## FAQ: Greywater requirements for vessels on inland waters

## **Updated November 2016**

EPA 725/16: This information sheet explains the greywater requirements based on the Code of practice for vessel and facility management (marine and inland waters).

## What is greywater?

Greywater is water that has been used for washing, laundering, bathing or showering. This includes water containing dissolved or undissolved byproducts such as fat and oil, food scraps that contain nutrients, household chemicals, soap and detergent rich in phosphate, nitrate and microbiological pathogens (eg bacteria and viruses).

If greywater is discharged into aquatic environments it can damage ecosystems, create algal blooms and pose significant human health risks.

### What do I have to do with the greywater and why?

The <u>Code of practice for vessel and facility management (marine and inland waters)</u> introduces mandatory requirements for vessel operators managing wastewater. A range of options are available for the management of greywater, depending on the size of the vessel and how it is used. Greywater management options include containment, treatment and changing onboard behaviour regarding water use.

For more information regarding the specific greywater management requirements for your vessel, refer to the EPA information sheet, *Wastewater requirements for vessels operating on inland waters*.

Greywater management requirements have been introduced by the EPA in response to the increasing environmental and public health risks associated with discharging vessel greywater into South Australia's aquatic environments.

## Has there been an exemption to the code of practice for greywater management?

Yes. On July 1 2016, after months of trialling, assessment and consultation with industry, the EPA released a temporary exemption to the code which involves the alternative method for the treatment of greywater for inland vessels. This alternative method involves splitting greywater into two manageable streams, one from the galley (higher risk) and the other from any other greywater producing facility, eg vanity, shower and laundry tub (lower risk).

Details of the new greywater requirements can be found Wastewater requirements for vessels operating on inland waters.



### How much greywater is produced on a vessel?

On average, residents on board houseboats with showers, washing machines, dishwashers, galleys and sinks can produce up to 150–160 litres of greywater per person per day. However, this water use can be significantly reduced by installing water-saving devices on board the vessel. The information sheet <a href="Wastewater requirements for vessels on inland waters">Wastewater requirements for vessels on inland waters</a> summarises the average greywater production rates for standard domestic appliances. The following table shows the advantages of installing water saving-devices in your vessel.

#### Average greywater production rate for standard domestic appliances

Appliance	Туре	Average rate of flow	Average use per cycle (L)	Reference
Shower	Standard	15–25 L/min	120 L	Australian Govt (DSEWPC)
	Water efficient	9 L/min	72 L	Australian Govt (DSEWPC)
Taps	Standard	15–18 L/min	N/A	Australian Govt (DSEWPC)
	Water efficient	2 L/min	N/A	Australian Govt (DSEWPC)
Dishwasher	Standard	40 L/cycle		Sydney Water
	Water efficient	18 L/cycle		Sydney Water
Washing Machine	Standard	156 L/cycle		Sydney Water
	Water efficient	72 L/cycle		Sydney Water

# Will the existing river vessel waste disposal stations have the capacity to handle the increased load created by greywater containment?

River vessel waste disposal stations are provided free of charge by the state government and are managed in South Australia by the Department for Environment, Water and Natural Resources (DEWNR). These stations can accept both greywater and blackwater.

The EPA is actively working with DEWNR regarding developments, load projections and potential impacts on the waste disposal stations.

For more information on waste disposal stations, please contact DEWNR on (08) 8463 6800 or to obtain a copy of the *River vessel waste disposal options, Edition no.2*.

## How can I find out about greywater management products, and which option is best for my vessel?

Please contact your nearest EPA-recognised wastewater compliance inspector for more information about greywater management products, and which greywater management option is best for your vessel. The EPA information sheet, <u>Wastewater requirements for vessels on inland waters</u> also has suppliers of greywater management products.

## Who can assist me with determining what greywater management option is best for my vessel (see below for listing), or inspect my vessel for greywater compliance?

The EPA has recognised a number of marina and slipway operators, and independent marine surveyors to provide advice to vessel owners to assist them with meeting the requirements under the code of practice. The accredited inspectors are:

- 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

- 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
- Mick Molnar (independent surveyor) 0407 970 752

All EPA-recognised wastewater compliance inspectors are entitled to charge a fee for the inspection process. Please contact the inspectors directly to obtain further information.

Once a vessel has been deemed compliant by an inspector, the details of the inspection will be forwarded to the EPA. The EPA will then send out a 'Wastewater Compliant' sticker and a letter of compliance to the owner/manager of the vessel.

## Is there a legal requirement to have my vessel inspected by an EPA-recognised wastewater compliance inspector?

At present, it is not a legal requirement to have your vessel inspected under the code of practice. However, EPA-recognised wastewater compliance inspectors are able to assist you with determining what greywater modifications are required on your vessel. The EPA strongly urges you to seek advice from these inspectors if you are unsure. Please note the inspectors may charge a fee for providing services.

## Can I contain greywater in my existing blackwater storage tank?

Yes, but you may need to review the capacity of your existing storage system and ensure that it meets the requirements of the <u>code of practice</u>. Also be aware that adding greywater with large amounts of fats and oils to any holding tank may result in blockages of pipework. The best practice would be to wipe down plates and cooking equipment with paper towelling for disposal via hard waste prior to washing. Vessel owners must also be aware that any plumbed connection to a wastewater holding tank should have a sewer trap fitted to prevent gases entering the vessel.

