Government of South Australia
Department of Health

DEPARTMENT OF HEALTH
Wastewater Management Section

Manual Bucketing of Greywater

What is Greywater

Greywater is wastewater generated from bathrooms (showers, baths, spas, and hand basins), laundries (washing machines, 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, phosphorus, 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.

Manual Bucketing

Manual bucketing onto lawn and garden areas using water from the bathroom or laundry, or temporary use of a hose manually fitted to the 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 and offensive odours.
- Don't use greywater if others in the household have diarrhoea or an infectious disease, as this could increase the risk of other people becoming ill.
- Don't use greywater to irrigate fruit, vegetables, or areas where fruit can fall to the ground and be eaten.
- 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.

Chemical contaminants: detergents, cleaners and other chemicals

- Environmentally friendly shampoos, detergents and cleaning products should be used to protect soil and plants watered with grey water. 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

- 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 rain water, especially in areas of 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 areas or properties. Pooled greywater can turn septic and produce offensive odours.
- 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 soil.
- 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.

Soils in many parts of Adelaide have a high clay content. Clay soils tend to be more susceptible to build up of salts and have low permeability. Extra care should be taken when using greywater in areas of clay soils to avoid long term damage.

Permanent Greywater Systems

Permanent greywater systems such as diversion devices or treatment systems, or any device attached to plumbing, can increase the use of greywater. However due to potential risks associated with grey water, permanent devices require installation approval from your Council or the Department of Health.

Information on permanent greywater systems can be obtained from:

http://www.dh.sa.gov.au/pehs/environ-health-index.htm;

by calling (08) 8226 7100;

or emailing: public.health@health.sa.gov.au.