksafe.govt.nz">www.worksafe.govt.nz</a>.</p>
<b>Tracking</b>	<p>Tracking is recording what happens to very <i>hazardous substances</i> from their manufacture through to use or disposal.</p> <p>Tracking is a <i>control</i> under <i>HSNO</i>.</p>
<b>Workplace exposure standards (WES)</b>	<p>A Workplace Exposure Standard (WES) refers to the level of a substance in the air that is believed to be safe for nearly all workers repeatedly exposed day after day to that substance. The values are usually calculated based on exposure over eight hours, 15 minutes or, in some cases, instantaneous exposure.</p>

## 9.2 FURTHER INFORMATION

More information is available from the following sources.

### WORKSAFE NEW ZEALAND

[www.worksafe.govt.nz](http://www.worksafe.govt.nz)

WorkSafe's website has more details on everything in this guideline including:

- > our guideline – *Managing health and safety: A guide for farmers*
- > HSNO test certifier database
- > guidance on approved handler test certificates
- > guidance on test certificates for farms
- > guidance about signs
- > guidance and information on health and safety on farms
- > more detailed information on fuels on farms in the guidance – *Above Ground Fuel Storage on Farms*
- > information on animal poisons in the guidance *Working safely in animal pest control: working with vertebrate toxic agents*
- > Approved Codes of Practice that give detailed information on how to comply with various parts of HSNO, including
  - *HSNOCOP 47: Secondary containment systems*
- > reporting workplace accidents, unsafe situations or serious harm
- > contact centre – 0800 030 040.

You can also get advice on hazardous substances at [hsinfo@worksafe.govt.nz](mailto:hsinfo@worksafe.govt.nz).

### HAZARDOUS SUBSTANCES TOOLBOX

[www.hazardoussubstances.govt.nz](http://www.hazardoussubstances.govt.nz)

The toolbox includes the *HSNO Calculator* and an inventory template. The Calculator does not include stationary container test certificates or tracking; use the *Approved hazardous substances with controls* database for this information.

### SAFER FARMS

[www.saferfarms.org.nz](http://www.saferfarms.org.nz)

The safer farms website has everything you need to know about making your farm a safer place for everyone. It includes:

- > an easy-to-use toolkit
- > guidance on staying safe on your farm.

### **ENVIRONMENTAL PROTECTION AUTHORITY**

[www.epa.govt.nz](http://www.epa.govt.nz)

The EPA website includes:

- > Approved Codes of Practice that give detailed information on how to comply with various parts of HSNO
- > *Approved hazardous substances with controls* database – in the search our records tab
- > guidance on limits for hazardous substance controls.

### **STANDARDS NEW ZEALAND**

[www.standards.co.nz](http://www.standards.co.nz)

Standards New Zealand produces standards to follow when using chemicals and fuels on farms, including:

- > detailed practical guidance on the safe management of farm chemicals – *NZS 8409 Management of Agrichemicals*
- > guidance on respiratory protective equipment – *AS/NZS 1715 Selection, use and maintenance of respiratory protective devices*.

### **LEGISLATION NEW ZEALAND**

[www.legislation.govt.nz](http://www.legislation.govt.nz)

Free source of all New Zealand legislation, including HSNO and HSE.

### **PRIMARY INDUSTRY TRAINING ORGANISATION**

[www.primaryto.ac.nz](http://www.primaryto.ac.nz)

Training provider for agriculture and horticulture.

### **GROWSAFE**

[www.growsafe.co.nz](http://www.growsafe.co.nz)

GROWSAFE provides training and certification for the safe use of farm chemicals.

### **FARMSAFE**

[www.farmsafe.co.nz](http://www.farmsafe.co.nz)

FarmSafe provides training and certification for the safe use of farm chemicals.

### **FERTILISER ASSOCIATION**

[www.fertiliser.org.nz](http://www.fertiliser.org.nz)

The Fertiliser Association provides information, including a code of practice, on fertiliser use.

### **AGRECOVERY**

[www.agrecovery.co.nz](http://www.agrecovery.co.nz)

Agrecovery offers a collection and disposal service for farm chemicals and packaging.

**FEDERATED FARMERS**

[www.fedfarm.org.nz](http://www.fedfarm.org.nz)

Federated Farmers advocate for farmers' interests, including advising on health and safety matters.

**RESPONSIBLE CARE NEW ZEALAND**

[www.responsiblecarenz.com](http://www.responsiblecarenz.com)

The industry association for New Zealand's chemical manufacturers and importers.

You can purchase codes of practice on a number of topics covered in this document from Responsible Care:

- > *HSNOCOP2: Signage for storing hazardous substances*
- > *HSNOCOP16: Hazardous substances storage*
- > *HSNOCOP36: Preparing for a chemical emergency.*

**LOCAL AND REGIONAL COUNCILS**

[www.localcouncils.govt.nz](http://www.localcouncils.govt.nz)

You should check with your local and regional councils, as there may be rules in the hazardous substances section of their district or regional plans that you need to follow. You can find your local and regional councils on the Department of Internal Affairs' local council website.

**NEW ZEALAND QUALIFICATIONS AUTHORITY**

[www.nzqa.govt.nz](http://www.nzqa.govt.nz)

NZQA ensures that training and education courses meet the required standards. Search for *agriculture* on their website for details of courses.





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