



# Stormwater Management

## for Small Business and Industry

EPA 502/03

### Why do businesses need this information?

This information aims to increase your stormwater management awareness and strengthen your knowledge. It will help you to manage the potential stormwater pollution prevention problems at your workplace.

### Benefits for you and your business

By addressing potential stormwater pollution problems at your workplace, you:

- minimise your potential for environmental fines and prosecutions
- demonstrate compliance with the Environment Protection Authority's codes of practice
- improve your businesses profile
- make long-term cost savings by increasing efficiency and reducing costs
- increase customer patronage
- improve environmental conditions for everyone.

### What is stormwater?

Stormwater is rainwater that flows across outside surfaces into stormwater drains and gutters in the street. The water is not treated and flows directly to our creeks, rivers, groundwaters and oceans. Stormwater should only contain clean rainwater, *not* pollutants such as general rubbish, industrial waste, heavy metals, oils and greases.

### What legislation governs stormwater pollution?

The stormwater system is protected by a number of different laws including the *Environment Protection Act 1993*, the *Environment Protection (Water Quality) Policy 2003* (the Water Quality Policy), the *Local Government Act 1934*, the *Development Act 1993* and the *Public and Environmental Health Act 1987*.

The new Water Quality Policy offers the most specific protection for the State's waters. It prohibits the pollution of the stormwater system and our natural waters. The Policy has general obligations which every person, business and industry must comply with as well as specific obligations for particular activities. Failure to comply with any of these obligations may result in the issuing of a \$300 fine, Environment Protection Order, and/or prosecution.

Clause 17 (1) of the Water Quality Policy states that a person must not discharge or deposit a pollutant listed in Part 1 of Schedule 4 of the Policy into any waters or onto land where it might enter any waters. The pollutants listed in Schedule 4 Part 1 which relate to small business and industry include:

- air conditioning or cooling system wastewater
- carpet or upholstery cleaning waste
- cleaning agents
- detergents and their by-products
- fire sprinkler test water
- oil, grease or lubricants
- paint and paint scrapings
- painting washwater
- paint stripping waste
- photographic chemicals
- putrescible waste (e.g. food scraps)
- rubbish (e.g. cans, bottles, plastic items or materials)
- street cleaning waste
- washdown water from cleaning animals or animal enclosures
- washdown water from cleaning vehicles, plant or equipment
- washdown water from commercial or industrial premises or wharves
- waste from grease traps.

Under Clause 17 (2) of the Policy, fertilisers, green waste (e.g. lawn clippings, leaves, prunings) soil, clay, gravel or sand must not be discharged or deposited into any waters.

For more information on the Water Quality Policy visit the EPA web site at [www.epa.sa.gov.au](http://www.epa.sa.gov.au), or telephone (08) 8204 2004.

## What can you do to stop stormwater pollution?

Many business activities can pollute stormwater. *The first step is to ensure that stormwater does not get contaminated as a result of your workplace practices.* Inspect the uncovered areas of your workplace: when it rains will rainwater runoff become contaminated before it gets to the stormwater drain?

### Cleaning your work area

- Prevent any washing water from entering stormwater drains. Detergents usually contain phosphates which, when transported through the stormwater system, cause problems in our waterways, such as excess algal growth, toxic algal blooms and reduced oxygen levels for aquatic organisms. Confine your washing and cleaning to a contained or bunded (raised edge) area where the wastewater is directed to the sewer. Using biodegradable phosphate detergents is only of benefit to the environment if detergent wastewater is directed to the sewage system and the treated effluent is re-used to grow plants.
- Keep your premises clean to stop unintentional pollution of the stormwater system. Your customers and staff will also appreciate a clean and tidy work area.
- Do not hose the work floor or forecourt unless all water can be collected or directed through an approved trade waste system.
- If you cannot hose without getting dirty water in gutters or stormwater drains, there are other cleaning options:
  - sweep or vacuum the area
  - use absorbent material to remove most of the grime and then use some solvent on a rag to remove the rest
  - paint the work floor with a non-slip paint to prevent it from absorbing oil.

