# Concrete wash

## Preventing stormwater pollution

**If you or your business work with concrete, lime or cement products, you need to make sure your activities do not result in air, land or water pollution.**

Otago Regional Council

# The law

## The polluter pays

Under the Resource Management Act 1991 (RMA), it is illegal for any substance to be discharged into natural water, the stormwater system, land or air unless authorised by a resource consent, a district or regional plan, a national environmental standard or other regulations.

Polluters can be fined up to $1,000, issued abatement notices, or prosecuted and fined up to $600,000 for breaching the RMA.

| Landowners | Employers | Workers |
|---|---|---|
| Make sure the contractor you hire knows how to do the job properly. | Make sure you train staff well and give them the correct tools for the job. | If you cause pollution, you and/or your company could be held liable for clean-up costs and/or penalties. |

**Report all spills immediately to the Pollution Hotline: 0800 800 033.**

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**orc.govt.nz**

# What's the problem?

## Environmental effects of cement products

Lime is a major component of cement and is found in concrete products. When dissolved in water, cement produces an alkaline solution with elevated pH that can kill fish, insects and plants.

Never allow concrete slurry or wastewater to enter stormwater drains. It must be collected for correct disposal or diverted to unsealed ground.

### Is filtering OK?

It is not possible to filter alkalinity from water. Do not use filter cloth, weed mat, enviro-filters and hay bales — they will not reduce the high pH of concrete wastewater.

The filtered water will still have an elevated pH and be extremely harmful, even if it looks clear.

### Is dilution OK?

Dilution only increases the size of the problem. It takes 10,000 litres of clean water to neutralise a litre of concrete slurry to a neutral pH of 7.

It is important to reduce the amount of water being used for clean-up.

# What can you do?

## Concrete cutting

Make sure all dust is collected so that it is not washed into the stormwater system where it can cause environmental harm or air quality issues.

If wet cutting, use as little water as possible. Ensure you put slurry controls in place before you begin work to prevent discharges to the stormwater system.

Make sure all concrete slurry has been diverted to unsealed ground or removed from the cutting site.

## Slurry controls

If you are cutting concrete, exposing aggregate, or undertaking lime stabilisation, you must have slurry/wastewater controls.

## Laying concrete and exposing aggregate

Check the weather — don't lay concrete if rain is forecast, as the rainwater may become contaminated and wet concrete will elevate the pH of rainwater runoff.

Put slurry controls in place before you start work, particularly if exposing aggregate. Check if the controls you have in place can handle the amount of concrete wastewater produced.

For small sites, wash equipment on unsealed areas — but not in tree drip lines. Do not wash any equipment where concrete wastewater may flow into streams or stormwater drains.

**Various methods can be used to prevent concrete wastewater runoff**

Source: Auckland Council

## *Remember:*

- **Remove water from pile holes, footings and foundations before pumping concrete.**
- **Check the weather forecast, plan ahead and put controls in place before starting work.**
- **Divert or contain any excess slurry or wastewater to an unsealed surface.**
- **Do not wash cement dust, cement slurry, acid or chemical wastewater into the drain.**
- **Never leave cement dust or slurry on site where rain could wash it into the stormwater system.**