

LAND MANAGEMENT

SUSTAINABLE LAND MANAGEMENT **Agrichemical Storage Checklist**

This checklist is designed to assist farmers and growers to have a safe agrichemical storage shed, mixing area and sprayer filler area. It is based on the 'minor storage requirements' of the Growsafe® 'Code of Practice for the Management of Agrichemicals' and the Growsafe® Technical Note D1 June 2001. Because agrichemicals can adversely affect human and animal health, property and the environment if not managed carefully, it is very important that agrichemical spray sheds are carefully maintained and well managed. Check with your district or city council for local agrichemical storage requirements.

Location of Sheds, Mixing Sites and Filling Areas

- Locate at least 20 metres from a waterway such as a drain, stream or river and away from unconfined aquifers (IF NOT, shed, mixing and filling areas must be fully bunded and sealed and capacity of the bunded area is 125% x volume of the largest liquid container in that area)
- Locate at least 30 metres from a bore or well (IF NOT, bore must be fully sealed and bunded)
- Locate away from houses, boundaries, stored fuel, buildings used to pack or store produce, animal feed or livestock. Check with your city or district council for local distance requirements.

Suitability of Storage Facility

- Ensure shed is well lit and keep ventilated
- Install shelves and flooring of non-absorbent material
- Construct a bunding around the base of the shed and seal the shed floor ensuring the capacity of the bunded area is 125% x volume of the largest liquid container in the store
- Ensure shed is of adequate size and has shelving for easy access to agrichemicals
- Loading to and from the shed should occur on the filler pad. Keep good access for delivery and removal of agrichemicals.
- Locate shed away from heating or ignition sources

- Keep 3m around shed clear of combustible vegetation & materials
- Store measuring equipment in the shed when not in use and do not use it for other purposes.

Safe Storage

- Keep all products in their original containers with label clearly showing
- Keep containers closed when not in use
- Lock shed and keep locked when not attended
- Supply clean water for hand washing, first aid and fire fighting
- Mark stores with HAZCHEM 2WE and NO SMOKING signs which are easily visible from normal approaches.

Product Segregation

- DO NOT store the following in your agrichemical shed as they are likely to react: pool chemicals; soil fumigants; lubricants; brake fuels; fertilisers (particularly potassium, calcium, ammonium nitrate); explosives; selenium remedies; and oxidising agents such as sodium chlorate/potassium chlorate.
- DO NOT store food or drink in the shed
- Segregate herbicides from other agrichemicals
- Store liquids below powders and solids.

Protective Clothing

- Wear the correct protective clothing as instructed on the label (gloves, overalls,

footwear, mask or glasses, respirator).

- Clean and maintain protective clothing (especially check for holes). Ensure rinse water goes to filler pad sump. Small amounts of agrichemical can completely disrupt septic tank function.
- Dispose of protective clothing to landfill
- Store respirator cartridges in a sealable container away from the shed.

Sprayer Filler Pads and Mixing Sites

- Install a backflow preventer (one way valve) or similar to ensure no contamination of fresh water source through back siphoning
- Install a sprayer filler pad to collect any spillage of agrichemical mixture or concentrate
- Locate pad alongside the agrichemical shed
- Make pad big enough to get sprayer and towing vehicle onto it at the same time
- Make pad strong enough to hold weight of fully loaded sprayer. Pad must be sealed.
- Make a raised edge or kerb (bund) on the edge of the pad to ensure liquids are contained
- Ensure capacity is 125% x volume of the largest liquid container e.g. sprayer tank
- Install a sump so spillage and rainwater can be transferred from the pad for disposal
- For any large, concentrated spill contact the Regional Council for best cleanup and disposal options.

For more information see the Environment Topic on Sprayer Filler Pads.

Spill Management

- Provide equipment solely for cleaning up spills. Equipment should include: broom; spade; empty container for temporary storage of spilt material or leaking containers; and a supply of absorbent material to soak up spills e.g. fine dry sand, zeolite e.g. 'kitty litter' (not sawdust as it can ignite)
- Clean up spills immediately
- Keep the shed clear of combustible material
- Install a fire extinguisher in a position accessible along an exit route (minimum size 4.5kg multi-purpose dry powder extinguisher or equivalent). Service annually.
- Have clear written procedures of emergency actions to be taken in the event of injury, poisoning, spill or fire. Procedures and emergency contacts should be in a water proof container attached to the outside of the shed.

In an emergency, the priority is to first prevent injury and then to safely prevent any escalation

of fire or spills entering waterways, accumulating in the soil or being released to the air.

Disposal

- Apply surplus spray mixture, tank washings and filler pad sump washings to the target area, or use a 'dribble bar' at no greater than the recommended application rate. Alternatively apply to waste ground or headlands
- Ensure re-entry periods are met.
- Ensure there is no liquid run-off or ponding. Vary the area used for disposal so concentrates do not build up in the soil.
- Triple rinse empty containers prior to disposal:
 - Drain empty container into spray tank of same agrichemical for 30 seconds
 - Fill 20% of container volume with water, replace lid, then rotate container so all interior surfaces are rinsed
 - Tip rinsewater into spray tank again allowing to drain for 30 seconds. Repeat rinsing and draining twice more.
- Return triple rinsed empty containers to supplier, or dispose at public landfills. Preferably squash and chop holes in containers for landfill to prevent reuse.
- Contact the Hawke's Bay Regional Council for the disposal of unwanted agrichemicals.

Records

- Maintain an up to date register of product trade names and quantities stored
- Locate the register in a safe position away from the shed
- Register must be immediately available to emergency services in the event of an emergency.

Training

- Train staff on first aid, handling, mixing and spill procedures and emergency contacts
- Ensure all staff handling or applying agrichemicals hold as a minimum the Growsafe® Introductory Certificate.

This checklist is based on the 'Code of Practice for the Management of Agrichemicals' NZS 8409:1999. Refer to this Growsafe® Standard for more detailed information. Contact your city or district council for local agrichemical storage requirements and requirements under the Hazardous Substance and New Organisms Act

For further information

For further information, please contact Growsafe® at www.growsafe.co.nz, your local council or the Hawke's Bay Regional Council for advice.

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