



Environmental requirements for exposed aggregate driveways

Refer to the Builder's Pocket Guide or the website
www.bpg.co.nz for further details





Why is containing concrete wash water important?

- One by-product of concrete is calcium hydroxide (lime).
- **The lime released from fresh concrete is very alkaline.**
- Any water that comes into contact with cement, cement paste, uncured concrete, concrete dust etc. quickly produces a strong alkaline solution that causes chemical burns to fish, insects and plants.
- **Even small amounts of concrete wash water, if allowed to enter the stormwater system, can cause serious damage to our environment.**

Discharging concrete wash water to the environment is against the law!

Discharges of contaminants to the environment are regulated by the Resource Management Act 1991.

-Any person who commits an offence under this Act is liable for imprisonment of up to two years or a fine of up to \$300,000.

-Companies face fines of up to \$600,000.

- Every person involved with an offence will be investigated and you may be found liable even if you were not present when the discharge occurred.
- Environment Canterbury has been liaising with PMOs and industry groups to educate contractors and raise awareness of the issue of concrete wash water.
- Post-earthquake the risk of environmental damage from concrete wash water has greatly increased and Environment Canterbury will be actively enforcing the Resource Management Act.

Example method for wash water collection



STEP 1

Place black polythene inside the boxing prior to pouring the concrete.

It can be rolled up during the pouring & placing to avoid being damaged or getting in the way



STEP 2

The polythene is then rolled out to create a bunded area at the bottom of the driveway.

The contractor has used 200 x 25 timber. Sand bags, a silt or compost sock could also be used.



STEP 3

Completed bund at bottom of driveway.

Note: If you are working near a stormwater drain, consider installing a drain seal or other secondary containment while wash water is being created and collected. A spill kit should also be part of your work kit.



STEP 4

Wash water and sediment are swept into bunded area.



STEP 5

Contaminated wash water pumped into an IBC, sediment is kept in the bund.

(bilge pumps are available from auto/marine stores, *Chux* type cloth over the intake keeps sediment out of the pump which is powered by 12 volt car battery).



STEP 6

Wash water is taken away for disposal.

Wash water can also be collected by sucker truck. **YOU MUST OBTAIN A WASTE TRACK RECEIPT** from the waste carrier – if they can't won't give you a receipt – don't use them!

For further details contact your Environmental Manager, scan the QR or go to :

<http://www.wasteminz.org.nz/wp-content/uploads/Liquid-and-Hazardous-Waste-Code-Compliant-Operators1.pdf>

Summary

- * Discharging concrete wash water is a liability to you, it is a liability to your business or employer, and a liability to your project managers (Arrow).
- * The penalties for illegally discharging concrete wash water can be significant for all concerned, **it's bad for the environment and bad for you and your business, it could affect you gaining future work with your primary contractor.**
- * The simple alternative is to contain your wash water and dispose of it lawfully.
- * The example above is not the only way wash water can be managed but it is the easiest most cost effective method we have encountered.
- * **DO NOT USE THE GUTTER AND/OR DIRT BUNDS – THIS METHOD CREATES ADDITIONAL SEDIMENT ISSUES AND IS NOT AN APPROVED METHOD.**
- * If you have any questions or need any further information, please contact Environment Canterbury's Pollution Prevention Team on 0800 324 636
- * **To report any discharges you see, call the Pollution Hotline on 0800 POLLUTION**