



Clean up and secure storage

Clean up after a spray operation to reduce risks.

- Return unused agrichemical to a locked, secure storage area
- Dispose of empty containers, surplus agrichemical mix and washings safely
- Clean protective clothing and equipment.
- Have a thorough shower.

Recycle/Recover containers/ Agrichemical product

Check if your retailer has a recovery return service.

- 3R Group - 3R.co.nz - has 3 FREE collections in Hawke's Bay a year, and can provide additional collections for a fee.
- Agrecovery, and Chemwaste (Auckland) can collect containers for a fee.

Empty containers

As soon as they become empty, plastic or steel agrichemical containers must be rinsed out three times. After each rinse the washings should be added to the spray tank. Once triple rinsed, the containers are safe for landfill disposal.

Plastic containers can be recycled, visit www.agrecovery.co.nz.

Containers that have held deadly poisons must not be used for any other purpose.

Other containers can have other uses as long as they have been thoroughly cleaned, but not for human or animal drinking water.

Surplus mix and washings

Any surplus mix and washings should be sprayed over the application area.

Unwanted and obsolete agrichemicals

Get rid of your unwanted agrichemicals safely and for free with 3R Group. Their agrichemical contractor collects in Hawke's Bay every four months.

Register for an agrichemical collection by contacting 3R Group 3r.co.nz or call 0508 374 768.

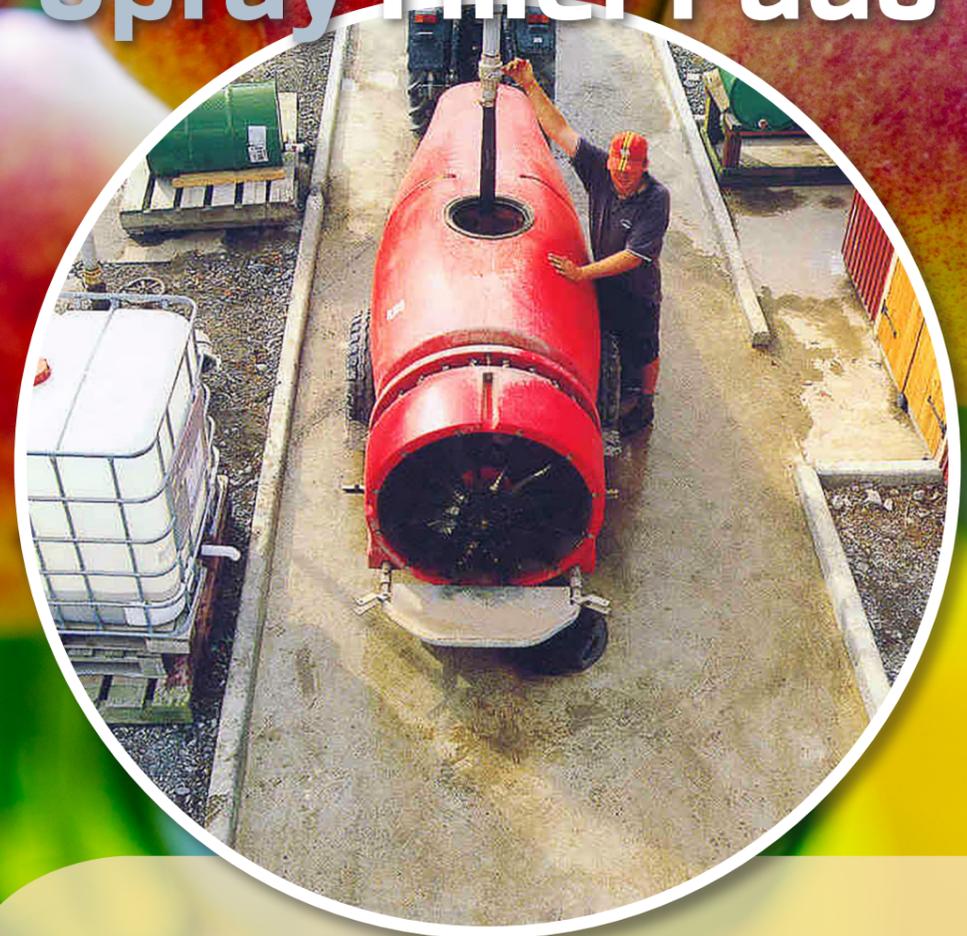
Secure & safe storage

More than 60% of all poisonings with agrichemicals involve children under 5 years old. It is vital that you make sure that children, pets and livestock cannot come into contact with agrichemicals.