## Can treated greywater be used to water areas on land?

The EPA recommends treated greywater from vessels should not be used to water areas on land as it may present a risk to human health and the environment. For further information, contact the <u>SA Health</u>.

## Can I pump wastewater from my vessel's containment tank into my shack's sewerage system?

This has the potential to cause problems and must be approved by the local council. For more information please contact your local council.

## Can I place a bucket or container in or below my kitchen sink to capture greywater?

No. While containment of your galley sink is a greywater management option, it must be a **fixed, fitted holding tank**. Appendix 3 of the code of practice outlines the specifications for fitting holding tanks.

## How much do greywater treatment or containment systems cost?

The EPA does not have information on the costs of greywater treatment or containment systems. For more information on costs, suppliers, etc, please contact the <u>Boating Industry Association (BIA)</u> on (08) 8340 9641 or contact your local marina or slipway.

## Are there any government subsidies available for people to install greywater treatment or containment systems?

Currently, there are no government subsidies available for people to install greywater treatment or containment systems.

## Does the EPA endorse a particular product?

The EPA will not endorse, approve or recommend a product. However, the EPA will recognise a product that meets the greywater discharge criteria listed in the <u>code of practice</u>. Recognised systems will be listed with the <u>Boating Industry</u> Association (BIA). For more information please contact (08) 8340 9641.

### How many riverboats are located along the river in South Australia?

It is estimated that there are approximately 2,000 riverboats operating on the River Murray in South Australia, including approximately 300 commercial hire boats.

### Are shacks on the river subject to the same, or similar requirements?

Yes. Greywater and blackwater waste disposal at river shacks are regulated by <u>SA Health</u>. Contact the department for further information, or your local council.

#### Are there different rules for vessels in inland waters and marine waters?

Yes, there are different requirements for vessels on inland and marine waters. This FAQ document specifically focuses on the greywater requirements for inland waters. For more information on requirements for marine vessels, please refer to the contact information listed at the end of this document or visit the <u>website</u>.

## How is the EPA enforcing the code of practice?

All river vessels will be subject to random inspection regimes for compliance with blackwater and greywater requirements, and may be subject to enforcement where compliance is not being met.

Mandatory provisions of the code of practice may be enforced on vessel owners and operators by:

- issuing an environment protection order (EPO) to secure compliance with the code, or
- issuing an on-the-spot fine for failing to comply with an EPO, or
- prosecuting through the court (maximum penalty \$250,000).

Authorised officers from the EPA and other government authorities may enforce the *Environment Protection (Water Quality) Policy 2015* which allows for on-the-spot fines for pollution offences.

Please refer to the <u>code of practice</u> for a detailed summary of the mandatory provisions.

## How does the code link to existing legislation?

The code was gazetted on 10 July 2008. It is linked to the *Environment Protection (Water Quality) Policy 2015* and supersedes the *Code of practice for vessels on inland waters* (2003).

## How are boating activities regulated on the River Murray outside of South Australia?

All boating activities on the River Murray outside of South Australia are subject to NSW legislation. NSW and Victoria share a common border along the Murray River from its headwaters in the Snowy Mountains to the South Australian border. The actual boundary between the two states is located at the high-water mark of the southern, or Victorian, bank of the original course of the Murray River.

## Is there greywater legislation for vessels operating in other states?

Yes, the NSW Maritime Authority administers the *Marine Pollution Regulation 2006*. This regulation contains specific provisions, including a requirement for all commercial vessels (belonging to either the passenger carrying or hire and drive classes) built after 1 January 2005 and used on the River Murray or Sydney Harbour to be fitted with greywater containment tanks.

In Victoria, the *Lake Eildon Recreational Area (Houseboats) Regulations 2003* covers the 700 houseboats (capped number) that are operating on Lake Eildon and contains strict requirements in regards to wastewater management.

If I register my boat in another state, but operate it in South Australia, do I still have to comply with the SA greywater requirements?

Yes, any boat operating on South Australian waters is required to comply with the code.

Is there any guidance available to help me understand the requirements of the code of practice?

The EPA has developed specific <u>vessel and facility management</u> information to assist vessel owners with understanding the requirements of the code of practice. These webpages contain links to the <u>code of practice</u> and EPA publication <u>Wastewater requirements for vessels on inland waters</u>.

Who can I contact for more information on greywater treatment systems?

For more information on greywater systems, please contact the **Boating Industry Association (BIA)** on (08) 8340 9641.

## **Disclaimer**

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

Online legislation is freely available. 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>

Email: <<u>ServiceSAcustomerservice@sa.gov.au</u>>

## **General information**

Environment Protection Authority GPO Box 2607 Adelaide SA 5001

Telephone: (08) 8204 2004 Facsimile: (08) 8124 4670

Freecall: 1800 623 445 (country)

Website: <a href="mailto:www.epa.sa.gov.au">www.epa.sa.gov.au</a>

Email: <a href="mailto:epainfo@epa.sa.gov.au">epainfo@epa.sa.gov.au</a>