



Stormwater Management

for Masonry and Related Industries

EPA 518/04—April 2004

Why do I need this information?

This information aims to help those in the masonry and related industries to identify and manage potential stormwater pollution problems.

The people and places that may need to read this guideline include:

- ceramics and pottery workshops
- dental technicians and investment casters
- school art and craft facilities
- stone masons
- glass and mirror fabricators
- manufacturers of:
 - bricks and tiles
 - architectural and ornamental concrete mouldings
 - plasterboard and decorative plaster mouldings.

The *Environment Protection (Water Quality) Policy 2003* requires you to undertake activities in a way that ensures stormwater is protected from pollutants such as suspended soils from washdown, waste water used in cutting or polishing operations, and solvents or chemicals.

What is stormwater?

Stormwater is rainwater that flows over outside surfaces into gutters and stormwater drains in the street. This water is not treated and flows directly to our creeks, rivers, groundwaters and oceans. Stormwater should only contain clean rainwater and *no* pollutants.

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 business profile
-

make long-term cost savings by increasing efficiency and reducing costs

- increase customer patronage
- improve environmental conditions for everyone.

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 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 Water Quality Policy has general obligations with which every person, business and industry must comply, as well as specific obligations for particular activities. Failure to comply with any of these obligations may result in 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 that relate to masonry and related industries include:

- brick, bitumen or concrete cutting wastewater
- building construction or demolition waste
- building wash water
- concrete waste
- paint and paint scrapings
- painting wash water
- paint stripping waste
- plaster, plaster waste, and plaster wastewater
- solvents and chemicals
- washdown water from cleaning vehicles, plant or equipment.

Under Clause 17 (2) of the Water Quality Policy, 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 or telephone (08) 8204 2004.

Identifying potential pollution problems

The main contaminant in wastewater from masonry operations is suspended solids from washdown and the water used in cutting/polishing operations. These can exceed SA Water's *Standards of Acceptance of Liquid Waste to Sewer*. Some solids can block the sewer over time (even at low discharge concentrations) because they tend to settle in sewerage pipes.

A number of operations making masonry and related products do not discharge to the sewer. These operations must not discharge into the stormwater system; they should contain any wastewater and have it collected by a licensed liquid waste contractor.

Other contaminants of concern include:

- paints and dyes
- solvents and other chemicals
- high pH, outside the acceptable range (pH 6–10).

If mains water is used, back siphoning could occur. This could introduce contaminants into the water supply.

What can you do to prevent stormwater pollution?

- Only wastewater meeting SA Water's standards of acceptance may be discharged to the sewer.
- Where gross solids are present, wastewater is to be discharged through:
 - a 225 mm silt trap fitted with mesh basket or holed bucket with 5 mm mesh/hole size
 - or**
 - a graded channel, of sufficient width to facilitate cleaning, fitted with one or more removable screens (the finest to have 5 mm mesh/hole size).
- If wastewater contains suspended solids, it is to be discharged through a suitably sized and approved settling chamber.
- Additional pretreatment of wastewaters, such as pH correction and removal of heavy metals, is to be installed where necessary.
- Those wastewater and chemical solutions not permitted to be discharged to the sewer are to be stored in approved containers in a bunded area and/or in blind tanks, pending disposal by a licensed liquid waste contractor.
- Wastewater and contaminated stormwater cannot be discharged into the stormwater system.

The information contained 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
Lands Titles Office, 101 Grenfell Street
Adelaide SA 5000

Telephone: 13 23 24
Internet: shop.service.sa.gov.au

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