



**GREYWATER POLICY
FOR DOMESTIC USE**

Amendments

Date	Amendment	Reference
1 May 2012	Adopted	EP/30

Policy Objectives

The objectives of this Policy are to:

- Outline the legislative requirements and regulations for reusing greywater on domestic premises and providing information to residents on approvals for installation and operation.
- Ensure that Mosman residents reuse greywater around the home in an environmentally safe manner.
- Define the term greywater and demonstrate what greywater can be used for.

What is Greywater?

Greywater is household wastewater that comes from the bath, shower, hand basin, washing machine, and laundry trough. It is recommended that wastewater from the kitchen sink and dishwasher not be reused, as it can contain heavy loads of organic material, fats and caustic additives. Toilet wastewater (blackwater) cannot be reused in a greywater system under any circumstance.

Greywater can be used for watering lawns and gardens, as well as flushing toilets and laundry use, depending on the method applied and the level of treatment provided.

Methods of Greywater Reuse

There are three methods of greywater reuse; i) Manual Bucketing, ii) Greywater Diversion Device and iii) Greywater Treatment System.

i) Manual Bucketing

Greywater from the shower, bath, laundry trough, and hand basin is the most readily available source for reuse. By using a bucket, greywater can be collected and supplied directly to the garden and or lawn areas.

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

ii) Greywater Diversion Device

Greywater diversion devices can be gravity fed or pump driven. A gravity diversion device diverts greywater directly from an appliance (eg. washing machine) using gravity to a subsurface irrigation system. A pump diversion device uses a pump and surge tank, and the flow of greywater is activated through a tap.

Greywater diversion devices do not require approval from Council to install and operate if the system meets specified requirements.

iii) Domestic Greywater Treatment System

A Domestic Greywater Treatment System (DGTS) collects, stores and treats greywater to a secondary treatment standard which allows reuse of the treated greywater for garden irrigation, toilet flushing and washing machine use. The treatment process varies according to the reuse option of the treated greywater. The treatment process may include aeration, clarification, membrane filtration and disinfection using chlorine or UV filtration.

The installation and operation of a DGTS requires Council approval and the system is required to be accredited by and registered with NSW Health.

Legislation and Regulations

The legislation and regulations that apply to the reuse of greywater include; the *Local Government Act 1993*, the *Local Government (General) Regulations 2005*, and the *Protection of the Environment Operations Act 1997*.

Local Government Act, 1993

Council may grant approval to construct and install a DGTS at a particular site in accordance with Section 68, Part C - Management of Waste, *Local Government Act, 1993*.

Section 68 - What activities generally require the approval of the Council?

- (1) A person may carry out an activity specified in the Table of Approvals below, only with the prior approval of the Council, except in so far as this Act, the regulations or a local policy adopted under Part 3 allows the activity to be carried out without that approval.

A person who fails to obtain an approval or who carries out an activity otherwise than in accordance with an approval is guilty of an offence.

Table of Approvals:

Part C Management of Waste

1. For fee or reward, transport waste over or under a public place
2. Place waste in a public place
3. Place a waste storage container in a public place
4. Dispose of waste into a sewer of the council
5. *Install, construct or alter a waste treatment device or a human waste storage facility or a drain connected to any such device or facility*
6. Operate a system of sewage management (within the meaning of section 68A)

Part F Other activities

1. Operate a public car park
2. Operate a caravan park or camping ground
3. Operate a manufactured home estate
4. Install a domestic oil or solid fuel heating appliance, other than a portable appliance
5. Install or operate amusement devices
7. Use a standing vehicle or any article for the purpose of selling any article in a public place
10. *Carry out an activity prescribed by the regulations or an activity of a class or description prescribed by the regulations*

Section 124 - Power to issue orders requiring a person to:

1. Comply with an approval (Order 30)
2. Take action to maintain premises in a healthy condition (Order 21)
3. Store, treat or dispose of waste (Order 22)
4. Not to use or permit a human waste storage facility to be used (Order 25)
5. Connect premises to a public sewer when the sewer is within 75 metres (Order 24).

Orders can be given to the owner or occupier of the premises or to the person responsible for the waste or the container in which the waste is stored. Failure to comply with such an order is an offence punishable with a fine.

Local Government (General) Regulations 2005

The Regulation sets out the criteria required to be met for the installation and operation of a greywater diversion device.

75A Approval required for domestic greywater diversion

(1) For the purposes of item 10 of Part F of the Table of Approvals, above, domestic greywater diversion is prescribed as an activity that requires the prior approval of the Council.

(2) However, domestic greywater diversion may be carried out without the prior approval of the Council if specific requirements under the Regulation are met.

43 Matters to be taken into consideration in determining applications for approval to operate system of sewage management

In determining an application for approval to operate a system of sewage management, the council must consider any matter specified in guidelines or directions issued by the Director-General in relation to the environment and health protection matters referred to in clause 29.

29 Matters to be taken into consideration in determining applications for approval to install, construct or alter sewage management facilities

(1) In determining an application for approval to install, construct or alter a sewage management facility, the Council must take into consideration the matters specified in this clause.

(2) Environment and health protection matters.

Protection of the Environment Operations Act 1997

The Act provides Council, as the appropriate regulatory authority (ARA), with the power to investigate complaints and issue legally binding notices for activities relating to wastewater including greywater reuse systems.

It is an offence to allow the wastewater to leave the premises or be discharged directly or indirectly into a stormwater drainage line or waterway.

Operators of managed greywater reuse systems must ensure the system does not cause pollution or they may be liable to enforcement action. Failure to obtain approval or to comply with the conditions of approval are offences punishable with a fine.

