

Pollution

and the Auckland Region

Exposed Aggregate Concrete

Exposing concrete aggregate is a high-risk activity because it produces a large amount of toxic slurry and wastewater.

Exposed aggregate driveway undertaken without controls



What effect can cement have?

Concrete wastewater has a pH of 12-13 and is as toxic as oven cleaner or bleach. The pH of freshwater is 6-7. Concrete wastewater causes burns in a similar way to a strong acid. A single bucket of concrete wastewater will easily kill hundreds of fish.

If you are exposing aggregate, you must have slurry/ wastewater controls in place before you start work.

Slurry Controls

- If you are concrete cutting, exposing aggregate or doing lime stabilisation you must have slurry/wastewater controls in place **before** you start work.
- Never allow concrete wastewater to enter the stormwater system.

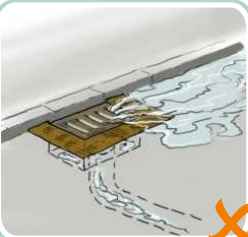


- For small areas divert run-off using sandbags, soil or other materials to a grassed area, pit or bare ground and allow to soak in. Ensure the area of grass/soil is big enough to absorb the volume of wastewater produced.
- Use sandbags or soil to dam the kerb and channel. Make sure this seals well and no wastewater seeps through.
- Use a wet vac, pump or sucker truck to remove wastewater as it builds up during the job. Ensure the wetvac or pump can cope with the volume of wastewater produced.



- Sweep or shovel up all slurry for disposal.
- Do not leave slurry to be washed away or set.

Good practice - diversion and removal of concrete wastewater



Sacking, feltcloth, weed mat

Do not try to filter concrete wastewater to remove the toxicity.

- Concrete wastewater must be collected or diverted to grass or bare soil.



Haybales

- Sacking, felt cloth, weed mat, enviro-filters and hay bales do not reduce the high pH. The filtered water will still be toxic even though it may look clear.



Enviro-filter



Dead native eel with cement burns

The Law

The Polluter pays

Polluters can face an infringement fee of up to \$1000 or imprisonment for a maximum term of two years or a fine of up to \$200,000, with a further \$10,000 for each day the discharge continues.

- **Land owners:** you are responsible for any work on your land. Make sure the contractor you hire knows how to do the job properly.
- **Bosses:** you are responsible for the actions of your staff. Make sure you train them well and give them the right tools for the job.
- **Workers:** you must do the job properly. If you cause pollution, you could lose your job, get a fine or even go to jail.

Remember

- Make sure your contractors and staff know what to do to protect the environment.
- Check the weather, don't undertake exposed aggregate works if rain is forecast.
- Plan ahead and put controls in before starting work.
- Don't hose cement dust or slurry onto streets or down any drains.
- Report all spills to the ARC Pollution Hotline **immediately**.

24 Hour Pollution Response Hotline

(09) 377 3107

09 366 2000 www.arc.govt.nz



Auckland
Regional Council
TE RAUHĪTANGA TAIAO