

Activities involving lime, cement, concrete and asphalt

If your daily activities involve working with cement, concrete or other lime based products or if you cut concrete or asphalt then please take the time to read this fact sheet to find out how you can prevent your wastes from harming our environment. It is important that wastes from these activities are disposed of correctly and are not allowed to enter the stormwater system. These wastes can be lethal to aquatic life!

What activities can cause pollution?

- Washing equipment associated with concrete and cement works eg. pumps, piping, shovels, barrows, trowels, concrete truck chutes
- Wetting freshly laid or dyed concrete
- Rinsing or acid-etching exposed aggregate concrete
- Disposing of unwanted concrete or asphalt products
- Spills of wet concrete, cement, asphalt emulsion or other additives, chemicals or fuels involved in these activities
- Cooling/lubricating concrete and asphalt cutting or polishing blades
- Washing residues from the cut or polished surface
- Lime stabilization of the earth prior to compaction or sealing
- Application of lime based fertilisers or soil conditioners



How does my waste pollute the environment?

Lime is a major component of cement and as such is found in all concrete products and is also used for stabilizing earth and for some landscaping activities. Lime easily dissolves in water, just like sugar, to make the water and slurry strongly alkaline (pH 11-13), which burns and kills fish, insects and plants that come in contact with it, much the same way acid burns us.

Filtering concrete wastes to collect slurry is not acceptable. The remaining liquid still has a high pH and should be disposed of safely with no discharge to the stormwater system.

Asphalt cutting wastewater, asphalt rinse and bitumen emulsion all contain high levels of hydrocarbon compounds and metals, many of which can poison stream life and can remain in the stream, lake and beach sediments for a long time.

Is a very small discharge ok?

NO, not even a small discharge of concrete or asphalt waste is allowed, a small amount of pH affected or hydrocarbon contaminated water can result in significant fish kills and plant loss in our waterways.

What if I dilute my concrete washings with water?

No, dilution is not the solution. You would need ten large tanker loads of clean water (approximately 100 cubic metres) to effectively dilute the waste from a typical small concrete cutting job. Dilution will only increase the amount of discharge and the environmental impact it has.

**DO NOT LET YOUR WASTES ENTER THE
STORMWATER SYSTEM! CONCRETE KILLS!**

It is easy to ensure that your activities do not cause water or land pollution!

By taking some precautions and making a few simple changes to your daily practices you can contribute to a pollution-free environment for us all to enjoy, both now and in the future. There are many waste control options available to you. You should check your site before work commences to decide which method of containment and disposal best suits your situation.

Handling wet concrete, cutting or polishing concrete or concrete products, rinsing exposed aggregate or damping concrete as it cures

If rinsing, damping, cooling or lubricating water is required, some methods of control to ensure there are no discharges to the environment include:

- Diverting washwater, slurry and other wastes onto unsealed ground/grass away from protected trees where they can soak in. Create a diversion path if necessary e.g. using sand, clay or a shallow trench.
- Using a stormwater cesspit as a temporary waste collection area by blocking the outlet with a plug and using a submersible pump to transfer the slurry and washwater to a grassy/unsealed area nearby or to a container for offsite disposal. If a cesspit is used this way, it must be thoroughly cleaned and all waste removed after the work is complete.
- Employ a waste contractor (i.e. sucker truck) to remove the slurry and washwater as they are produced.



Washing concrete trucks and equipment

Use a specifically designed wash area that either discharges into the sewer system (a trade waste consent is required from North Shore City Council for this option) or contains all wastewater in a sealed tank for recycling or re-use. If you need to wash out the concrete truck chute away from the depot, be sure to wash it over grass or in the designated wash area onsite.

Asphalt cutting

All wastewater must be collected for recycling or disposed of as a trade waste either to the sewer system with approval from North Shore City Council or via a reputable trade waste contractor.

Using lime to stabilise earth or road works

Clearly identify the location and depths of all water mains within the work area prior to commencing work and ensure that they are not damaged while the lime is being hoed into the ground. Never undertake lime stabilisation when rain is expected. Have procedures in place so that your company is always prepared to prevent lime and other contaminants from your jobs being accidentally washed into the natural environment if or when something goes wrong.

ALWAYS REMEMBER

- Permitting or allowing lime, cement, concrete, asphalt and any of their derivatives to enter the stormwater is illegal and may result in a fine of up to \$200,000 and/or imprisonment.
- ALL stormwater drains flow untreated, directly to our streams, lake and beaches.
- Never rinse or wash anything where wastewater can drain to the stormwater system or a stream.
- Always clean up all spilt material or deposited wastes before rain can wash them away.
- If disposing wastes into a bin, ensure the bin is sealed so your wastes do not leak out.
- Always dry-sweep work areas rather than rinsing away with a hose.
- Develop and implement operating procedures that take into account environmental protection. Ensure all staff are well trained in these procedures and relevant equipment is onsite.
- Check out www.northshorecity.govt.nz for more information about pollution.

If you see any water pollution please call North Shore City Council's Actionline or the Auckland Regional Council Water Pollution Hotline as soon as possible. A prompt call will help us trace pollution to the source.



Actionline
Phone: 486 8600



Auckland
Regional Council
TE RAUHITANGA TAIAO

Water Pollution Hotline
Phone: 377 3107