

Australian Capital Territory

## **Greywater Use**

## Guidelines for residential properties in Canberra

## **Acknowledgements**

ActewAGL ACT Health ACT Planning and Land Authority Territory and Municipal Services

Second Edition, published October 2007



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## 1. Introduction

Water is fundamental to our existence.

As cities expand and populations grow, the demand for water is rising. Factors, such as extended periods of drought combined with the social, economic and environmental costs of creating new water supplies, are leading us towards the need for better management of our water resources.

In April 2004, the ACT Government released the **Think water**, **act water** strategy to address sustainable management of the ACT's water resources. Included in the strategy are a number of initiatives aimed at achieving a 12 per cent per person reduction in mains water use by 2013 and 25 per cent by 2023.

A further target set by the Government is to increase the use of reclaimed water from 5 per cent to 20 per cent by 2013. By reusing water, it is possible to benefit from water that would otherwise be lost to us after a single use. Using domestic greywater is one way of contributing to the achievement of this reuse target.

Because greywater has already been used, it may contain substances harmful to public health and the environment. However, through your understanding of health and environmental considerations, your ongoing commitment to some simple principles, and by following relevant ACT legislations, you will be able to use greywater without compromising public health, your household or the environment.

ACT Health has prepared these Greywater Use Guidelines in partnership with the ACT Planning and Land Authority, Territory and Municipal Services and ACTEW.

## 2. Scope

This document has been developed to guide householders on the use of greywater in residential properties in the ACT. It covers system design considerations, owner obligations, health and environmental implications and legislative requirements associated with its use.

Greywater is the wastewater from the hand basin, shower, bath, spa bath, washing machine, laundry tub, kitchen sink and dishwasher. This document does not address blackwater use. Blackwater is the wastewater from the toilet, urinal and bidet.

## 3. Greywater use and system design

When deciding upon the greywater system that best suits your household, several design considerations need to be taken into account.

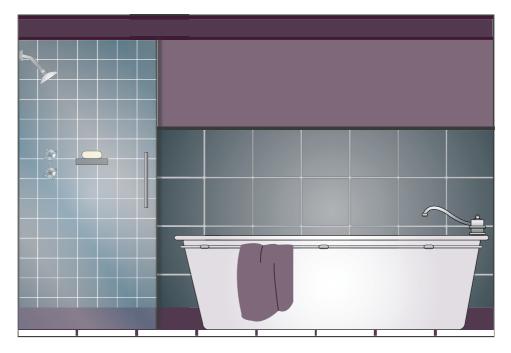
As the characteristics of greywater vary and are dependent upon the number of occupants, their ages, lifestyle, health status and water use patterns, it is necessary to ensure that the design and possible impact of the greywater system is understood. Systems intended for long term use should be carefully designed and maintained.

Greywater can contain disease causing organisms. It may also contain fats, oils, detergents, soaps, salt, nutrients, food and hair derived from household and personal cleaning activities that can pollute your garden environment.

## Sources of greywater

It is important to consider the quality of greywater from different sources to ensure that its use does not pose a risk to public health or the environment.

**Bathroom greywater** — greywater from the bathroom is suitable for use On average, a two to three person Canberra household generates 180 litres of greywater per day from the hand basin, shower and bath.



Bacteria numbers can be high in shower and bath water, especially if there are young children in the family or individuals who suffer from gastrointestinal illness. If someone is suffering from gastrointestinal illness, it is advisable not to use the greywater until they recover.

The chemical constituents of bathroom greywater include soap, shampoo, hair dyes, toothpaste and cleaning chemicals. Greywater from hand basins is more polluted than bath or shower greywater, but is much lower in volume.

Some of these contaminants act as plant nutrients and can be beneficial in the garden in low concentrations, but others can adversely affect plants or soil structure and are difficult to remove. The 'environmental considerations' section outlines further information on how the choice of cleaning products can reduce the impact of greywater on the environment.

