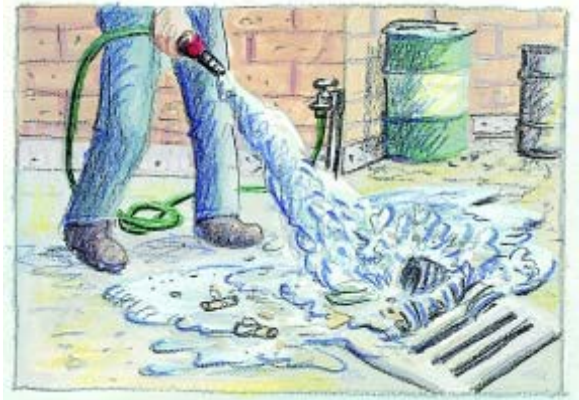


## Business Pollution Prevention Fact Sheet

***The stormwater system is a direct link between your workplace and our waterways and ocean***

### Why is stormwater management important?

Urban stormwater pollution represents one of the most significant threats to our creeks, wetlands, the Hunter River and our coastline. When it rains, stormwater picks up pollution from your workplace, car parks, streets and gardens and carries it via gutters, drains and underground pipes straight into the waterways. Ensuring that stormwater is free of pollution and that “only rain goes down the drain” ensures healthy waterways for the enjoyment of the community, for the fishing industry and for aquatic life.



**It is against the law to pollute water or place pollution in a position where it is likely to be blown, fall or leak into a drain, gutter or local waterway. The maximum penalty for companies is \$5 million. Ensure that you are aware of your legal responsibilities.**

### What is stormwater pollution?

Anything that enters the stormwater system other than clean rainwater is considered to be pollution.

### What is the difference between stormwater and wastewater or sewage?

*Stormwater* is rainwater that flows across hard outside surfaces into the stormwater system. The stormwater system includes street gutters, drains, pipes and channels that transport rainwater to waterways. Stormwater is not treated so it is important to keep all pollution out of the stormwater system.

The *sewerage* system is separate from the stormwater system. It includes underground pipes that transport wastewater from kitchens, bathrooms, laundries and tradewaste from some businesses to sewage treatment plants. After treatment, the effluent is discharged the ocean.

*Wastewater* is any water used or contaminated in conducting your business processes and activities. All trade wastewater from your premises must drain to the sewer, not the stormwater system. Businesses may require a permit from the Hunter Water Corporation before discharging wastewater to the sewer.

### Simple measures to prevent pollutants entering stormwater

In order to prevent stormwater pollution remember to:

- Maintain pollution controls to ensure their maximum effectiveness
- Educate employees and subcontractors on pollution prevention measures and their importance.

## Environmental Impacts of Stormwater Pollution

POLLUTANT	POTENTIAL SOURCES	ENVIRONMENTAL IMPACT
Rubbish and debris (gross solids e.g. cigarette butts)	<ul style="list-style-type: none"> <li>• Littering behaviour</li> <li>• Poor waste facilities and management</li> </ul>	<ul style="list-style-type: none"> <li>• Clogs waterways and can block stormwater drains, contributing to localised flooding</li> <li>• Releases toxic compounds into waterways as it disintegrates</li> <li>• Destroys the visual quality of open space and waterways</li> <li>• Can entangle or be ingested by marine animals</li> <li>• Degrade aquatic habitats</li> </ul>
Sediment (e.g. soil, sand, clay and dust)	<ul style="list-style-type: none"> <li>• Erosion from building sites and bare earth</li> <li>• Pavement and road wear</li> <li>• Uncovered stockpiles</li> <li>• Un-mulched garden beds</li> </ul>	<ul style="list-style-type: none"> <li>• Reduces light penetration and affects photosynthesis in aquatic plants and algae</li> <li>• Increases the sedimentation of local waterways</li> <li>• Clogs the gills of aquatic organisms</li> <li>• Smothers habitats and bottom dwelling animals</li> <li>• Facilitates the transport of other pollutants downstream</li> </ul>
Detergents (including biodegradable)	<ul style="list-style-type: none"> <li>• Cleaning activities</li> </ul>	<ul style="list-style-type: none"> <li>• Contains toxic compounds which impact the health of aquatic life</li> <li>• Contributes to blue green algae blooms</li> <li>• Promotes weed growth</li> <li>• Impacts aquatic diversity</li> </ul>
Oil and grease	<ul style="list-style-type: none"> <li>• Runoff from roadways or carparks</li> <li>• Poor storage and spillage</li> <li>• Illegal dumping of waste lubricating oils</li> </ul>	<ul style="list-style-type: none"> <li>• Toxic to aquatic organisms and animals who live in waterways</li> <li>• Interrupts oxygen transfer in aquatic environments by forming a film over the water's surface</li> <li>• Hinders fish respiration and feeding</li> <li>• Reduces the photosynthesis in aquatic plants</li> <li>• Reduces visual quality of waterways</li> </ul>
Heavy metals (e.g. cadmium, chromium, copper, zinc and lead)	<ul style="list-style-type: none"> <li>• Road and vehicle wear</li> <li>• Vehicle exhaust</li> <li>• Roof/structure and corrosion</li> <li>• Air conditioning coolants</li> <li>• Pesticides and herbicides</li> <li>• Batteries</li> <li>• Spillages</li> <li>• Soil</li> </ul>	<ul style="list-style-type: none"> <li>• Toxic effects on aquatic plants and animals</li> <li>• Bio-accumulates in food chain (i.e. concentrations build up in the tissues of aquatic species)</li> <li>• Reduces aquatic diversity</li> <li>• Contaminates soil in waterways</li> </ul>
Nutrients	<ul style="list-style-type: none"> <li>• Soil</li> <li>• Decaying vegetation (e.g. leaves and lawn clippings)</li> <li>• Fertiliser</li> <li>• Sewer overflow</li> <li>• Animal faeces</li> <li>• Detergents</li> </ul>	<ul style="list-style-type: none"> <li>• Increase algae concentration</li> <li>• Increases aquatic plant growth</li> <li>• Reduces aquatic diversity</li> <li>• Promotes weed growth</li> <li>• Increases turbidity (muddiness) of water</li> </ul>

Adapted and modified from City of Sydney, Clean Harbour Partners Brochure 2003