Based on the GROWSAFE® Code of Practice for the Management of Agrichemicals NZS 8409:1999 the Agrichemical Storage Checklist is designed to assist farmers and growers to have a safe agrichemical storage shed. Visit growsafe.co.nz.

If you are storing large volumes of agrichemical also check HSNO requirements with your local council.

Spray Filler Pads



Useful information

The GROWSAFE® manual and specific industry crop protection programmes can provide useful management detail, as well as information from chemical suppliers or manufacturers' representatives. Visit growsafe.co.nz.

Hawke's Bay Regional Council staff can also provide advice on your responsibilities and the needs for a spray plan. Check hbrc.govt.nz search#landadvice for a list of useful website links.

HBRC contact details

Urgent contact for mis-sprays or spills,
HBRC Pollution Response 0800 108 838
Compliance team enquiries, 06 835 9200



The use of agrichemicals is essential to the agriculture and horticulture industries and to manage lifestyle blocks. Agrichemicals need to be used safely and responsibly to protect human and animal health, the environment, and Hawke's Bay's commercial markets both locally and internationally.



INTRODUCTION

This Information Sheet as been developed with GROWSAFE®.

Spray filler pads are an excellent way to minimise risk to the environment at the spray filler site.

Agrichemical contamination of soil and water will occur unless good agrichemical handling practices are followed. The concentrated agrichemicals handled in the sprayer filling area are high risk to the environment unless well managed.

Hawke's Bay Regional Council does not require spray filler pads to be installed. However the Resource Management Act states everyone must avoid causing any adverse effect on the environment.

A FILLER PAD

A filler pad is an area designed to collect any spillage of agrichemical mixtures or concentrates. The pad would usually be made of concrete but any impermeable material that contains and retains any spillage is suitable. Ideally it is bunded, and located alongside or as part of the agricultural storage area.

Ideal locations for spray filling areas:

- Away from flood prone areas.
- At least 20m from a waterway such as a drain, stream or river (if not possible it is best practice that the shed, mixing area and filling areas be fully bunded and sealed. The capacity of the bunded area needs to be 25% larger than the volume of the largest liquid container in that area.
- Ideally 30m from a bore (if not possible it is best practice to fully seal and bund the bore).
- Where the winter groundwater table is less than 600mm below ground level.
- Away from houses, boundaries, stored fuel, buildings used to pack or store produce, animal feed or store livestock. Check with your city or district council for local distance requirements.

How big does it need to be?

The pad should be big enough to get your sprayer and the towing vehicle onto the pad, with room to spare at the side and end. Unless you want to drive onto the pad with a boom extended it only needs to be big enough to cope with a folded boom.

INTRODUCTION TO DESIGN DRAWINGS

A general design is provided. If this does not suit your situation a specific design will be required. If the pad is to be made of concrete, the design and construction should comply with NZS3109:1997 Concrete Construction. Two helpful publications are:

- The Guide to Concrete Construction - Cement and Concrete Association of New Zealand and Standards NZ 1999
- Good Concrete Floors and Basements Practice. Building Research Association of NZ, Private Bag 50908, Porirua City. Phone: (04) 235 7600 Fax: (04) 235 6070

CONSTRUCTION

If concrete, or an alternative, is used then the floor must be designed to take the loads applied, particularly point loads from wheels. This means concrete strength, concrete placement and finishing, concrete thickness and reinforcing requirements must be right. If other material is used instead of concrete a special design may be needed. Contact GROWSAFE® for advice.

A roof is recommended. A large sealed area will collect a lot of water (1mm of rain gives 1 litre per square metre of pad). This water must be collected and stored for disposal along with any agrichemical collected. Covering the pad eliminates that problem. A drain system for rainwater is **NOT** acceptable.

Install a sump

The filler pad must have a sump not bigger than 200 litres. The sump should be kept empty by pumping the wastes into a larger storage tank. Currently the best option for disposal is to apply the agrichemical back on to land at application rates not exceeding label rates for any of the chemicals in the mixture.

Pad Design

Because of the risk of uncontrolled discharges from valves or taps that are left open. A portable pump is an easy way to empty the sump and use of a sump liner allows any collected solids to be removed. Consider installing grating to minimise the capture of these solids.