**Laundry greywater**— greywater from the laundry is suitable for use

On average, a two to three person Canberra household produces 120 litres of greywater from the laundry per day. Bacteria numbers in laundry greywater are not usually high, except when nappies are washed. Greywater from nappy washing is not recommended for use.

The chemical contaminants of the wash cycle water are soap, salt, sediment and organic material.

Washing machine rinse cycle water is of a better quality than wash cycle water. You may wish to consider only using water from the rinse cycle.



**Kitchen sink and dishwasher** – greywater from the kitchen is not recommended for use.

#### Kitchen greywater:

- May be heavily polluted with food particles, oils, fats and other wastes, which
  can promote and support the growth of micro-organisms and solidify causing
  blockages in the greywater system.
- Is often chemically polluted with detergents and cleaning agents, particularly those from dishwashers, which are very alkaline. Over a period of time these contaminants may damage the soil.
- May contain harmful bacteria.

### Diversion of untreated greywater

The simplest systems involve diverting greywater from the laundry and/or bathroom directly to the garden or lawn for immediate use.

#### This can be achieved by:

- Using a bucket or siphon to transfer water.
- Connecting the washing machine discharge hose to a pipe leading to the garden.
   Note: A washing machine pump is only designed to operate under minimal resistance. To protect your pump from damage use a large diameter hose and only divert to areas lower than the washing machine.
- A plumber fitting the laundry tub waste pipe with a hand operated diversion valve. You can then easily switch the plumbing diversion device to divert greywater, by gravity, from the laundry tub through a hose to the garden instead of the sewer. For example, you can let the wash cycle water drain to the sewer and then divert the better quality rinse cycle water to the garden.
- Diverting bathroom water by fitting a diversion valve into the bathroom waste pipe, much like the above laundry tub diversion system. However, this is only an option for houses built on piers, as there is usually no access under houses built on a concrete slab.

It should be noted that plumbing legislation in the ACT requires that any work conducted on the water supply, sanitary plumbing or drainage systems is to be carried out by a licensed plumber or drainer, see the 'legislation' section for further information.

## Storage of greywater

Untreated greywater must not be stored for more than 24 hours as it may give rise to offensive odours due to the growth of micro-organisms. Surface irrigation with untreated greywater that has been stored can produce offensive odours and may provide conditions conducive to the transmission of disease as well as attracting insects and rodents.

To reduce the potential risks associated with the use of untreated greywater, it is strongly recommended that you ensure:

- Untreated greywater is not stored for more than 24 hours;
- Children and pets should not come in contact with the untreated greywater;
   and
- Untreated greywater is clearly labelled to prevent accidental misuse.

Untreated greywater, which has not been used within 24 hours, should be discharged to the sewer. If the untreated greywater is stored for more than 24 hours you will need to obtain written approval from ActewAGL to discharge the greywater.

### **Treatment of greywater**

Greywater diversion devices do not treat greywater.

If you want to store greywater for more than 24 hours, it must be treated to reduce bacterial numbers and chemical pollutants.

Treatment processes can include filtering, settling of solids, flotation and removal of lighter materials, anaerobic or aerobic digestion, chemical removal of pollutants and disinfection.

The technical performance objectives of systems designed for the treatment and storage of greywater are outlined below in Table 1. Achieving these objectives reduces the risks to public health and the potential for creating nuisance odours.

When selecting a greywater treatment system ensure that the manufacturer can demonstrate that they meet the values in Table 1.

