

Contingency Plan for the Emergency Disposal of Milk



This guide is designed to protect the environment in the event of an emergency requiring on-farm disposal of milk. It outlines the preferred methods for disposing of milk during an emergency. An emergency is defined as a situation where the farmer is unable to have milk picked up by the factory.

Waterbodies must be protected from contamination by milk

The discharge of milk into natural water can seriously affect river and stream life including trout, native fish, insects and vegetation. Milk has a more severe effect on waterbodies than farm dairy effluent. The widespread dumping of milk could cause severe damage to waterways and the environment which would take some time to recover. The final cost to the environment could be greater than the original loss of milk.

As well as instream life, there are other consumptive river users such as town supply reservoirs, industry, domestic users and livestock to consider. The consequences are, therefore, likely to be widespread.

The Taranaki Regional Council approach

The Taranaki Regional Council is aware of the potential harmful effect on the environment and if on-farm disposal of milk becomes necessary the Council needs to ensure that no milk is discharged to waterbodies.

To ensure that no milk is discharged into waterbodies, either directly or indirectly, the Council can provide farmers with:

Technical advice There are methods of alternative milk disposal which can be adopted by virtually all farmers (see overleaf).

Field advice Council officers can provide on-farm advice to farmers who consider they have particular problems with disposal of milk during an emergency.

Summary

Any discharge of milk into natural water may cause serious damage and the Taranaki Regional Council believes that with forward planning farmers can prevent the discharge of milk to waterbodies during an emergency.

Conditions on most dairy resource consents require that farmers advise the Taranaki Regional Council in the event of an unauthorised discharge to land or waterbody.

For further advice contact:
Taranaki Regional Council
Inspectorate Section
Ph: (06) 765 7127 (24 hours)
Emergency contact: 0800 736 222 (24 hours)

Preferred Methods of Disposal

Spray irrigation

Milk can be sprayed onto pasture without causing pasture damage, if it is diluted with water. Spray nozzles should be placed in a position as far as possible from waterbodies, and should be shifted to a new site after each discharge to prevent pasture damage.

- Dilute the milk with at least the same volume of water (ie. 1 volume of water to 1 volume of milk or 1:1 dilution) before or during application to land. Higher dilutions should be considered if there is potential for odour problems, especially to neighbours.
- Irrigate onto recently grazed pasture and following irrigation of milk solution, flush the pasture with clean water to rinse the milk residues from foliage into the soil.
- Use as much land area as practically possible.
- If possible, use land that can be worked following application.
- Monitor the application to ensure that there is no discharge to waterbodies.

Oxidation ponds

Past experience has shown that, over a period of days, ponds can cope with milk without any apparent harmful effect. Ponds which are the **correct size** for the herd milked are able to receive and treat milk for a limited time.

- Ponds should be able to receive up to six milkings with no detrimental effects on the effluent quality or pond operation.
- After six milkings, there could be a problem with odour, however this should abate after four or five days.
- More than six milkings will lead to a deterioration in effluent discharge quality. However, methods are available to extend the period beyond six milkings, such as increasing the volume of effluent in the ponds.
- Monitor the discharge to ensure that there is no overflow caused by shock loading.

Dumping in a constructed pond or trench

A suitable pond or trench can be constructed fairly quickly using farm equipment such as front-end loaders or back blades. Milk can then be pumped or transported to the trench or pond which should be filled in after the emergency has ended. A new holding pond or trench should be dug for any subsequent need to dispose of milk. Ponds or trenches should be sited clear of houses or dairies because of possible odour problems. Prompt backfilling will reduce or eliminate such odours.

Sacrifice area

An area sited clear of waterbodies can be used to dump milk but there may be problems with smell and pasture damage. Therefore, such a sacrifice area should be sited at least 200m clear of houses or dairies. Raw milk can be pumped or transported to the areas in honeywagons, tractor-mounted weed spray tanks or 200 litre drums. To minimise pasture damage, dump on a different site each time and then, if possible, use water to wash the milk from the foliage into the soil.

Note: The location of trenches and sacrifice areas needs to be at least 50 metres away from wells or bores to avoid groundwater contamination.

Feeding to livestock

Whole milk can be fed to calves before or just after weaning, or disposed of at any nearby piggery if arrangements are made and suitable storage is available.