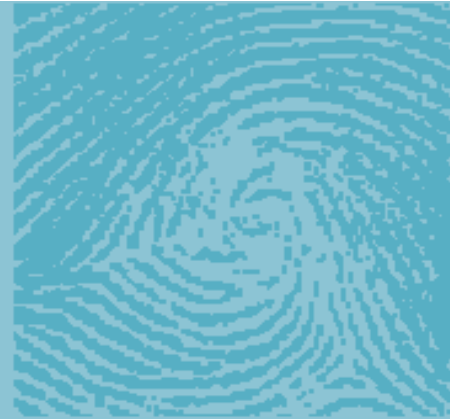


Appropriate reuse of greywater



The purpose of this guidance note is to describe the uses of greywater that the Department of Human Services considers appropriate to minimise health risks.

What is greywater?

Greywater includes all household wastewater except toilet waste. It can be a valuable water resource, and an increasing number of householders are reusing greywater for a variety of purposes. However, care must be taken with this practice as it can carry health and environmental risks.

Reuse of greywater

Greywater can be used untreated, or it can be treated to varying degrees to reduce nutrients and disease-causing pathogens. The appropriate uses of greywater depend on both the source of greywater and the level of treatment, and are listed in the table overleaf. The potential health risks associated with greywater reuse when it has been sourced from a multi-dwelling or commercial premises are considered potentially greater than those associated with greywater reuse within a single domestic premises.

Greywater reuse must always occur in a safe and controlled manner. Reuse that places public health at risk may be investigated by local council officers under the nuisance provisions of the *Health Act 1958*, and reuse that causes environmental pollution may be investigated by the Environment Protection Authority (EPA) under the *Environment Protection Act 1970*.

Untreated greywater

The reuse of untreated greywater is not currently subject to specific legislative control in Victoria, and it can be temporarily diverted from the house for reuse in garden watering (for example during dry summer periods). However, the guidance provided in the EPA's Domestic Wastewater Management Series: Reuse Options for Household Wastewater (Publication 812) should be followed to minimise the health and environmental risks associated with this practice.

Untreated greywater must not be stored for periods longer than 24 hours as it will become septic, and the Department does not recommend the reuse of untreated greywater for any purpose within the home.

Treated greywater

The EPA must approve greywater treatment systems that are designed to treat **up to** 5000 litres per day, before a local council permit can be issued for their installation. The EPA approval specifies monitoring and maintenance requirements, and the approved forms of dispersal of treated water to the environment. Different levels of treatment can be achieved with these systems, depending on the technology. More information on greywater treatment systems can be obtained from the EPA.

Greywater treatment systems that are designed to treat **more than** 5000 litres per day must comply with the requirements in the EPA's Guidelines for Environmental Management: Use of Reclaimed Water (Publication 464).

Appropriate uses of greywater according to level of treatment

Treatment	System verification/monitoring	Appropriate reuse application, if greywater sourced from and reused within <u>single domestic premises</u>	Appropriate reuse application, if greywater sourced from <u>multi-dwelling/commercial premises</u>
Temporary Diversion Systems:			
Untreated	None	Garden irrigation: <ul style="list-style-type: none"> • manual surface¹ • sub-soil trench 	Garden irrigation: <ul style="list-style-type: none"> • sub-soil trench
Permanent Treatment Systems:			
Filtration	EPA Certificate of Approval for specific treatment system specifies ongoing maintenance and monitoring requirements.	Garden irrigation: <ul style="list-style-type: none"> • sub-soil trench 	Garden irrigation: <ul style="list-style-type: none"> • sub-soil trench
Primary treatment	EPA Certificate of Approval for specific treatment system specifies ongoing maintenance and monitoring requirements.	Garden irrigation: <ul style="list-style-type: none"> • sub-soil trench 	Garden irrigation: <ul style="list-style-type: none"> • sub-soil trench
Secondary treatment (20/30 standard) ² (≤5000L/day)	EPA Certificate of Approval for specific treatment system specifies ongoing maintenance and monitoring requirements.	Garden irrigation: <ul style="list-style-type: none"> • sub-surface drip • sub-soil trench 	Garden irrigation: <ul style="list-style-type: none"> • sub-soil trench
Secondary treatment and disinfection (20/30/10 standard) ³ (≤5000L/day)	EPA Certificate of Approval for specific treatment system specifies ongoing maintenance and monitoring requirements.	Garden irrigation: <ul style="list-style-type: none"> • surface • sub-surface drip • sub-soil trench In-house use: <ul style="list-style-type: none"> • toilet flushing • washing machine 	Garden irrigation: <ul style="list-style-type: none"> • surface • sub-surface drip • sub-soil trench
Treatment and disinfection (Class A standard) (>5000L/day)	As per reclaimed water guidelines.	Garden irrigation (any method) In-house use: <ul style="list-style-type: none"> • toilet flushing • washing machine 	Garden irrigation (any method) In-house use: <ul style="list-style-type: none"> • toilet/urinal flushing • washing machine

Table Notes:

¹ Surface irrigation with untreated greywater should only occur on a temporary basis during dry periods, and be managed in accordance with the guidance provided in EPA publication 812.

²20/30 – 20 mg/L BOD, 30mg/L suspended solids

³20/30/10 – 20 mg/L BOD, 30mg/L suspended solids, 10 *E.coli*/100mL

Who to contact for more information

Department of Human Services
Environmental Health Unit

1300 761 874

www.dhs.vic.gov.au/phd/environmental

Environment Protection Authority
Information Centre

03 9695 2722

www.epa.vic.gov.au