Table 1 – Greywater treatment objectives and applications for greywater stored for more than 24 hours

Treatment	Greywater use application
Treated greywater to a quality of 20mg/L BOD5, 30mg/L SS.	Sub-surface irrigation     (100-300mm below ground level)     Sub-soil irrigation     (>300mm below ground level)
Treated and disinfected greywater to a quality of 20mg/L BOD5, 30mg/L SS and 10 cfu thermotolerant coliforms/100mL	<ul> <li>Covered surface drip irrigation</li> <li>Surface irrigation</li> <li>Toilet flushing</li> <li>Laundry use</li> <li>Car washing</li> </ul>

Source: NSW Health 2000

Note: BOD5 – Biochemical Oxygen Demand (5 Day)

SS – Suspended Solids CFU – Colony Forming Unit

#### Distribution of treated greywater

The following distribution methods will require some level of treatment to the greywater, see Table 1, before being distributed. This may result in some increased costs, depending on the level of treatment recommended.

- **Sub-soil irrigation** this is a common method of irrigation whereby the greywater is distributed into trenches dug into the ground. This method is usually associated with septic systems and there are a number of variations that rely upon absorption and/or transpiration of the greywater.
- **Sub-surface irrigation** this system is installed between 100mm and 150mm below the ground, usually in grassed areas. The greywater is distributed through small-diameter perforated pipes or dripper lines. The greywater is applied directly to the root zone so that the plants can utilise the water.
- Covered surface drip irrigation this enables greywater to be applied directly
  to the surface of the soil under the layer of mulch. The greywater is distributed
  under pressure from small diameter perforated pipes or dripper lines. This
  system is usually applied to plants such as, fruit trees and grape vines.
- **Spray irrigation systems** these systems are not recommended as they disperse the greywater over the exposed soil or vegetated area in aerosol droplets. If spray irrigation is used the greywater needs to meet the requirements set out in Table 1 as for surface irrigation.

It is recommended that householders maintain a permanent connection to the sewerage system. This will allow greywater to be discharged during periods of wet weather or when the householders are producing excessive amounts of greywater.

## Maintenance of greywater systems

The success of your greywater system will depend on the household's efforts and commitment to maintaining the system. Once the system is installed it becomes the owner's/occupier's responsibility to ensure it is maintained for the life of the installation, see 'owner obligations'.

Some greywater systems will require regular maintenance, such as regular cleaning or replacing of filters and periodic de-sludging of the holding tanks. Additionally, during periods of wet weather or excessive greywater production, some systems will require the manual diversion of the greywater back to the sewerage system.

Consideration should be given to the on-going costs of operating and maintaining the greywater treatment system.

## 4. Owner obligations

The ACT Government does not specifically regulate greywater, however, owners are required to comply with plumbing and other legislation.

There is a responsibility upon you, as the owner of a greywater system, to ensure that the system is maintained and does not compromise public health or the environment. Greywater can contain disease causing organisms. It may also contain fats, oils, detergents, soaps, salt, nutrients, food and hair derived from household and personal cleaning activities that can pollute your garden environment.

Provided that you operate the greywater system sensibly, and follow the basic principles in this guideline there should be minimal risks associated with the use of greywater.

If a report regarding your use of greywater is made to ACT Health or the Environment Protection Authority, action may be commenced under the *Public Health Act 1997* or the *Environment Protection Act 1997*.

## 5. Public health and environmental considerations

Owners and users of greywater systems should have a clear understanding of the potential public health risks and environmental impacts associated with the use of greywater. Greywater systems that are not properly designed, used and maintained will have impacts on the health of the public and the environment.

#### **Public health considerations**

The public health risks associated with the use of domestic greywater on lawns and gardens is considered to have a low risk of transmitting disease to humans, although people's susceptibility to disease varies. The young, elderly and immunocompromised are more susceptible to disease than the general population.

It is still important to remember that greywater can be contaminated by activities such as bathing and clothes washing. Disease causing organisms in greywater are principally transmitted through the ingestion of greywater via contaminated hands, or indirectly through contact with contaminated items such as grass, soil, toys or garden implements.

Disease causing organisms can also be transmitted through the inhalation of aerosols, by penetration through broken skin, by flies, cockroaches and vermin such as rats and mice. Even household pets may transmit disease by tracking and carrying disease causing organisms into the home or when petted by children.

