Environmental legislation and Council Development Consents

Under the Protection of the Environment Operations Act 1997 (POEO), allowing sediment or sediment laden water to enter any waterway including street gutters, stormwater drains, swales or creek lines (flowing or not) is considered to be water pollution. Penalties and notices can apply including fines of up to $5 million.

Council will enforce the POEO where necessary, however we endeavour to provide information about erosion and sediment control and encourage you to help us protect the Lake by reducing water pollution.

Non-compliance with the conditions of a Development Consent is a breach of the Environmental Planning and Assessment Act 1979 and may also attract fines.

Mulch or compost used or stockpiled on your site may produce leachates such as tannins. Appropriate control measures must be installed to prevent pollution offsite.

Further information

- **Council's website**;
- the **'Blue Book'** - Managing Urban Stormwater: Soils and Construction, Landcom (2004) 4th Ed;
- International Erosion Control Association (Australasia) (IECA) (free downloads) **www.austieca.com.au**;
- Call Council's Erosion and Sediment Control Officer on **02 4921 0333**; or
- Builders Pocket Guide **www.bpg.co.nz** (be aware that some practices outlined are not permitted in the Lake Macquarie City Council area).

Acknowledgements and disclaimer:

This Fact Sheet contains information from Best Practice Erosion and Sediment Control. IECA, November 2008. This Fact Sheet is for general information only and is not intended to cover every situation. It is not a regulatory document. Obtain your own independent professional advice.

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FACT SHEET 8F

WHAT ARE DRAINAGE CONTROL, EROSION CONTROL AND SEDIMENT CONTROL?

It is important to understand the difference between drainage, erosion and sediment controls to determine the right control technique to use in each situation.

- Erosion controls prevent or reduce soil erosion caused by raindrop impact (see photograph below) and sheet flow (downslope movement of water taking the form of a thin, continuous film over relatively smooth soil or rock surfaces).

- Drainage controls prevent or reduce soil erosion caused by concentrated flow by managing the movement of "clean" and "dirty" water through the site.
- Sediment controls trap and retain sediment either moving along the land surface or contained within flowing water (suspended sediment).

In Lake Macquarie City, the total sediment or suspended solids concentration in waters leaving construction sites should not exceed 50mg/L. This equates to approximately 50kg or three and a half domestic buckets of soil, evenly dispersed through a standard (1000m³) Olympic swimming pool.

Sediment controls are most effective for soils with a higher sand content. Conversely, soils with a higher clay content are most effectively controlled using erosion controls.

Sediment controls alone are often insufficient at providing adequate environmental protection. Therefore, appropriate drainage and erosion controls must be applied, at all times, especially on clay soils.

Buffer zone and sediment fences

Mulch for erosion control and sediment fence for sediment control

Erosion Control

Revegetation by hydromulching

Compost blanket (on a BMX track)

Mulching

Erosion control blankets

Gravelling

Lined clean water diversion

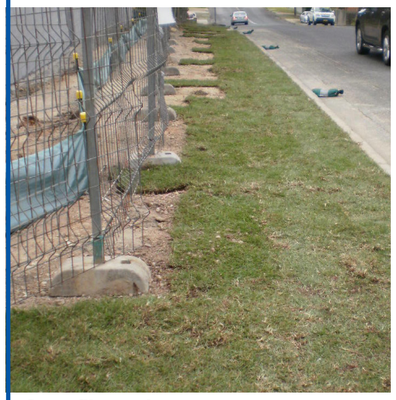
Dust control with a polymer

Contour ripping

Sediment Control

Sediment fences

Sediment weirs



Grass filter strips

Construction access

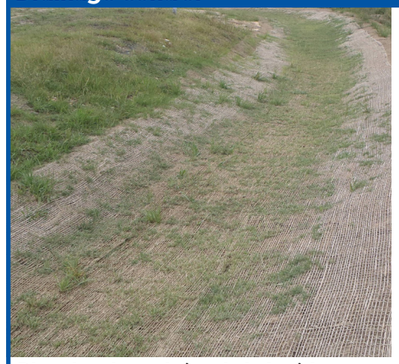
Compost/mulch bunds

Sediment basins

Gutter inlet protection

Straw bale filter

Drainage Control



Diversion channels/catch drains/clean water

Outlet structures

Diversion channels/catch drains/dirty water

Temporary water crossing

Check dams

Lined clean water diversion

Chute

Energy dissipater