

Fact Sheet 8

Greywater reuse

There are around 6000 properties within the Shire of Nillumbik that are not connected to mains sewerage. These properties are serviced by an onsite wastewater disposal system (septic tank system). Wastewater if not properly managed can impact on public health and the environment.

There are 10 fact sheets about onsite wastewater systems:

1. Conventional septic tanks
2. Aerated wastewater treatment plants
3. Sand filters
4. Split system
5. Common disposal methods for primary treatment
6. Common disposal methods for secondary treatment
7. Purchasing a dwelling in Nillumbik
8. Greywater reuse
9. Indigenous plants and grasses for transpiration
10. Decommissioning your domestic wastewater system

Greywater can be a good water resource during times of drought and water restrictions, but its reuse can carry health and environmental risks therefore it needs to be managed accordingly.

The installation of a domestic greywater system requires approval by local councils as there are legislative requirements that need to be followed. Guidance on how to safely use greywater diversion devices (GDD) in the home for watering gardens or flushing toilets can be found in this factsheet.

What is greywater?

Greywater (all non-toilet household wastewater) is domestic wastewater from a bath, shower, basin and laundry. Kitchen sinks are generally not considered an acceptable source of greywater due to the presence of food particles, grease, oils and fats. Greywater does not contain toilet waste but it can contain pathogens, which if poorly managed can present a risk to human health and the environment.

Temporary greywater diversion

Untreated greywater can be reused temporarily with many readily available systems (hoses, buckets, diversion valves) that can be used with domestic plumbing. These systems are designed for immediate greywater reuse and it is important to note that untreated greywater cannot be

stored for longer than 24 hours. The installation of a temporary greywater system does not require a council permit.

Permanent greywater reuse

Permanent greywater treatment and reuse systems need a Certificate of Conformity to the relevant Australian Standard and a permit from Council.

Depending on the standard of treatment, greywater can be used for garden irrigation or for reuse in the house. An increased extent of regulation applies to any in-house use of greywater such as toilet flushing and cold water for washing machines. If greywater is to be used for these purposes, then EPA Code of Practice require greywater to be treated to what is known as an advanced secondary treatment and disinfection stage and meet a 10/10/10 standard meaning a quality of <10 mg/L BOD5, <10 mg/L suspended solids and E.coli <10 cfu/100 mL. Greywater of this quality may also be used for surface and subsurface irrigation.

When using greywater for garden irrigation it should be distributed by using porous hoses or drippers beneath a layer of mulch and be compliant with the owner's manual or the Certificate of Conformity with the latest version of Australian Standard 1546.

For information

For information on onsite wastewater systems contact Environmental Health on 9433 3340.

Protecting the environment

Greywater may contain soap or detergents with high levels of phosphates and salt. This can cause excessive weed growth and may impact plant health and the environment. To reduce the effect of additional nutrients on the environment it is recommended to use low phosphorous and sodium detergents.

If detergents have an NP symbol on their label it indicates that less than 0.5 per cent phosphorous is contained within the product.

Information can be found at lanfaxlabs.com.au

The dos and don'ts of managing the risks of greywater

Do

- Use untreated greywater within 24 hours.
- Only use greywater during periods of low rainfall when watering is required.
- Use low risk greywater such as final rinse water from washing machines, showers and baths.
- Use detergents, cleaners and shampoos that are biodegradable and low in salt and phosphorous.
- Ensure irrigation is underground through a drip system or under mulch to keep it safely away from people and pets.

Don't

- Reuse kitchen wastewater as it has high concentrations of contaminants which are not readily broken down by soil organisms.
- Divert greywater which could have faecal contamination, e.g. water used to launder soiled nappies.
- Water vegetables or fruit for human consumption with greywater.
- Allow greywater to pool or stagnate on the garden as it may cause odours.
- Use greywater in sprinklers.
- Store in rainwater tanks.
- Drink greywater or allow children or pets to play with greywater.
- Use for car washing or topping up swimming pools.
- Allow greywater to flow beyond a property boundary or into a stormwater drain.