Care should be taken to ensure that ground water that is used for drinking water is not contaminated by the use of greywater. Special attention needs to be given to the protection of in-ground rainwater tanks from contamination.

#### **Environmental considerations**

The inappropriate use of domestic greywater has the potential to harm the environment by:

- · Overloading the garden with nutrients;
- Exceeding a site's hydraulic loading and causing runoff of polluted water into stormwater drains, rivers, streams and other people's property;
- Causing the soil to become permanently saturated, preventing plants from growing and causing offensive odours;

- Overloading the garden with salt, causing degradation of the soil structure, permeability and soil pH; and
- Degrading the soil with chemical impurities, which affect the soil's ability to assimilate nutrients or water.

Soil and plants can process many of the contaminants found in greywater if the system is not overloaded. These include organic material, nutrients and sediments. Some nutrients can even be beneficial in moderate concentrations.

However, some greywater contaminants cannot be treated or do not degrade in the soil. Principal among these is salt, which comprises up to 30 per cent of some laundry detergents and can cause salinity and degradation of the soil structure.

Some of the environmental impacts associated with the use of greywater can be reduced through the careful selection and use of cleaning products.

Common washing powders contain salts, which produce saline greywater. For clothes washing, liquid concentrates or powdered products which use potassium salts produce better quality greywater than those using sodium salts.

Some detergents and powder cleansers contain boron, which can be toxic to plants in high concentrations.

## Minimising the health and environmental risks of greywater

Ensure greywater is used carefully to minimise the potential to transmit disease or create environmental harm. You can ensure the risks are minimised by:

- Not using sprinklers to distribute greywater, as they create aerosol droplets that may drift into a neighbour's property;
- Not using greywater on food plants that are consumed raw;
- Ensuring no greywater runoff leaves the block;
- Not irrigating with greywater during periods of wet weather;
- Ensuring greywater does not create a nuisance, such as odours or pools of water; and
- Using cleaning products that are environmentally friendly, for example, low salt liquid washing products.
- Alternating your greywater use with other sources, such as rainwater from tanks as well as your potable supply.

## 6. Legislation

#### **ACT Health**

The ACT Public Health Act 1997 is aimed at protecting and maintaining the health of the public from risks associated with facilities, equipment, products and activities. The Act states that a person shall not create an insanitary condition and gives ACT Health the power to make a person rectify the insanitary condition. An insanitary condition is a condition, state or activity that is considered to be or likely to be a public health risk, damaging to public health or is offensive to community health.

The Public Health Regulations 2000 outlines provisions for the protection of Canberra's water supply. Under these Regulations it is an offence for a person to put anything into the water supply that is detrimental to the quality of the water. This includes the backflow of contaminated water e.g. greywater into the drinking water supply, which is discussed further in Appendix 1.

## **ACT Planning and Land Authority**

The ACT Planning and Land Authority regulates plumbing in the ACT. The legislation governing the plumbing industry is called the Construction Occupations (Licensing) Act 2004 (COLA). A number of operational Acts that relate to Building, Electrical, Plumbing, Gas, and Utilities sit under the COLA. The Water and Sewerage Act 2000 and the Water and Sewerage Regulations 2001 are operational legislation within the COLA.

The plumbing legislation (Water and Sewerage Act and Regulations) requires that any work conducted on the water supply, sanitary plumbing or drainage system is to be carried out by licensed plumber.

All plumbing work installed in the ACT must comply with the *Water and Sewerage* Act 2000 and AS/NZS 3500. All plumbing product installed must meet the requirements of the Plumbing Code of Australia, plumbing product approval scheme, see Appendix 1.

Plumbing work on greywater systems must be carried out by licensed plumbers. This work may involve changing or modifying existing plumbing and drainage associated with the installation of a greywater diversion valve or a treatment system. The licensed plumber must notify ACT Planning and Land Authority of their activities and lodge a 'Start of Work Notice'.

