



Concrete Washings and Concrete Cutting Waste Water

If your day to day activities involve the handling of concrete and other cement based products, then before you begin you must consider the effects your activity may have on the environment.

What sort of things cause pollution?

Poor work practices while handling fresh concrete or while undertaking concrete cutting, may be causing some of these common problems:

The discharge of waste water onto the ground and into the stormwater system from;

- Washing the chutes of concrete mixing trucks
- The use of cooling water in concrete cutting
- Rinsing freshly laid concrete to remove fines
- Washing concrete pumping gear and other concreting equipment

How can my waste pollute the environment?

Cooling water used in concrete cutting and rinse water used to remove fines will pick up concrete particles and cause the receiving water to turn strongly alkaline. Wash water from concrete trucks and equipment will also be highly alkaline and contain high sediment loads.

Cement wash water and cement based products can cause harm to the environment because;

- They are strongly alkaline, due to lime content. This alkalinity can kill or burn aquatic life, in much the same way as acid would.
- High sediment loads can smother and kill the same creatures that live in the bed of a water body, it also causes abrasion and clogging of the gills of fish.
- The sediment makes it difficult for plants to get the energy they need to live and for animals to find food, by reducing sunlight penetration.
- Chemical additives can poison the creatures that live in a water body.

It is important to realise that 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, habitats destroyed and the stream can take many years to recover.

You may think that your little bit of waste can't harm the environment but remember, there are other people in the district 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. It is the cumulative effects of this combined discharge that causes 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 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-You can stop pollution resulting from your activities

Concrete Trucks & Equipment

- Use a specifically designed wash area which either discharges into the sanitary sewer or contains all waste water in a sealed pond or tank for re-use as concrete make-up water or for equipment washing.
- On any large construction sites requiring multiple deliveries, ensure there is a designated wash out area which allows water to soak into the ground and not run overland into the stormwater system.

Concrete Cutting & the Washing of Fines

If cooling water is needed or washing needs to be carried out on site, ensure that there is no discharge to the environment by:

- Placing hay bales or sandbags to filter runoff, discharging the filtered washwater to the sanitary sewer with the approval of Tauranga District Council,
- Diverting runoff to a grassed area,
- Blocking a receiving drain and pumping the waste water to an area where it can evaporate or soak into the ground,
- Washing the fines off freshly laid concrete to the side, not into the stormwater drainage system.

Above all, **never** wash concrete products in areas where wastes will drain to a stormwater drain or stream.

Clean up all spilt material immediately and dispose of wastes in a bin in such a way that they won't leak out.

Ensure all workers and/or contractors are aware of these requirements.

Always have a good Spill Contingency Plan with equipment handy and your staff well trained

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