

Greywater Re-use During the Drought

Environmental Health Fact Sheet

WHAT IS GREYWATER?

Greywater is household wastewater that has *not* come into contact with toilet waste. It comes from the kitchen sink, dishwasher, bath, shower, bathroom hand wash basin, clothes washing machine, and laundry trough. Water from household air conditioners is not greywater, and there is no objection to its reuse on gardens.

WHAT IS CURRENT POLICY?

The Department of Health currently has a greywater reuse policy "Greywater Reuse in Sewered Single Domestic Premises – April 2000" which is available at:

<http://www.health.nsw.gov.au/public-health/ehb/general/wastewater/greywater~policy.pdf>

This policy sets out sources, quantities and characteristics of greywater; the public health and environmental considerations; and options for reuse in sewered single domestic premises. It does not support the reuse of untreated greywater in a domestic setting, unless it is used below ground.

Long term sustainable greywater reuse should be in accordance with the greywater reuse policy and as required under current legislation. This is because greywater can contain disease-causing organisms, detergents, soaps, nutrients, oils, salts and particles of hair, food, lint, etc. Unless properly managed, these characteristics can give rise to health risks and degradation of the environment.

WHY REUSE GREYWATER?

New South Wales is experiencing water restrictions due to current drought conditions and the critically low levels of surface water storage. It is recognised that in times such as these many householders like to conserve water by reusing their greywater on their gardens.

Many of the alternatives being put forward have the potential to pose a public health risk. Most Public Health Units have received enquiries from councils and the public regarding the reuse of household greywater. This information sheet provides guidance on how greywater can best be reused for watering gardens and lawns. *This advice is intended for the duration of the current water restrictions only.*

Greywater cannot be re-used for drinking or other domestic uses such as food preparation, ablutions, washing clothes, car washing, and topping swimming pools. Recycling of other household effluent such as black water (toilet waste) should not occur due to significant risks to human health. Some types of greywater may be used relatively safely for garden watering as described below.

HOW CAN I REUSE GREYWATER DURING THE DROUGHT?

Wastewater from the kitchen sink (apart from final rinse water) and dishwasher should not be reused as these can contain heavy loads of organic material, fats and caustic additives. Greywater from the bath, shower, laundry trough and washing machine (final rinse water only) and wash hand basin are the most readily available sources of greywater that can be reused. **Only by using a bucket, or similar receptacle, can these types of greywater be collected and applied to garden or lawn areas.** This manual application will assist in keeping health risks to a minimum. Drainage systems must not be altered to allow the direct diversion of greywater to the ground surface.

If the house is serviced by reticulated sewerage, it is important not to reuse all the greywater. Some greywater is needed to help flush sewer pipes to prevent blockages.

THE DOS

- Do select garden friendly detergents. Only biodegradable products and products with low phosphorus, sodium, boron, chlorine and borax should be used. Bleaches and fabric softeners should be used sparingly. Disinfectants should not be used at all.
- Do apply greywater in several locations rather than one single point, so that pooling of greywater does not occur.
- Do apply greywater to areas that are not readily accessible to children and household pets.
- Do be careful lifting and carrying buckets of greywater particularly over slippery surfaces and on stairs.

THE DON'TS

- Don't use greywater from the washing of nappies and soiled clothing.
- Don't use greywater when a household resident has an infectious disease such as diarrhoea, infectious hepatitis, intestinal parasites, etc.
- Don't apply greywater on edible plants or where fruit fallen to the ground is eaten.
- Don't apply greywater during rain.
- Don't apply greywater so that it flows into the street or down storm water drains.
- Don't store greywater. Stored greywater will turn septic giving rise to offensive odours and provide conditions for micro-organisms to multiply, and will attract flies and cockroaches.
- Don't let your greywater go beyond your property and cause a nuisance for your neighbours.
- Don't over water. Over application of greywater may clog the soil causing the pooling of greywater, which can result in the development of unsightly areas of grey / green slime. This slime is caused by the presence of soaps, shampoos, detergents and grease in greywater. The accumulation of slime can cause odours, attract insects and cause environmental damage.
- Don't spray irrigate greywater.
- Don't connect pipes or hoses to household drainage lines or appliances.
- Don't use greywater to wash paths, driveways or cars.

FURTHER INFORMATION

For further information and advice contact the Area Health Service Public Health Unit or Council's Environmental Health Team on Tel. 9952 8202.