#### Drinking water protection (Backflow Prevention)

The Water and Sewerage Act 2000 requires a plumber to install a backflow prevention device if there is risk that non-potable liquids, solids or gases may enter into the drinking water supply of the Territory. Refer to the 'backflow prevention table', Appendix 1, for further information.

### **Environment Protection Authority**

The Environment Protection Act 1997 regulates environmental impacts from human activities. The capture and use of greywater must not lead to environmental damage. When designing your greywater system you need to keep this in mind so that you do not:

- Allow greywater to flow off your block or to contaminate groundwater;
- Create offensive odours: or
- Pollute the environment in any other way.

#### **ActewAGL**

Greywater sludge, untreated greywater stored for more than 24 hours and other treatment by-products can only be discharged to the sewer with written approval from ActewAGL. The discharge of unapproved substances into the utility sewerage system may be in contravention of the *Utilities Act 2000*.

## 7. Commonly asked questions

Interest and awareness about the use of greywater as a water conservation method is increasing in the community, particularly in periods of water shortages. The following section is aimed at answering some of the commonly asked questions about greywater and its use within a single domestic household.

## How much greywater do households generate?

Table 2 provides some typical statistics for water use and greywater production for an average Canberra household.

Table 2: Amount of wastewater generated in a typical Canberra household

Household sector	Indoor water usage		Greywater generated	
	(L/day)	%	(L/day)	%
Toilet	170	32		
Kitchen	50	10	50	14
Laundry	120	23	120	34
Bathroom	180	35	180	52
Total	520	100	350	100

Source: Calculations interpreted from the ACT Government, Think water, act water, a strategy for sustainable water resource management in the ACT

As the quantity of greywater generated can vary considerably, it is important for each household to determine how much greywater it produces before designing the greywater diversion and distribution system.

## What are the health implications of urine in greywater?

Urine from a healthy person is sterile. While some bladder infections may pass micro-organisms in urine, the potential for these organisms to survive and cause infection is considered remote.

#### What can I use my greywater for?

To minimise any potential health risk, it is important that you limit the use of untreated greywater to outdoor applications such as:

- Watering plants and shrubs (excluding plants to be consumed raw); and
- Watering lawns.

### Can I use greywater on my fruit trees?

Yes. Drip irrigation or sub-surface irrigation is the most efficient method of watering the trees. Spray irrigation is not recommended due to concerns with spray drift in windy weather and fruit being consumed raw.

## Can I use greywater on my vegetable garden?

No. Greywater is not recommended, due to concerns with the contamination of the vegetables, in particular those that are consumed raw.

## Do I need Government approval for my treatment system?

The ACT Government does not formally approve greywater treatment systems. However, normal plumbing approvals are required and can be obtained from the ACT Planning and Land Authority. ACT Health provides guidance on effluent quality from greywater treatment systems (see Table 1).

Materials used in plumbing and greywater treatment and diversion systems must comply with Plumbing Code of Australia product certification scheme and AS/NZS 3500 Parts 1 and 2 (Section 2 Materials and Products).

The requirements of the ACT plumbing legislation and Australian and New Zealand Standard 3500 must be met. (See Appendix 1).

## 8. Agency contacts

#### **ACT Health**

#### **Health Protection Service**

Postal address: Locked Bag No. 5 WESTON CREEK ACT 2611 Telephone: 6205 1700

Fax: 6205 1705

Website: www.health.act.gov.au/hps

## Territory and Municipal Services

Postal address: GPO Box 158 Canberra ACT 2601

#### **Environment Protection and Heritage**

Phone: 13 22 81 Fax: 6207 6084

#### **Sustainability Policy and Programs**

Phone: 13 22 81 Fax: 6207 6255

Website: www.thinkwater.act.gov.au

## ACT Planning and Land Authority

## **Building and Plumbing Enquiries**

16 Challis Street, Dickson

Or

Cnr Lysaght and Hoskins Streets,

Mitchell

8.30 am to 4.30 pm weekdays

Telephone: 6207 6262

Fax: 6207 6258

Website: www.actpla.act.gov.au

#### **ActewAGL**

#### **Technical Enquiries**

ActewAGL House 221 London circuit Canberra City 8.30 am–5.00 pm

Telephone: 6248 3555

Website: www.actewagl.com.au

## Appendix 1

## Plumbing requirements for on-site greywater services

Plumbing and drainage requirements relating to greywater systems can be summarised as follows:

