Stormwater Management

for Painters

EPA 541/04—April 2004

Why do I need this information?

This information for professional painters aims to improve your ability to identify and manage potential stormwater pollution problems at your work site.

The *Environment Protection (Water Quality) Policy 2003* requires that you undertake activities in a way that ensures stormwater is protected from pollutants such as paints, solvents and cleaning agents.

What is stormwater?

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

Benefits for you and your business

By addressing potential stormwater pollution problems at your workplace you:

- minimise the risk of environmental fines and prosecutions
- demonstrate compliance with the Environment Protection Authority's codes of practice
- improve your business profile
- make long-term financial savings by reducing costs and improving efficiency
- increase customer satisfaction and 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 Act), 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*.

Government of South Australia
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WaterCare It's in your hands

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 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 pollutant listed in Schedule 4 that relate to professional painters inlcude:

- paint and paint scrapings
- painting wash water
- paint stripping waste
- solvents
- stain or varnish.

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

What can painters do to prevent stormwater pollution?

Procedures can be put in place at each stage of the painting process to ensure liquid wastes and washwater are disposed of in the most appropriate manner.

Site preparation

Develop a stormwater pollution prevention plan before you start painting.

- Locate the stormwater drains and signpost them, if necessary, to ensure they can be easily protected if a spill occurs.
- Develop a spill response procedure and keep all materials needed for this close at hand. Appropriate spill equipment includes absorbent material, transportable bunds, shovels, bags and buckets.
- Designate an area for all paint and equipment to be stored whilst on the site. Ensure there are enough brushes and rollers for each paint type and colour. This keeps washing to a minimum and reduces the quantity of wash water for disposal.
- Designate a washdown area with separate zones for water-based and solvent-based paints. Ensure the area is located away from stormwater drains or where it could drain into the stormwater system.

Painting

- Purchase only as much paint as you need for the job at hand. Any excess paint can be saved for the next job or donated to your local school, community or theatre group.
- Reduce the amount of paint you need to wash out of your brushes, rollers or trays by returning as much paint as possible to the container.
- Place your open paint container or tray on a stable surface in a safe position so it is unlikely to spill.

Clean up

- Do not wash brushes and equipment by flushing them under running water where the water may drain into the sewer, stormwater or natural waterway.
- Never empty washwater from water-based **or** solvent-based paints, or even heavily diluted water-based paint, directly into a stormwater drain or natural watercourse, or onto land where it may enter a drain or watercourse. Disposal of solvent-based washwater on the ground may lead to groundwater contamination.

- When disposing of paint containers, scrape out the paint solids from the bottom onto a cloth. Allow the paint on the cloth, and any remaining in the tin, to dry out and dispose of it appropriately.
- Check with the SA Water Trade Wastes Section (telephone 8207 1350, fax 8207 1361) for the requirements on trade wastewater treatment *before* you discharge any wastewater or industrial liquids to the sewer. Solvents can cause explosive conditions in confined spaces and inhibit sewerage biological treatment processes by preventing oxygen transfer. If the discharge is not approved, collect and dispose of the waste at a liquid waste treatment facility.
- Set up your equipment washdown area to include:
  - three or more containers holding solvent or water for dipping brushes and rollers. There must be sufficient height above the liquid to contain the liquid flying off fast-spinning rollers—for example, 20 litre drums holding 3–5 litres of cleaning liquid. (Metal drums should be used unless the plastic drum is approved by the packaging code for solvents.)
  - appropriate equipment for processing wastewater, including a drum for settling solids, paint filters, capillary absorption ropes and a container with a loose lid to allow for aeration and oxidation of binders when treating solvent-based paint.
- Water-based paint washings may be treated on-site by allowing paint solids to settle out and decanting the clear liquid off the top. The paint will settle faster if a flocculating agent such as alum (ferrous aluminium sulphate) is stirred into it. The decanted liquid can be reused for further equipment cleaning or collected and disposed of at a liquid waste treatment facility. The remaining paint solids can be left to dry out and be disposed of appropriately.
- Solvent-based paint washings may also be treated on-site and reused by settling out the paint solids and decanting the solvent off the top. The decanted solvent can be further refined by:
  - pouring the decanted liquid though a fine filter such as nylon or metal gauze, or filter paper. This removes coarse solids such as leftover paint.
  - using a capillary absorption rope: place one end of the rope in the decanted solvent and the other end in a receiving drum at a lower level. The solvent is transferred through the rope by capillary action and will be partially decontaminated.
  - draining the decanted solvent through a drum packed with an absorption filter material such as activated charcoal. This will also partially decontaminate the used solvent.
  - allowing the decanted solvent to stand in a cool place with a loose lid, until the paint binder which is dissolved in the solvent has fully reacted, or oxidised, and has settled out as a stretchy gel or paste. Decant the liquid off the top and reuse.

If on-site treatment and reuse is not an option at your work site, store the waste liquids in separate holding tanks and have a licensed liquid waste contractor or solvent recycler collect the tanks for treatment at an appropriate facility.

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

For general information please contact:

Environment Protection Authority GPO Box 2607 Adelaide SA 5001 E-mail: *epainfo@epa.sa.gov.au*	Telephone: Facsimile: Freecall (country): Internet:	(08) 8204 2004 (08) 8204 9393 1800 623 445 *www.epa.sa.gov.au*