

## Grey water requirements for vessels on inland waters—frequently asked questions

Updated November 2008

*EPA 725/08: This information sheet provides explanations on the grey water requirements based on the 2008 Code of Practice for Vessel and Facility Management (Marine and Inland Waters).*

### What is grey water?

Grey water is water that has been used for washing, laundering, bathing or showering. This includes water containing dissolved or undissolved by-products 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 grey water 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 grey water and why?

The *Code of Practice for Vessel and Facility Management (Marine and Inland Waters)* introduces a range of options for the management of grey water, depending on the size of, and manner in which the vessel is used. Management options include grey water containment, treatment and changes in behavioural management.

The Environment Protection Authority (EPA) has introduced grey water management requirements due to the potentially increasing environmental and public health risks associated with discharging vessel grey water into South Australia's aquatic environments.

**Will the existing River Vessel Waste Disposal Stations (RVWDS) have the capacity to handle the increased load created by grey water containment?**

RVWDS are provided free of charge from the state government and managed in South Australia by the Department of Water, Land and Biodiversity Conservation (DWLBC).

The EPA is actively working with DWLBC regarding grey water developments, load projections and potential impacts on the RVWDS.

For more information on RVWDS, please contact DWLBC on (08) 8463 6800 or visit <[www.dwlbc.sa.gov.au/murray/rvwds/index.html](http://www.dwlbc.sa.gov.au/murray/rvwds/index.html)>.

**How much do grey water treatment or containment systems cost?**

The EPA does not have information on the costs of grey water treatment or containment systems. For more information on costs, suppliers, etc, please contact the Boating Industry Association of South Australia (BIASA) on (08) 8212 6000 or visit <[www.boatingsa.com.au](http://www.boatingsa.com.au)>.

**Are there any government subsidies available for people to install grey water treatment or containment systems?**

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

**Is there support available for product development and infrastructure?**

The EPA has, and will continue to, provide technical support and advice as it is approached to assist grey water developers to introduce systems which will fulfill the requirements and recommendations of the code of practice.

**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 grey water discharge criteria listed in Code of Practice for Vessel and Facility Management (Marine and Inland Waters). Recognised systems will be listed with the Boating Industry of South Australia (BIASA). For more information please contact BIASA on (08) 8212 6000 or visit <[www.boatingsa.com.au](http://www.boatingsa.com.au)>.

The EPA is also working closely with Standards Australia and is involved in the development of an Australian Standard for grey water treatment systems for vessels operating on inland waters. This proposed standard will set an industry benchmark to minimise the development of sub-standard systems and hopefully provide consumers with a quality product which will not pose environmental and public health risks. It is anticipated that the standard will be published by September 2009.

**How do I know the system I buy will work?**

In conjunction with the EPA's involvement in the development of an Australian Standard for grey water treatment systems, the EPA also provides a checklist for consumers to assist in assessing a wastewater systems integrity and ensure that it will facilitate compliance with the Code of Practice for Vessel and Facility Management (Marine and Inland Waters). The checklist summarises requirements for wastewater treatment systems to have a service manual including:

- operating instructions
- maintenance schedules and requirements
- authorised service provider.

Please refer to the *EPA Guidelines: Managing vessel wastewater for black and/or grey water* (2008) for more information.

### What kinds of questions can I ask my grey water treatment system provider?

Questions to ask your grey water treatment system supplier could include...

#### Design

- 1 Are there different size systems?
- 2 My boat can't fit a big system—is there a system for my small boat?
- 3 Do you retrofit systems to suit the layout of my boat?
- 4 How long will the system last?
- 5 Does the system use much power?
- 6 How many litres per day can the system handle?
- 7 Does the system have an alarm that tells me it is getting full?
- 8 How much does the system cost?
- 9 How do I know if the system is working? Is there an alarm in place?

#### Installation

- 10 Is installation expensive and how long does it take?
- 11 Does my vessel have to be out of the water to install the system?
- 12 Will my vessel still pass survey with this system installed?
- 13 Who can install my system and are they a recognised member of a professional boating/vessel organisation with a code of ethics?
- 14 Can I install it myself?

#### Accreditation

- 15 Is this system recognised by the Boating Industry Association or other professional boating/vessel organisation with code of ethics?
- 16 Does all the pipe work comply with the Code of Practice?
- 17 Does the system meet the discharge criteria of the EPA Code of Practice?

#### Contacts

- 18 Can you provide me with the contact information for some of your customers with whom I can ask about the performance of your system?

#### Maintenance

- 19 Does the system have a warranty?
- 20 What happens if the system breaks down?
- 21 Do I have to change any filters?
- 22 Can I service the system myself?
- 23 What are the maintenance costs?
- 24 Does it come with operating and maintenance instructions?
- 25 How long does it take to service the system and how often does this have to happen?
- 26 Will I get my hands dirty servicing the system—is it a messy job?

#### Testing

- 27 Was the system tested under maximum load? What was this load?

- 28 Was the testing analysed and collected by a certified laboratory?
- 29 Has the system be trialled on commercial vessel and what were the results?

