PROTECTED SLURRY AND CLEAN-UP AREAS

WHAT IS THIS?

Protected areas for all slurry generating and clean-up activities including concrete, brick and tile cutting, cement and mortar mixing, drilling, and cleaning of equipment, must be designed to contain wastewater. This is a Supplementary Sediment Control.

Concrete wastewater is highly toxic and can raise the pH of waterways to very alkaline which kills aquatic life when washed into waterways through the stormwater system. Disposal in the stormwater system and/or dilution is NOT an option; it would take 1 million litres of water to dilute 1 litre of alkaline wastewater back to being non-toxic.

Pollution from slurry generating and clean-up activities not only seriously impacts waterway health, but it can also form deposits in the stormwater system, reducing its capacity and increasing the risk of flooding. Additional control measures must be put in place when these activities are required to occur outside of the designated protected area (e.g. cutting of a footpath).

Section 18 of the *Urban Drainage Act 2013* states that '*a person must not discharge, or cause or permit to be discharged, anything other than stormwater into a public stormwater system*'. Dilution is not a legal option, and you can be prosecuted for allowing pollution such as untreated wastewater to enter the stormwater system. There are also harsh fines for this kind of pollution under the Environmental Management and Pollution Control Act 1994.

WHAT DO I NEED TO DO?

Before starting site works:

- Identify an appropriate location for protected slurry generating activities and clean-up area on the site, ideally away from stormwater pits and drains.
  - This area must contain all wastewater and residues in protected wastewater systems. Alternatively, wastewater can be pumped into on-site holding tanks and managed appropriately or removed with a vacuum truck. You may require a trade waste permit from TasWater.
  - The designated area may be best located close to your formal stockpile area (see page 47).
- Identify additional controls to ensure stormwater pits are always protected in case of accidental pollution (e.g. filter socks, see page 61).
- Include the location of this area with associated sediment controls in your ESCP (see page 17).

Installing the controls:

- The designated slurry generating activities and clean-up area must have a diversion channel up-slope to divert clean water around the area (see page 26), and wastewater collection controls/devices below to completely contain water from this work. If cutting concrete, tiles etc. in an area near a stormwater pit, use multiple temporary collection devices such as filter socks, berms, or skirts suitably installed to ensure untreated wastewater DOES NOT enter the pit untreated (see page 61) (Figure 20).
- Install filtration systems on your brick cutting machine with built-in slurry containment systems.
- Carry out works in a way that minimises the amount of slurry generated, thereby reducing the amount of clean up and disposal required.
- When equipment is washed down, use the designated clean-up area or a designated container such as a 'Slurry Tub' (pictured on page 66). Clean equipment by wiping down rather than hosing off.

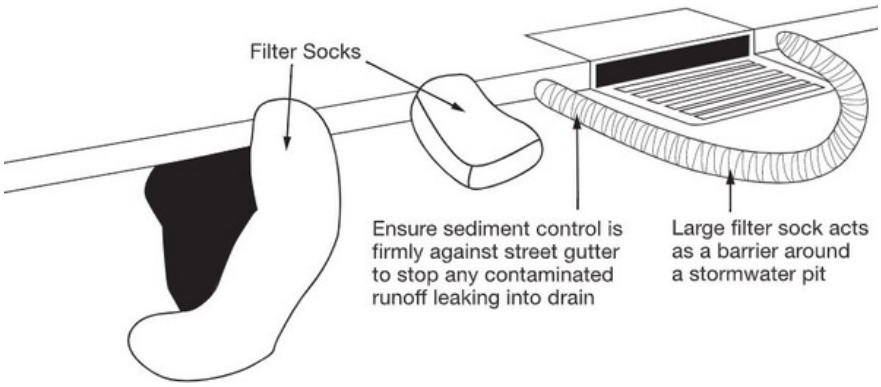

Figure 20: Installing a series of filtration systems is best practice for ensuring pollution from slurry generating or wash-up activities does not enter the stormwater system. *Figure from the NSW Department of Conservation 2004 'Environmental Best Management Practice Guideline for Concrete Contractors'.*

Vacuum systems with high-efficiency particulate absorbing (HEPA) filters can be used to suck up concrete slurry waste into larger holding tanks. The concrete slurry waste can then be reused or disposed of.

Photo credit: www.onlineconcrete.com.au

Maintaining the controls:

- Manage concrete, brick or tile cutting slurry in the designated area. DO NOT hose down – dilution is not an option. If there is no designated disposal area, place slurry into a portable settling tank or drum half full of water. Solids will settle to the bottom of the drum for later disposal and the water can be reused when concreting. Do not dispose of untreated wastewater in the stormwater system, it will be too alkaline.
- If you have an undercover storage area on-site, waste concrete slurry can be disposed of by tipping small amounts into plastic or geotextile-lined containers or ditches (Figure 21). This will enable the water to evaporate, and the solids can then be disposed of to landfill or reused as clean fill in construction or as road base.
- If you have no on-site means of treating alkaline wastewater, you may need to use a vacuum truck or other approved waste handler.
- All sediment controls require regular cleaning to maintain effectiveness and over time may need to be replaced. Remove any build-up of slurry or sediment from the designated protected area and regularly check for leaks or breaks.

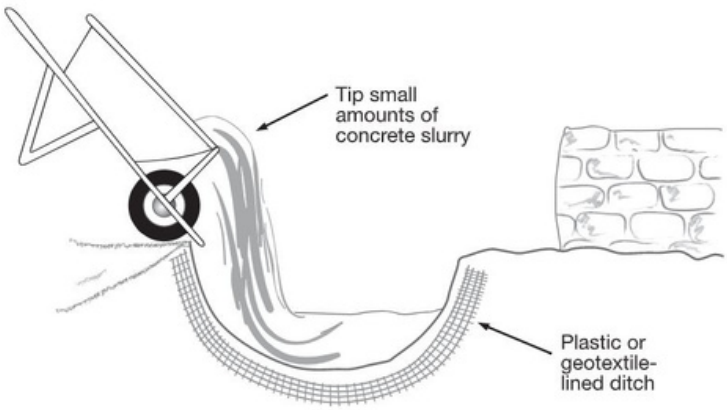

Figure 21: Small amounts of waste concrete slurry can be stored undercover in plastic or geotextile-lined containers or ditches for later management. *Figure from the NSW Department of Conservation 2004 'Environmental Best Management Practice Guideline for Concrete Contractors'.*

Avoid cleaning equipment on improvised wash-out areas such as lawns, driveways, or pavements. Slurry can leach into the ground and alter soil chemistry or find its way into the stormwater system and our waterways. Collect slurry generated from washing down machinery and tools in a container. After settling, the water should be reused on-site and the hardened waste can be disposed of. Not even filtered water can be disposed of to the stormwater system - it is likely to be too alkaline.

Photo credit: slurrytub.com