

Grey water requirements for small vessels and vessels with minimal grey water production facilities

Updated February 2012

EPA 941/12: All vessel owners must adhere to the grey water rules as set down by the Code of practice for vessel and facility management (marine and inland waters). This information sheet summarises the requirements for small vessels and vessels with minimal grey water production facilities.

Introduction

The [Code of practice for vessel and facility management \(marine and inland waters\)](#) [code of practice], introduced in 2008, is linked to the *Environment Protection (Water Quality) Policy 2003*, and supersedes the *Code of practice for vessels on inland waters* (2003). It contains mandatory requirements for vessel operators managing blackwater (toilet wastes) and grey water (wastewater that has been used for washing, laundering, bathing or showering).

The code requires inland waters vessel operators to retain all black water on board and undertake measures to manage grey water. Through the release of its grey water, a vessel can cause significant harm, especially in sensitive aquatic areas. Grey water discharges from a vessel can also pose health risks to those on board and other recreational river users. For example, water extracted from the River Murray is often only filtered for use in the kitchen sink; in many cases the water used for washing, showers and spas is taken directly from the River Murray and may therefore contain pollutants released by an adjacent vessel, or even one's own.

The code of practice requires all commercial vessels and most private vessels to install a containment or treatment system for grey water, however, it is recognised that such options may be unsuitable for some private vessels due to the individual size and operational requirements of each.

Vessels with minimal grey water production facilities

- Vessels with minimal grey water production facilities are those which:
- have structures which allow for containment of galley waste (ie small houseboats)
- produce grey water from a single galley, single hand basin and single shower only
- are privately owned and not permanently occupied.
- Operators of vessels with minimal grey water production facilities must:
- contain all galley waste (it is suitable to store galley waste in an existing black water tank)
- install in-line strainers for all other grey water production facilities
- adopt environmentally friendly practices (eg use low-flow shower heads, environmentally friendly detergents).

Note: These requirements are for existing vessels only, and do not apply to newly constructed vessels from 1 January 2011.

Small vessels

Small vessels are those which:

- have structures which deem the vessel to be impractical or impossible to contain galley waste (ie cabin cruisers and trailer-sailers)
- only produce grey water from a single galley, single hand basin and single shower
- are privately owned and not permanently occupied

Note: Owners of vessels which meet these criteria will need to confirm so by contacting the EPA at vfm@epa.sa.gov.au.

Operators of small vessels must:

- install a grease trap (or equivalent) for galley waste , and an in-line strainer where practical
- install in-line strainers for all other grey water production facilities
- adopt environmentally friendly practices (e.g. use low-flow shower heads, environmentally friendly detergents).

Grey water management options

Grease traps

Grease traps are required to remove grease from grey water before it is discharged from vessels. Grease traps are only an option for vessels with structures which makes containment of galley waste impractical or impossible (small vessels).

The EPA does not endorse, approve or recommend a product or service. However, the organisations listed below can provide advice on the particular grey water management option most suitable for your vessels needs:

- Storm Plastics (Adelaide) <www.stormplastics.com.au>
- Everhard Industries <www.everhard.com.au>
- Reln Plastics <www.reln.com.au>
- Plastic Fabrications <www.plasticfab.com.au>



Storm Plastics grease trap

Strainers and filters

An in-line strainer or filter is required to remove solids from grey water before it is discharged from vessels with structures making containment of galley waste impractical or impossible (small vessels), and vessels with minimal grey water production facilities. There are no formal specifications for strainers and filters which vessel owners must adhere to. When selecting strainers and filters a vessel owner should be mindful of size (ie ability to handle volume of grey water) as well as the strainer mesh size or filter density (ie fine enough to catch larger particles, but not so fine that it will require constant maintenance). The EPA does not endorse, approve or recommend a product or service. However, the organisations listed below can provide you with advice on the particular grey water management option most suitable for your vessel's needs:

- Storm Plastics <www.stormplastics.com.au>
- Just Water Savers <www.justwatersavers.com.au>
- Whitworths Marine and Leisure <www.whitworths.com.au>
- Vindex <www.vinidex.com.au>
- Various hardware and irrigation supply stores
- Your local slipway operator



Examples of sump and in-line strainer products from Long Island Marina, Whitworths and Mannum Slipway

Environmentally friendly practices

All vessel owners need to be mindful of what goes down their drains and adopt environmentally friendly practices.

- **Dispose of kitchen waste responsibly**

Clear food scraps, oils and fats from dirty dishes before washing to prevent them entering drains. Kitchen waste should be collected and kept on board the vessel for later disposal at a land based facility.

- **Be mindful when using cleaning and toiletry products**

Cleaning and toiletry products contain nitrates, phosphates and other chemicals which can have a negative impact on aquatic ecosystems in the River Murray. In-line strainers remove larger particles (ie dirt and hair) but not phosphates and other harmful chemicals. Many detergents, cleaning agents and washing powders are available to purchase which are low in nitrates and phosphates. Alternatively, look for biodegradable, pure soap or soap-based substances.