#### **Administration requirements**

- A licensed plumber is required to install the plumbing pipework to the greywater diversion and/or treatment system for all plumbing installations delivering greywater for use on a suburban block in the ACT.
- The requirements of the Water and Sewerage Act 2000 and Regulations 2001 and Australian and New Zealand Standard 3500 must be met.
- The licensed plumber or drainer installing a greywater diversion valve, diversion device, or treatment system is required to lodge a plumbing 'Start of Work Notice' with ACT Planning and Land Authority.
- The licensed plumber must arrange for all greywater plumbing pipework to be inspected by an ACT Planning and Land Authority plumbing inspector.
- The licensed plumber must submit a Certificate of Compliance to ACT Planning and Land Authority and the customer when work is complete.

#### On-site greywater drainage systems

- Rainwater, stormwater or surface water must not enter the greywater system or be discharged to the sewer through the greywater return or overflow.
- Any greywater to be returned to the sewerage system is to be conveyed via a
  disconnector gully. This gully cannot replace a complying overflow relief gully
  for the building.
- Below ground diversion devices (pump transfer pits) for greywater systems shall be vented to the atmosphere via an open air vent at a high level. All access openings to the diversion device must be sealed and be vermin proof.
- For greywater systems where bladder technology is employed an open air vent may not be required.
- Open air venting on greywater diversion devices cannot be replaced by an air admittance valve.
- Sanitary plumbing and drainage piping from a sanitary fixture (baths, showers, basins and laundries) shall comply with Australian and New Zealand Standards 3500 Part 2 Section 3 through to 9.

- Greywater sanitary plumbing and drainage shall be installed directly to a treatment system or diversion device and independently of other systems.
- Below ground greywater diversion devices (pump transfer pits) should be protected from sewage surcharge by the installation of a reflux value.
- A direct diversion device/valve installed above the level of the overflow relief gully does not require protection from sewage surcharge.

#### On-site internal household greywater systems

The following shall apply when a flushing toilet cistern is to be supplied with greywater:

- There shall be no interconnection or cross connection between any drinking water services (domestic water supply or rainwater supply) and a greywater service.
- All distribution pipes for the greywater system permitted to be used for toilet cistern flushing (or pressurised irrigation systems) shall be coloured purple and clearly and permanently marked 'WARNING: RECYCLED OR RECLAIMED-WATER-DO NOT DRINK'.

Hose taps used in greywater services shall be of a type that has a removable handle and coloured purple.

### Marking, labelling and signage

All pipes, pipe sleeves, identification tapes and outlets shall be coloured purple in accordance with AS2700.

All pipes, pipe sleeves and identification tapes shall be marked with the following in accordance with AS1345:



Greywater diversion components should be labelled 'WARNING: RECYCLED OR RECLAIMED-WATER-DO NOT DRINK'.



Greywater outlet points shall have safety signs that are clearly and permanently marked 'WARNING: NOT FOR DRINKING' in accordance with the requirements of Australian Standard AS1319.

## **Proximity to other services**

The following applies:

- Above ground installations of greywater services shall not be installed within 100 mm of any parallel drinking water service.
- Below ground installations of greywater services shall not be installed within 300 mm of any parallel drinking water supply.

## **Greywater materials**

Plumbers must check the products and materials they are installing comply with AS/NZS 3500 Parts 1 and 2, Section 2 Materials and Products.

