

Water blasting



If your day-to-day activities involve the use of water blasting equipment, you should consider the potential your activity has to pollute the environment.

What causes pollution?

Poor work practices while water blasting may be causing some of these common problems:

- Discharges of contaminants including sediment, paint, oil, heavy metals, chemical cleaners and organic waste to the ground or stormwater system
- Foaming water in the stormwater system
- Blockage of stormwater grates and drains with waste materials
- The discolouration of natural water bodies.

How your waste can pollute the environment

Any material or substance left uncovered or on the ground outside can flow or be washed by rainwater into a nearby stormwater drain where it will result in the pollution of the local stream and/or the coast.

Wastewater from blasting operations contains a number of substances that can pollute our environment. These include sediment, fuel residues, heavy metals, paint, cement, plaster, oil and organic matter.

If discharged, these substances can cause harm to the environment by:

- Contaminating land and groundwater
- Smothering small aquatic plants and animals and destroying where they live
- Poisoning animals and plants
- Preventing oxygen and sunlight from entering the water, making it difficult for animals to find food and for plants to get energy
- Irritating or clogging the gills of fish
- Building up chemicals in the bodies of plants and animals potentially causing long-term health effects.

Even a very small quantity of pollutant, or just one accidental discharge can drastically alter the quality of a stream. Fish, insects and plant life can be killed and their habitats destroyed. The stream can take many years to recover.

You may think that your little bit of waste can't harm the environment but there are other people in the region carrying out activities similar to yours. Your waste when combined with that of others can amount to a significant amount of pollution occurring every day of the year. The cumulative effects of combined



Photo 1: Wastewater from water blasting should be contained for appropriate disposal

discharges can cause serious damage to our environment and must be prevented.

It is illegal to cause pollution

In New Zealand the Resource Management Act (1991) is the law that protects our environment. It clearly states that every person is responsible for ensuring that their activities and those of their employees do not contribute to pollution of our environment.

Specifically, it is illegal to allow any substance to enter water either directly, through the stormwater system or via the contamination of land without authorisation.

By making a few simple changes to your site and your daily practices you will be contributing to a pollution free environment for us all to enjoy both now and in the future.

Play it Safe – stop pollution resulting from your activities

If you use chemical additives, or the blasting waste will contain fuels, oils or other chemicals:

- Take appropriate measures to contain any waste runoff for appropriate disposal. Alternatives for disposal include discharging to the sewer or collection by a commercial waste contractor. Any containment systems need to be maintained regularly throughout your operation
- Block off outlet pipes from any affected stormwater sumps and use a submersible pump to transfer

wastewater from these sumps into the sewerage system

• Filter and recycle wastewater through your water blasting system.

If you are only blasting dirt or particulate matter such as paint:

- Place a filter over or around any affected stormwater drains. Alternatives include:
 - filter cloth stretched across the sump grate
 - Wool/pink batts around the sump
 - An appropriately sized sand bund around the sump.
 - Sandbags or haybales around the sump.

This will allow the water to pass through and the particulate matter to be collected for disposal in the bin. Ensure that you continually maintain these filters throughout your operation.

- Enclose your work area with netting or a fine mesh to prevent windblown pollution.
- Consider alternative methods such as blasting with a vacuum system or recycling wastewater.

Always have a good spill contingency plan. Keep pollution control equipment handy and make sure your staff members are well trained.

For further advice or information contact: Taranaki Regional Council, Private Bag 713 Stratford Ph: 06 765 7127 Fax: 06 765 5097 Pollution Hotline: 0800 736 222 www.trc.govt.nz