

LANDOWNER AND OCCUPIER CHECKLIST



Swim-through dip

There are an estimated 50,000 former sheep dip sites in New Zealand. Arsenic was used to control external parasites on sheep from 1840 to 1980 and organochlorine pesticides were used from 1945 to 1961. The majority of former sheep dips investigated to date are contaminated with these persistent dip chemicals at levels that are hazardous to humans, animals and the environment. There are some simple steps that you can take to minimise the risks to people living near the site, workers, stock and your business.

The term 'dip site' collectively refers to the sump, bath, vat or shower, the draining platform, the disposal area for spent dipping fluid, the scooping mound for sludge, the splash zone, the run-out paddock, potentially contaminated timber rails and posts and any other yards that may have been used to hold treated sheep.

General management

- Read Sheep Dip factsheets 1, 2 and 3.
- Identify the location of the sheep dip site(s) on your property.
- Draw a simple map, with measurements and obvious landmarks. Attach it to your Business Plan or farm records. Seek advice if in doubt.
- Obtain an initial screening or analysis of the site (e.g. soil and water samples) to determine the extent of contamination in and around the dip site.

- Prepare a site management plan that covers health and safety; grazing animals; edible crops; and water supplies.
- Remove old chemical drums and sheep dip remedies (and other unwanted agrichemicals) that are on your property. These will need to be disposed of to an approved facility.
- Check industry Quality Assurance programmes for advice on dip sites. Some may require land owners to prepare a hazard mitigation plan for the dip site.
- Seek professional advice (from your farm advisor or an environmental consultant) before undertaking any remediation (clean-up) activities or disturbing soil at a dip site. You could make the risks worse and the ultimate clean-up costs higher if you do not seek advice first. You may need to obtain resource consent(s) from your local, unitary or Regional Council.

Health and safety

- Don't let children play in the soil near the old dip or the parts of the yard or paddocks used as holding pens for dipped sheep.
- Place hazard signage and inform farm staff, tenants and visitors of the hazards associated with a dip site.
- Cover securely any plunge dips to prevent access by children especially ones containing water/liquid. These may be a potential drowning hazard.
- Take appropriate health and safety precautions with any earthworks in the area.

Grazing animals

- Fence the area off with stock-proof fencing.
- If you have to use former yards for current livestock activity, avoid holding stock in the (potentially affected) yards for longer than 3-4 hours.
- Maintain a good, dense grass cover (even in drought) to avoid dust and contamination of vegetation.
- Avoid water or feed troughs near the dip site.
- Avoid pugging or soil disturbance by livestock.
- Avoid rearing, weaning or hand-feeding cattle within 30 metres of a dip site or further on the lower side if there is a likelihood of erosion or down-slope migration.
- Take fat biopsies if you think your animals have been exposed to organochlorine residues in soil or feed. Contact your vet.
- Avoid purchasing livestock from a property where they might have been raised or held in contaminated yards.
- Do not use sheep dip sites to grow animal feed or forage crops

Pigs and poultry

- Do not use former dip sites and structures for pigs and poultry.
- Do not re-use concrete or timber from old sheep dip sites for animal holding pens.

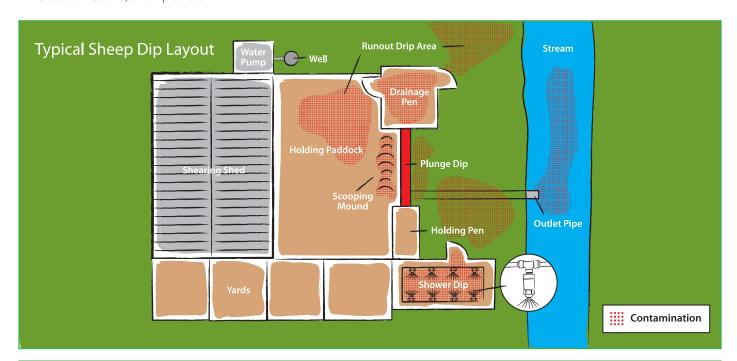
Edible crops, vegetable gardens and wildfood

- Do not use sheep dip sites to grow edible crops, vegetables, animal feed or forage crops.
- Do not re-use concrete or timber from old sheep dip sites in domestic gardens.
- Avoid harvesting fruit, mushrooms and vegetables from the vicinity of a sheep dip site.
- Avoid harvesting 'wildfoods' such as watercress, tuna (eel), trout, waterfowl etc below any dip discharge outfall where it enters a wetland, swamp or drain.

Be aware that discharges from sheep dips in coastal areas can cause residues in shellfish.

Water supplies

- Do not install a bore or well in an area where there may be contaminated groundwater from old dip sites. In some cases, contamination may move up-gradient of a dip site.
- Test any water used for human or stock consumption for arsenic and organochlorines if it is sourced from surface water or a groundwater source you suspect could be contaminated from a dip.
- Test all water used for irrigation and commercial food production for organochlorine pesticides and arsenic.



Sources of further information

Sheep Dip Factsheet 1:

Sheep Dips in New Zealand

Sheep Dip Factsheet 2:

Organochlorine Pesticides

Sheep Dip Factsheet 3:

Arsenic

All Sheep Dip Factsheets are available on

www.envirolink.govt.nz. Project number 820-TSDC59

Your Regional Council's contaminated sites officer, District Council environmental health officer or District Health Board health protection officer.

Identifying, Investigating and Managing Risks Associated with Former Sheep-dip Sites (2006). A guide for local authorities, Ministry for the Environment ME 775.

http://www.mfe.govt.nz/publications/hazardous/risks-former-sheep-dip-sites-nov06/risks-former-sheep-dip-sites-nov06.pdf

Health and Safety Guidelines on the Cleanup of Contaminated Sites (1994). Department of Labour http://www.osh.dol.govt.nz

Disclaimer

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This factsheet was prepared by Sally Gaw and Graham McBride for Tasman District Council through a Foundation for Research Science and Technology Envirolink grant. Sally is a lecturer in environmental chemistry at the University of Canterbury. She has ten years experience in managing contaminated land and was a member of the Ministry for the Environment's Pesticide Advisory Group. Graham is a farmer with national and international experience with managing legacy chemicals from agriculture. He initiated research into sheep dips in New Zealand.