### Bunding

- A bund is a low wall built to contain liquids. It can be made of any impervious material, such as bricks or concrete.

- A bund should be large enough to hold the contents of the largest container in the area plus 20%. Bunded areas should be roofed to prevent rain from entering them and washing pollutants out or rusting the drums. Guidelines are available from the Environment Protection Authority on 8204 2004.
- Speed humps about 100 mm high across the entrance to the workshop can turn the whole workshop into a bunded area. If any spills do occur, they are contained within the work area and can be mopped up. This can be an acceptable alternative to building a specific bunded area, as long as you can show that no spills can escape. Use speed humps as bunds only if they are contained in a roofed area.
- A ramp across the bund will allow containers to be easily placed and removed.

### **Runoff from surface preparation**

Clean and prepare all surfaces on a concrete-paved area that is covered and bunded to exclude any stormwater. Prevent dust escaping from this area by enclosing surface preparation areas or by using vacuum systems. The dust may contain toxic heavy metals and other toxic substances, and at the very least will annoy neighbours. Use a wet cloth or sponge and a bucket to minimise it.

Contaminated water from preparation or process activities must not enter stormwater drains. There are three options for disposing of this water:

- Direct it to the sewer, but you must first get a trade waste permit from SA Water (8207 1350).
- Collect it and reuse it. For this you need something to pump it back into the system. Benefits are low water use and consequent low costs, and occasional disposal.
- Send it to a licensed waste treatment facility.

### **Wash bays**

- Wash items only in an approved wash bay. Ask your local council for approval to install a wash bay.
- Enclose wash bays on three sides to prevent splash contamination of their surrounds. Place a speed hump at the entrance to prevent water from escaping. Roof the wash bay to prevent entry of rain, and pave the floor with concrete.
- Wash bays must be connected either to the sewer through an approved trade waste system or to an underground storage tank that is emptied by a licensed contractor. The wastewater must not drain to the stormwater system. Clean the wash bay regularly to prevent oil build-up.
- Use quick break degreasing compounds and detergents to reduce the emulsification of oils and other hydrocarbons. Portable systems for treating wastewater before discharge are available; check in the Yellow Pages under 'Water Treatment & Equipment'.

### **Water use**

Water is one of our most valuable natural resources. Water supply organisations in South Australia have begun to implement a 'user pays' system to promote water conservation and to better reflect the true cost of water collection, storage and supply services.

Businesses can save money and have a positive impact on the environment by implementing a water efficiency program, starting with a water audit which will determine how much water your business uses, where there are water leaks, and what systems and equipment could be put in place to reduce your water use.

For information on water restrictions visit the SA Water web site ([www.sawater.com.au](http://www.sawater.com.au)), or telephone 1800 130 952.

The information in this document is from a series of fact sheets developed by the Stormwater Pollution Prevention Projects. Visit [www.catchments.net/initiatives/initiatives\\_stormwater.shtml](http://www.catchments.net/initiatives/initiatives_stormwater.shtml) for more information on stormwater issues.

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## FURTHER INFORMATION

### **Legislation**

Legislation may be viewed on the Internet at: [www.parliament.sa.gov.au/dbsearch/legsearch.htm](http://www.parliament.sa.gov.au/dbsearch/legsearch.htm)

Copies of legislation are available for purchase from:

Government Information Centre

Telephone:

13 23 24

Internet:

[www.info.sa.gov.au](http://www.info.sa.gov.au)

### **For general information please contact:**

Environment Protection Authority

Telephone:

(08) 8204 2004

GPO Box 2607

Facsimile:

(08) 8204 9393

Adelaide SA 5001

Freecall (country):

1800 623 445

Internet:

[www.epa.sa.gov.au](http://www.epa.sa.gov.au)