Materials used in plumbing for greywater treatment and diversion systems must comply with AS/NZS 3500. Complying products must meet the Plumbing Code of Australia product certification authorisation and be marked with "W" for the "WaterMark" scheme.

Table 3: Backflow prevention requirements

Type of premises	Definition and clarification	Backflow prevention device required at the property boundary
Domestic premises with direct diversion of greywater.	Direct diversion of greywater onto lawns or garden beds.	No special conditions if a dual check water meter or a dual check valve has been installed 1.
Domestic premises (single residential) with a greywater reuse system, pressurised and non-pressurised.	Premises where greywater is collected, <b>not treated or treated</b> and reused for acceptable purposes <sup>2</sup> .	No special conditions if a dual check water meter or a dual check valve has been installed 1.
	External use only:	
	<ul> <li>Covered surface drip irrigation</li> <li>Surface flood irrigation</li> <li>Sub-surface irrigation</li> <li>Sub-soil irrigation</li> </ul>	
Domestic premises (single residential) with a greywater reuse system, pressurised.	Premises where greywater is collected treated, and reused for acceptable purposes <sup>2</sup> .	Testable backflow prevention device appropriate for the degree of hazard.
	Internal use:  Toilet cistern flushing Laundry use	(Medium hazard rating)
Greywater systems approved for use on multi-unit developments in excess of 3 or more residential buildings or installed on a commercial property.	All systems	Testable backflow prevention device appropriate for the degree of hazard.  (Medium hazard rating)

- 1. To check if you have a dual check water meter contact ActewAGL on 6248 3555.
- 2. See Table 1 Greywater treatment objectives and applications

Where a higher risk of contamination of the water supply is identified, the plumbing regulator, ACT Planning and Land Authority or ActewAGL may require the property owner to install a higher hazard backflow prevention device at the property owner's cost.

## Feedback on Greywater Use – Guidelines for residential properties in Canberra

This booklet will be reviewed on a regular basis to address issues and feedback provided by the people using it as well as advances occurring in greywater use and management.

Your feedback on this booklet is welcomed. By answering these few simple questions, your comments will contribute to the future development and enhancement of this booklet and other information about greywater.

## Sending us your feedback

You can post or fax this form to:

Health Protection Service Locked Bag 5 Weston Creek ACT 2611

Telephone: 6205 1700 Fax: 6205 1705

Or, you can download a copy of this form from the Health website at www.health.act.gov.au/hps , and email the completed form to: hps@act.gov.au

# Your Feedback

1. How did you find out about the Greywater Use Guidelines?					
2. Where did you obtain your copy of the Greywater Use Guidelines?					
3. To what extent did the contents of the Greywater Use Guidelines meet your information needs? My information needs were (please circle):					
a) met very well b) just met c) not meet d) unsure					
4. What additional information do you suggest could be incorporated into the guidelines or other information available about greywater?					
5. How do you rate the level of detail provided? (Please circle)					
5. How do you rate the level of detail provided? (Please circle) a) too much detail b) about the right level of detail c) not enough detail					
5. How do you rate the level of detail provided? (Please circle)					
5. How do you rate the level of detail provided? (Please circle) a) too much detail b) about the right level of detail c) not enough detail Additional comments welcome:					
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5. How do you rate the level of detail provided? (Please circle) a) too much detail b) about the right level of detail c) not enough detail Additional comments welcome:					

6. How easy was the document to read and understand?						
a) very easy	b) easy	c) a little difficul	t d)	very difficult	e) unsure	
Additional comments welcome:						
7. What additional information do you think could be made more available about water issues and water saving in general?						
	•••••		•••••			
8. Please indic Guidelines:	cate which	of the following be	st desc	ribes your inte	erest(s) in these	
a) a househol	lder intereste	ed in reusing greyw	ater (			
b) a greywate	er storage oi	treatment system	supplie	r or installer		
c) plumber						
d) building or	property de	veloper				
e) consultant						
f) other, plea	se specify: .					

Thank you for taking the time to provide us with your views.

