

## Moss and mould remover and biodegradable detergents

Moss and mould removers left on surfaces can later discharge to the natural environment and have negative effects on the environment.

Note that even 'biodegradable' detergents pollute the environment. They quickly remove oxygen from the water when they break down and are not permitted to enter the stormwater system.

When using moss and mould remover and biodegradable detergents

- Treat them like any other potentially harmful chemical
- Do not apply or wash them off without containment in place
- Make sure they do not enter the stormwater system
- Do not apply them when rain is forecast

## Environmental Management Plans

The ARC strongly recommends that all companies which routinely undertake waterblasting activities create an Environmental Management Plan (EMP).

- An EMP is a written document that explains how staff will identify the pollution risks for each worksite.
- It describes the methods and equipment which should be used to ensure that wastewater run-off is collected and/or disposed of in an environmentally responsible manner.
- Utilise your expertise to develop new and innovative ways of managing the wastewater from waterblasting activities to prevent water pollution.

Go to [www.arc.govt.nz](http://www.arc.govt.nz) and follow the links to the Pollution Management website for a downloadable EMP guide.

## The Law

In New Zealand the Resource Management Act (1991) is the law that protects our environment. In the Auckland region it is illegal for any substance to enter water either directly, through the stormwater system or via the contamination of land without prior authorisation from the Auckland Regional Council. Polluters can face a fine of up to \$600,000 for breaches of the Resource Management Act.

To obtain more information about permitted activities regarding the discharge of waterblasting wastewater refer to section 5.5.54 of the Air, Land and Water Plan on the ARC website [www.arc.govt.nz](http://www.arc.govt.nz)

## Remember

- Outside drains discharge untreated straight into the local stream or to the sea
- Plan ahead – put controls in place before starting work
- Disconnecting downpipes and diverting runoff are simple yet effective ways of preventing pollution

## 24 Hour Pollution Response Hotline (09) 377 3107



Sidewalk being waterblasted without controls in place

# Pollution and the Auckland Region

## Waterblasting

Wastewater from waterblasting activities can contain a variety of pollutants including detergents, sediment, paint chips as well as organic material such as moss and algae, all of which are harmful in the aquatic environment.

When waterblasting, you must prevent the discharge of any contaminants into the stormwater system or natural water.



Waterblasting waste entering a stormwater drain.

**Never carry out waterblasting works without appropriate containment in place.**

# Common waterblasting activities and contaminants

It is illegal and harmful to discharge waterblasting waste into the stormwater as it can have a negative impact on the environment. It is your responsibility to prevent unlawful discharges from your waterblasting activities. Make sure you put appropriate controls in place before you start working.

Waterblasting wastewater is much more concentrated than runoff caused by rain.

Activity	Common contaminants
Roofs, walls, windows	Detergent, paint chips, lichen, moss
Driveways, sidewalks	Detergent, sediment, lichen, moss
Prep surfaces for painting	Paint chips, lead
Boats, cars	Algae, paint chips, grease, dirt
Exposing aggregate concrete	High pH concrete waste water (extremely toxic)



Runoff from waterblasting a terracotta roof discharged onto a beach

# Effects of waterblasting run off

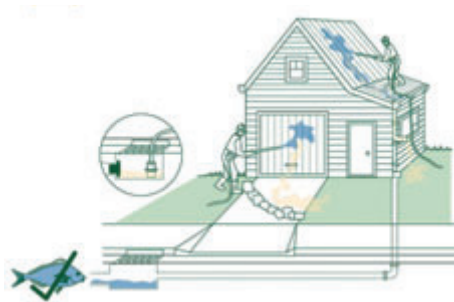
- Contamination of land and water
- Poisoning of aquatic wildlife and plants
- Smothering of aquatic habitat
- Preventing oxygen and sunlight from entering the water, degrading the aquatic environment
- Build up of toxins in animals' bodies potentially causing harm to humans when caught and eaten

## Bad practice:



Downpipes not disconnected, no diversion to unsealed ground or sewer, contaminated runoff is entering the stormwater system

## Good practice:



Downpipes disconnected, runoff on ground diverted, no discharge to the stormwater system

**All outside drains are for rainwater only and drain straight to the local stream or the sea!**

# Ideas for containment and diversion

The discharge of waterblasting waste water directly into the stormwater system is not permitted.

The discharge must be

- collected for reuse; or
- discharged to land so that runoff or accumulation of contaminants does not occur; or
- recycled or collected for disposal at an authorised facility.

Disconnect downpipes and divert runoff onto unsealed ground



Block catchpit outfall and use pump or sucker truck to pump wastewater onto unsealed ground or to a container for removal



Use sandbags to divert runoff away from drains onto unsealed ground