Installation and Operation Approvals for Reuse of Greywater

i) Manual Bucketing

Council approval is not required for manual bucketing provided that water is only collected from the shower, bath, hand basin, and laundry trough, and is directly applied to the garden or lawn area.

ii) Greywater Diversion Device

A greywater diversion device does not require Council approval to install and operate provided the system meets the following criteria:

- Your property is in a sewered area;
- Installation is in accordance with the *NSW Guidelines for the Greywater Reuse in Sewered Single Domestic Premises*;
- Installation and operation is carried out in accordance with the NSW Code of Practice for Plumbing and Drainage, 2006;

- Conditions of Section 75A of the Local Government (General) Regulation 2005 are met;
- The device installed has a Watermark License and is listed by NSW Health.
- The device is installed by a licensed Plumber;

and provided the following performance standards are achieved:

- Greywater must not be stored;
- End use is sub-surface irrigation only;
- Prevention of the spread of disease by micro-organisms;
- Prevention of the emission of nuisance or foul odours;
- Prevention of contamination of water;
- Ensure all pipes/taps are labelled as greywater;
- Prevention of degradation of soil and vegetation;
- Discouragement of insects and vermin;
- Use of biodegradable, low phosphorus detergents;
- Ensure that regular maintenance is undertaken to clean the device and irrigation system;
- Minimisation of any adverse impacts on the amenity of the property and surrounding lands.
- The device must have a manual switch to easily divert greywater to sewer if required;
- Greywater is not let go beyond the property boundary or within 1m of property boundary and cause nuisance to neighbouring properties.
- Wastewater is not diverted from kitchen or toilet plumbing,
- Any diversion other than by gravity is only via a licensed non-storage surge tank and pump system installed by a licensed plumber.
- Diversion devices must not be installed below the fixture trap on any plumbing fitting.
- The plumber installing the system must notify Council that the greywater diversion device is in place.

Installation and operational approval is required for any greywater diversion system that does not comply with the above requirements.

If a property has an existing onsite sewage management system, an Approval to Operate from Council is required under the *Local Government Act 1993* and its Regulations for a greywater diversion device.

iii) Domestic Greywater Treatment System (DGTS)

Council approval is required for both the installation and operation of a DGTS. To be approved a DGTS must be accredited by NSW Health.

An application for approval to install and operate must be lodged with Council prior to commencement of the installation of the system.

An administration fee of \$150.00 (GST inclusive) must be paid by the applicant on lodgement of the application. This administration fee will cover the assessment and determination of the application, inspection to determine compliance with approval conditions and the issue of an approval to operate.

If installation of a DGTS requires earthworks, a development application and consent, under the *Environmental Planning and Assessment Act 1979*, is required.

Conditions of Consent:

The DGTS accredited by NSW Health is approved subject to the following conditions of consent:

During Construction

1. All effluent arising from the Domestic Greywater Treatment System must be managed wholly within the premises where the system is installed.
2. All irrigation equipment must be installed in such a way that it will not be readily subjected to damage.
3. Effluent from (DGTS) must be managed by the use of one or more irrigation techniques specified in AS/NZ 1547.

Prior to Occupation

1. That certification is provided to Council indicating that the DGTS has been installed and commissioned in accordance with the manufacturer's specifications and that the plumbing to the system has been installed in accordance with the NSW Code of Practice for Plumbing and Drainage 2006 and Australian Standards AS2700, AS1319 and AS1345.
2. The irrigation system must be operated in such a way as to prevent any run-off of effluent from the land application area.

During Occupation

There is an onus of responsibility on the owner of the residential premises to maintain the greywater treatment system for the life of the installation.

1. If land application is by spray irrigation, the land application area should not be used for passive or active recreational purposes.
2. That the owner of the premises, in which the greywater treatment system has been installed, enter into an annual service contract with a suitably qualified person or company to undertake mandatory maintenance and servicing of the DGTS in accordance with the manufacturer's service and maintenance guidelines.
3. The chosen service agent must be able to provide service within 24 hours of being notified of a system malfunction.
4. The service agent is required to provide four services at 3 monthly intervals whereby the service check should include, but not be limited to all mechanical, electrical and functioning parts of the DGTS including:
 - i. Operation of the sump well and settling tank, pumps and plumbing fittings
 - ii. Operation of the alum dosing equipment
 - iii. The alarm system

- iv. The UV and chlorine disinfection units
 - v. The effective operation of the effluent reuse options
5. Operating and maintenance manuals shall be provided for all plant, equipment, water treatment equipment and systems and shall include at least the following:
- i. Start- up, operating and shut-down procedures
 - ii. Particulars of the maintenance management program including plant servicing and cleaning schedules.
6. Maintenance records shall contain the following information:
- i. Date, item of plant, equipment or system and nature of service performed.
 - ii. Details of defects found and rectification procedure undertaken.
 - iii. The name and contact details of the person and company performing the service.
7. The operating and maintenance manuals and service records shall be readily available at the site for inspection by the regulatory authority upon request.

Policy Adoption

1 May 2012

Policy Review, Implementation and Monitoring

The Policy will be reviewed at least every three years, with the first review to be undertaken by 1 May 2015.

In the instance of the gazettal of new legislation or the introduction of updated guidelines from the State Government prior to 1 May 2015, a review to update this Policy and incorporate regulatory changes will be undertaken immediately upon notification.

The Department / sections responsible for the implementation and monitoring of compliance with this Policy will be the Department of Environment and Planning – including the Environment and Services and Development Services Sections.