

# Disposal of Exposed Aggregate Driveway Washwater

If you or your business constructs exposed aggregate driveways, then you must ensure that the washwater is collected and does not enter the stormwater system and pollute the waterways.

## How can concrete washings cause pollution?

Concrete washwater is caustic and will burn and kill aquatic animals when it comes in contact with them. Burnt lime in cement easily dissolves in water to produce a very strong alkaline solution of pH around 10.0 – 13.0. Even when the concrete fines settle out, the water will remain alkaline.

Hundreds of eels and fish have previously been killed when exposed aggregate driveways have been washed into our local streams via the stormwater system.

## How can you prevent water pollution resulting from washing exposed concrete driveways?

Plan in advance how you will contain all the washwater that comes off the driveway. Options for containing washwater from exposed aggregate driveways include:

- Digging a hole and diverting all the runoff into the hole, ensuring that the hole is large enough to take all the runoff and any rainfall predicted. Once the washwater had soaked into the ground the remaining residual should be disposed of as a solid waste; or
- Blocking off the nearest road catchpit and pumping the washwater to a container or sucker truck for appropriate disposal. Disposal could be into a hole as given above.

## What other sources of concrete washings cause pollution?

- The washing of concrete equipment, such as wheelbarrows and pumps, where the washwater flows onto the pavement and into the gutters;
- The use of cooling water in concrete cutting;
- The washing of concrete mixing trucks chutes;
- Disposal of left over concrete or spills;
- Rainwater falling on freshly laid concrete.

To control the washwater from washing equipment and concrete cutting, refer to Figures 1 and 2 (over page) respectively.

## What are the penalties for polluting the stormwater?

Under the Resource Management Act (1991) you, and your staff and contractors, could receive an instant fine of \$1,000 or be taken to the Environment Court where the maximum penalties are a fine of \$200,000 with a further \$10,000 for each day that a discharge continues, or two years in prison; plus any clean up costs.

Note where an offence is committed by employees/contractors acting under instructions from another person/corporation, each is equally but severally liable. Therefore it is important that your staff and contractors are aware of their obligations to protect the stormwater from pollution.

Contact the Tauranga City Council on

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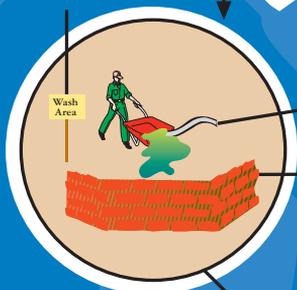
for more information.

Figure 1:

Wash-down area on-site located away from stormwater lines and pits.



Wash-down area clearly signposted.



High pressure, low volume spray nozzle.

Straw-base filter, preferably wrapped with geotextile filter fabric.

Bales embedded 100mm into the ground and held in place with star pickets.



Geotextile fabric lined ditch allows soakaway.

Figure 2:

Best management practice for preventing concrete run-off entering stormwater drains (for concrete cutting, hardstand management and washing down exposed aggregate).

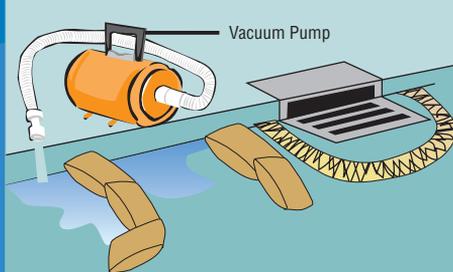
Note: It is best to use these controls simultaneously.

1. Establish a dam in the street gutter using sandbags or earth.



Ensure sediment control is firmly against street gutter so as to stop any contaminated run-off leaking into drain.

2. A vacuum system can be set up to constantly suction up contaminated liquid as it reaches the containment dam. Alternatively, at the end of a particular job, the built-up pool of contaminated liquid can be suctioned up before moving onto the next stage.



3. Always vacuum or sweep up any excess concrete slurry or residue left in the gutter.



Figures 1 and 2 taken from the New South Wales Environment Protection Authority 'Environmental Best Management Practice Guideline For Concreting Contractors, October 2002'.

**Remember no concrete washwater should enter our stormwater system. If you require further advice please contact a Pollution Prevention Officer on 577 7000.**

Contact the Tauranga City Council on

**577 7000**

for more information.