The EPA does not endorse, approve or recommend a product or service. However, the websites listed below can provide you with expert advice on environmentally friendly products which can be used onboard your vessel.

- The Green Directory www.thegreendirectory.com.au
- Natures Organics www.naturesorganics.com.au
- Greenpages www.thegreenpages.com.au

Vessel owners should also be mindful of how much water they are using. The River Murray Boat Owners Association has produced calculators to help river users to understand the volume of grey water produced by their vessel. These calculators can be found at www.rmboa.org.au.

Simple ways to reduce the volume of water used on board your vessel include:

- half filling the sink when washing dishes and taking shorter showers
- using water efficient products (ie hot water re circulators www.redwater.com.au)

The table below also provides shows comparisons between the average water usage of both standard and water efficient domestic appliances.

Average grey water production rate for standard domestic appliances

Appliance	Type	Average rate of flow	Average use per cycle (L)	Reference
Shower	Standard	15–25 L/min	120 L	Australian Govt (DSEWPC)
		15 L/min	120 L	Sydney Water
		12 L/min	N/A	WA Water Corporation
		15 L/min	120 L	Brisbane City Council
		20L/min	140 L	QLD Water Commission
		15 L/min	120 L	Hunter Water
	Water efficient	9 L/min	72 L	Australian Govt (DSEWPC)
		9 L/min	72 L	Sydney Water
		9 L/min	N/A	WA Water Corporation
		8.5 L/min	68 L	Brisbane City Council
		7 L/min	49 L	QLD Water Commission
		9 L/min	72 L	Hunter Water
Taps	Standard	15–18 L/min	N/A	Australian Govt (DSEWPC)
		15–17 L/min	N/A	Sydney Water
		15–20 L/min	N/A	WA Water Corporation
		17 L/min	N/A	Hunter Water
		16 L/min	N/A	South East Water, VIC
	Water efficient	2 L/min	N/A	Australian Govt (DSEWPC)
		3 L/min	N/A	Sydney Water
		9 L/min	N/A	WA Water Corporation

Verification of your vessels compliance status (private vessels only)

At this stage it is not a requirement for privately owned vessels operating on inland waters to be inspected for compliance with the vessel wastewater regulations. However, a number of vessel service facilities/inspectors have been accredited by the EPA to inspect and verify your vessels compliance status as part of a new program which is currently being expanded.

Owners of vessels which have been verified as wastewater compliant are issued with a 'Wastewater compliant' sticker to display on their vessel. The details of the inspection are then forwarded to the EPA who will issue the vessel owner with a letter of compliance.

The following vessel service facilities/inspectors have been accredited by the EPA to inspect your vessel for wastewater management compliance:

- Mannum Marine (Greenings Landing) – (08) 8569 1609
- The Marina Hindmarsh Island – (08) 8555 7300
- Mannum Slipway and Moorings – (08) 8569 1620
- Long Island Marina – (08) 8532 6900
- Justin Inglis (Berri Slipway) – 0407 277 161
- George Godz (independent surveyor) – 0407921162
- Leo Vette (independent surveyor) – 0428 330 405
- Bill Leonard (independent surveyor) – 0400 824 816 or (08) 8532 1304
- Andrew McFarlane (independent surveyor) – 0413 525 242
- Rod James (independent surveyor) – 0429 402236

All accredited inspectors are entitled to charge a fee for the inspection process. If you request an inspection of your vessel by an EPA officer, a fee will be charged for this service.

More information

For more information on how to make your vessel compliant with regulations contained in the [code of practice](#), please contact the marinas and slipways listed above.

Note: this information sheet will be updated with additional products and suppliers as they are identified. Should you have product or supplier details you would like added to this information sheet, please contact the EPA.

Useful websites

EPA vessel and facility management pages www.epa.sa.gov.au/vfm.

Disclaimer

The EPA does not endorse the products or information provided by businesses and/or service providers contained within this information sheet. Links provided in this information sheet are available as an aid to commercial operators and the boating public to provide them with relevant industry contacts and sources of information on which to base decision making regarding ship-sourced sewage management options.

This publication is a guide only and does not necessarily provide adequate information in relation to every situation. This publication seeks to explain your possible obligations in a helpful and accessible way. In doing so, however, some detail may not be captured. It is important, therefore, that you seek information from the EPA itself regarding your possible obligations and, where appropriate, that you seek your own legal advice.

Further information

Legislation

Legislation may be viewed at: <www.legislation.sa.gov.au>

Copies of legislation are available for purchase from:

Service SA Government Legislation Outlet
Adelaide Service SA Centre
108 North Terrace
Adelaide SA 5000

Telephone: 13 23 24
Facsimile: (08) 8204 1909
Website: <shop.service.sa.gov.au>

For general information please contact:

Environment Protection Authority
GPO Box 2607
Adelaide SA 5001

Telephone: (08) 8204 2004
Facsimile: (08) 8124 4670
Freecall (country): 1800 623 445
Website: <www.epa.sa.gov.au>
Email: <epainfo@epa.sa.gov.au>