Install Bunding

Bunding is a raised edge or kerb designed to contain liquids on a sealed area. The pad will have a minimum 2% slope to drain towards the sump. A bund is recommended as a raised edge provides an extra safety barrier if a sudden large spill occurred. The raised kerb must go all around the filler pad so a graded ramp will be needed to allow machinery access onto the pad. The capacity of the bunded area needs to be 25% larger than the volume of the largest liquid container in that area.

CLEANING SPILLS

Any spillage, particularly of concentrated chemicals to land or water:

- Immediately take all practicable steps to contain and then remove the contamination from the environment.
- Immediately notify the Regional Council Pollution Hotline of the escape: 0800 108 838.
- Unprotected concrete absorbs volatile agrichemicals within seconds. Check the Disposal section of the GROWSAFE® Code NZS8409.

Spray Filler Pads

General design of a sprayer filler pad showing pad dimensions

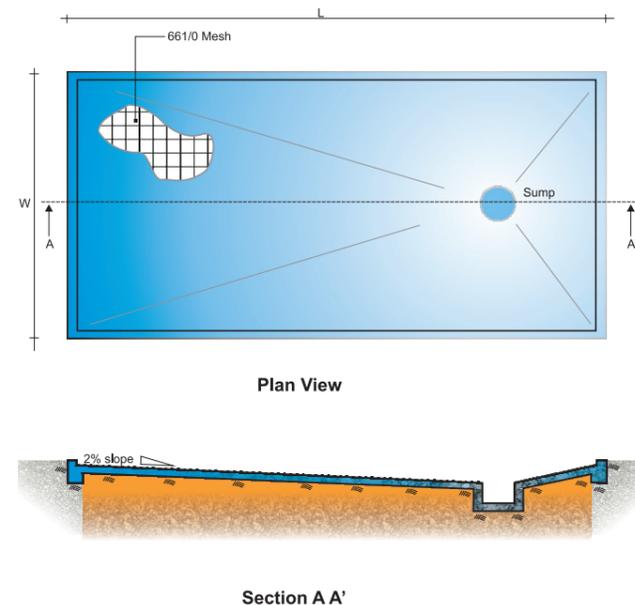
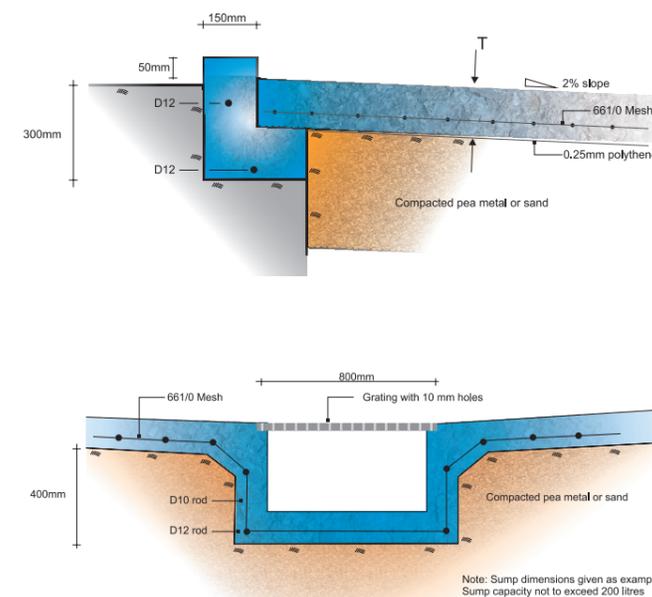


Diagram showing pad and sump design



Dimensions

Pad Length L(m)	6	8	10
Pad Width W(m)	4	4	4
Pad Thickness T(m)	150	150	150
Concrete Volume (est) (cubic m)	7	9	11
Concrete Strength (mPa)	20	20	20
Approximate containment volume (litres) with 50mm bunding (recommended)	2200	2900	3600

Notes:

1. Proper concrete placement and finishing to achieve a high-density impermeable surface is essential.
2. 2% slope means a fall of 20mm per 1 m pad length.
3. Well compacted pea gravel or sand base is essential.
4. Critical points for the sump are:
 - a. Volume no greater the 200 litres.
 - b. No pipes or drains through the walls.
 - c. Impermeable seal between pad and sump essential.
 - d. A removable stainless steel or polythene sump liner can be used.