

ENVIRONMENTAL HEALTH FACT SHEET

No. 502

MANUAL BUCKETING & TEMPORARY DIVERSION OF GREYWATER IN SINGLE DOMESTIC PREMISES

WHAT IS GREYWATER?

Greywater is wastewater generated from bathrooms (showers, baths, spas, and hand basins), laundries (washing machines and troughs) and kitchens (sinks and dishwashers). However, kitchen water can contain food particles, grease, oils and fats and its use is not recommended (particularly without treatment).

GREYWATER CHARACTERISTICS

The quality of greywater can be highly variable due to factors such as number of household occupants, their age, lifestyle, health, water source and products used (such as soaps, shampoos, detergents). Greywater may contain:

- disease causing organisms (bacteria, viruses, protozoa) from nappies and other soiled clothing
- chemicals from soaps, shampoos, dyes, mouthwash, toothpaste, detergents, bleaches, disinfectants and other products (such as boron, phosphorous, sodium, ammonia and other nitrogen based compounds)
- dirt, lint, food, hair, body cells and fats, and traces of faeces, urine, and blood.

Risks presented by these contaminants can be reduced by good management practices and by sensible use of greywater.

MANUAL BUCKETING & TEMPORARY DIVERSION

Manual bucketing onto lawn and garden areas using water from the bathroom or laundry, or temporary use of a hose manually fitted to a washing machine outlet hose, is permitted subject to the following advice:

- don't use greywater from washing clothes soiled by faeces or vomit, for example, nappies
- don't store untreated greywater for more than 24 hours, as bacteria and organic contaminants in greywater will cause it to turn septic and produce strong offensive odours
- don't use greywater if other people in the household have diarrhoea or an infectious disease, as this could increase the risk of other people becoming ill
- avoid splashing of greywater and wash your hands before eating or drinking or smoking
- keep children away from areas watered with greywater until it has soaked into the ground.

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CHEMICAL CONTAMINANTS: DETERGENTS, CLEANERS AND OTHER CHEMICALS

- Environmentally friendly shampoos, detergents and cleaning products should be used to protect soil and plants watered with greywater. Products containing low levels of boron, phosphorus and salt should be used. Boron can be toxic to plants, some native plants are sensitive to phosphorous while sodium and other salts can damage soil structure.
- Washing machine rinse water has lower concentrations of detergents compared to wash water. If wash water is used it should be diluted with rinse water.
- Bleaches and disinfectants can kill beneficial soil organisms and damage plants. Avoid using greywater containing harsh chemicals or bleaches, or after washing out hair dye or paint products.
- A useful website that contains information on laundry products is <http://www.lanfaxlabs.com.au/>

SENSIBLE USE

The setback distances from the greywater discharge points to the site features shall be as follows:

Feature	Discharge Point (metres)
Closed Fence Boundaries	0.5
Open Boundaries (i.e. open fence or no fence)	1.2
Buildings*	1.2
Bores (private)** - intended for human consumption	50
Paths, drives, carports etc.	0.5

Note: * Greywater contains chemicals that can damage your house if discharged against the foundations.
 ** Only Environmental Health may vary this setback requirement.

- Greywater tends to be slightly alkaline and this can be harmful to acid loving plants such as azaleas and camellias.
- Rotate greywater irrigation using mains (drinking) or rainwater, especially in areas with low rainfall. This will help to flush salts from the soil.
- Water several locations. This will prevent salts and other contaminants accumulating in the soil.
- Prevent pooling and runoff of greywater onto other properties, into watercourses and the stormwater system. Pooled greywater can turn septic and produce offensive odours as well as providing breeding sites for mosquitoes.
- Don't over-water your plants – greywater shouldn't be used to irrigate more than you would with other sources of water. Plants are susceptible to waterlogged soils.
- Monitor areas and plants irrigated with greywater. If there is visual evidence of damage you may need to modify watering practices, try a different or bigger irrigation area, or reduce the amount of water used.

PERMANENT GREYwater SYSTEMS

If permanent diversion of greywater is intended then a product approved Greywater Diversion Device (GDD) or Greywater Treatment Device (GTS) must be installed instead of manual bucketing or temporary diversion of greywater. Permanent greywater systems attached to plumbing can increase the use of greywater. However due to potential risks associated with greywater, permanent devices require installation by a licensed plumber.

For further information about permanent greywater water systems, refer to fact sheet on the *Permanent Greywater Reuse in Single Domestic Premises*.

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