



Stormwater Management

for Shopping Centres

EPA 505/03

Why do you need this information?

Stormwater runoff from shopping centres travels by gutters and drains to local creeks or canals and eventually ends up in a river or waterway, or on a beach. The extensive paved areas of many shopping centres generate large volumes of rainwater runoff which can carry considerable quantities of pollution.

What is stormwater?

Stormwater is rainwater that flows across outside surfaces into stormwater drains and gutters in the street. The water that goes into stormwater drains 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, grease, oil, food waste, leaves, dust or litter.

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 of the Water Quality Policy states that a person must not discharge or deposit a pollutant listed in Schedule 4 of the Policy into any waters or onto land where it might enter any waters. The pollutants listed in Schedule 4 which relate to shopping centres include: air conditioning or cooling system wastewater; cleaning agents; detergents and their by-products; hard waste (e.g. vehicles, tyres, batteries, metal parts, piping); putrescible waste (e.g. food scraps); rubbish; solvents; washdown water from cleaning vehicles, plant or equipment; washdown water from commercial or industrial premises or wharves; and waste from grease traps.

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

What can you do to prevent stormwater pollution?

- Sweep up litter and leaves from car parks and public access areas. Do not sweep litter, leaves or anything else into gutters or drains.
- Erect signs around the centre to promote better environmental practices. This will encourage customers and contractors who use the centre to be aware of their environmental responsibilities, specifically to not pollute stormwater and waterways.
- Provide adequate recycling and disposal bins for customers to use, especially around the perimeter of the centre and in the car parks.
- Confine cleaning and washing of anything to a bunded area where wastewater is directed to a collection pit and then treated, recycled or discharged to the sewer.
- Keep all external workshop areas clean. Clean up oil, grease, paint residue and cleaning fluid with absorbent material. Do not hose contaminated water into the stormwater drain.
- Make sure your centre has a response plan for spills of hazardous materials. Keep clearly labelled spill clean-up material in an accessible place, ready for use.
- Ensure that air conditioning bleed-off, and flush water when units are being serviced, does not drain to the stormwater system.
- Keep all wastes and garbage where they cannot be washed or blown into stormwater drains.
- Consider first flush systems, oil-water separators, trash racks, or runoff reuse for landscape irrigation, in the design stage of new or modified carparks.

Trade wastewater

Trade wastewater is any wastewater produced by a commercial or industrial activity. It does not include wastewater that goes into the sewer from toilets, kitchens, bathrooms or laundries in homes.

Trade wastewater from shopping centres mostly comes from food outlets that produce greasy wastes and, in some cases, from motor vehicle repair premises located in shopping centre car parks.

Trade wastewater is not necessarily toxic or harmful but can be a problem if it is put directly into the sewer without first having problem substances removed.

Contact SA Water Trade Wastes section (telephone 8207 1350, fax 8207 1361) to find out about trade wastewater requirements for your centre.

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.

Shopping centre management 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 centre uses, where there are water leaks, and what systems and equipment could be put in place to reduce your water use.

For information on the current level of water restrictions visit the SA Water web site (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 for more information on stormwater issues.

FURTHER INFORMATION

Legislation

Legislation may be viewed on the Internet at: 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

For general information please contact:

Environment Protection Authority

GPO Box 2607

Adelaide SA 5001

Telephone:

(08) 8204 2004

Facsimile:

(08) 8204 9393

Freecall (country):

1800 623 445

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www.epa.sa.gov.au