FACT SHEET

SHEEP-DIPS

Sheep dipping started in New Zealand in the early 1800s and was required by law. Well over 50,000 sheep-dip sites are present in New Zealand.

Most sheep farms had their own dip. Due to collapse or changes in size often more than one dip site is present. Mobile spray dips were used in the second half of the 20th century.

Dips are found close to woolsheds, yards, areas were water is available and road or rail loading facilities. The last had often a communal dip where tens of millions of sheep could be dipped during the lifetime of the dip.

These sheep-dip sites often hold more arsenic in the soil than is found on timber treatment yards. They are located in centre of towns, often near the current stock yards, or along railway lines. On average every 30 – 50 km of railway would have had a sheep loading and dipping facility.

The soil contamination is severe close to the dip, the drip pad and mixing tanks, to the point that incidences of stock death still occur every year. However expose to the contaminants found even up to 200 meters from the dip itself can cause chronic diseases and will affect health and well being of people and children living on such sites. Therefore professional assessment of the spread of contamination is essential.

Marking out the contaminated area is a first step in managing the risks associated with sheep-dips.

An experienced person can do this in one day. Some samples will need analysis in a laboratory, while others can be analysed on-site.

Fencing off the relevant areas is the simplest way to reduce the risk.

Main contaminants (found at 100 – 50% of original concentration mg/kg)

	Arsenic	Dieldrin	DDT-Lindane
Period used	1840 – 1980	1955-1961	1945 – 1961
NZ background level	4- 10	0.0001	0.00001
Lifestyle /residential NZ guideline level	30	2.7	8.4
Levels near dips	>10,000	>1000	>500
Levels in yards	50 – 500	7 – 200	10 – 300
Levels in 1st paddock	20 – 300	3 – 100	5 – 150

Note: levels found in actual dips sites surveyed (total dip sites surveyed: 50)

Care is required not to under estimate the spreading of the contamination. Sheep were often muddy and large quantities of sludge with high concentration of chemicals were often spread around the dip to dry. Sometimes they were spread along fence lines, or buried in the local dam. Where ever the sludge is disposed its position needs to be identified for the fencing to be effective.

The most permanent solution to wide spread soil contamination is offsite disposal, or on-site burial. This may require a resource consent in your region.