### Operation

- 30 Are there specific detergents that I can use in the laundry, bathroom and kitchen that will improve the efficiency of the system?
- 31 Do you provide information that will teach me how to improve the efficiency of the system?
- 32 Are there certain chemicals that I can't put down the system?
- 33 Will the system handle sewage if it enters the system due to unforeseen circumstances?
- 34 Can I drink or recycle the water that comes out of the system?
- 35 Does the system treat 100% of all flows from sink, washing machine, dishwasher, handbasins and showers?
- 36 What happens when half a tub of cream goes down the sink?
- 37 Will the system cope with half a pavlova being washed down the sink (yes it happens!)?
- 38 Do I have to scoop out fat from the system or manually remove oil and grease?
- 39 Will the system get clogged with hair from the shower?
- 40 Does the system kill germs reliably?
- 41 What happens if there is a power failure?
- 42 Will the system cope with nappies being washed in the shower and washing machine?
- 43 Will the system remove all colours from the grey water (like coffee, red wine and food dyes)?
- 44 Will the system treat the grey water so that it will be safe for my kids to swim near the vessel without getting sick?
- 45 Will the system stink?

### **How can the government legislate for grey water systems when there are currently limited products available on the market place?**

The EPA has introduced grey water management requirements due to the potentially increasing environmental and public health risks associated with discharging vessel grey water into SA's aquatic environments.

As the timeframes set by the code are staged over three years, it is expected that more products will become available during this time.

### **What are the timeframes set out by the code?**

For the management of grey water, vessel operators are required to observe the following compliance dates:

- 1 January 2009 for all newly constructed vessels
- 1 January 2010 for existing commercial vessels in survey and those that are permanently occupied
- 1 January 2011 for all other vessels.

**How were these timeframes developed?**

The timeframes were developed after three years of comprehensive development, involving extensive stakeholder engagement and consultation with industry groups and the general public. Reasonable and practicable timeframes took into account social and economic factors, environmental risk, availability of products and services and the need to set targets to give surety.

**What if I can't meet the timeframes set out by the code?**

Vessel operators who are experiencing difficulties with achieving compliance by the stated deadlines should notify the EPA in writing as soon as is reasonably practical by clearly outlining the circumstances would result in the inability to meet the above timeframes.

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

It is estimated that there may be approximately 2,000 riverboats operating on the River Murray in South Australia, including approximately 300 commercial hire boats and in excess of 700 private recreational use houseboats.

**Is there a difference in legislation for vessels that occupy inland waters in comparison to those that occupy the ocean?**

Yes, there are different requirements for vessels on inland and marine waters. This FAQ document specifically focusses on the grey water 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.

**How is the EPA going to enforce the new grey water components of the legislation?**

All river vessels will be subject to random inspection regimes for compliance with black and grey water 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 in several ways:

- by issuing an Environment Protection Order (EPO) to gain compliance with the policy, or
- by issuing an on-the-spot fine for failing to comply with an EPO, or
- by prosecuting through the Court (maximum penalty \$30,000).

Authorised officers from the EPA and other government authorities may enforce the *Environment Protection (Water Quality) Policy 2003* which allows for on-the-spot fines for pollution offences.

Please refer to the Code of Practice for Vessel and Facility Management (Marine and Inland Waters) for a detailed summary of the mandatory provisions.

**How does the Code of Practice for Vessel and Facility Management (Marine and Inland Waters) link to existing legislation?**

The Code is linked to the Environment Protection (Water Quality) Policy 2003 and supersedes the *Code of Practice for Vessels on Inland Waters (2003)*.

The Code was gazetted on July 10, 2008.

**Will the inspection of compliance with the grey water requirements be linked to the existing survey process for commercial vessels on inland waters?**

Yes, grey water requirements will be inspected through the existing survey process for commercial vessels on inland waters.

**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 grey water 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 grey water 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.

**Is the EPA working with other states regarding developing common legislation for grey water management along the River Murray?**

The EPA is actively promoting South Australian developments in grey water management to the NSW Maritime Authority and NSW boating industry representatives.

The NSW Maritime Authority has recently indicated that due to the recent advancements in grey water treatment technology and changes to legislative requirements in South Australia, that they would be receptive towards discussions with the EPA in reviewing the existing regulations to include grey water treatment options.

Further, the NSW Maritime Authority has recently issued a two-year exemption for a commercial houseboat to trial a grey water treatment system in the Mildura–Wentworth region. This boat has since been launched and negotiations have commenced to increase the number of exemptions to trial additional grey water treatment systems on commercial houseboats operating on NSW waters.

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

Yes, any boat operating on South Australian waters is required to comply with the Code of Practice for Vessel and Facility Management (Marine and Inland Waters).

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

The EPA provides a series of presentations and publications to industry groups and the media, to assist the public in understanding the requirements of the new code of practice.

**What other information is available relating to grey water requirements?**

Owners and operators of vessels on inland waters should obtain a copy of the Code of Practice and other EPA publications, including:

- *EPA Guideline: Managing vessel wastewater for black and/or grey water* (2008)
- *EPA Information: Wastewater requirements for vessels on inland waters* (2008)

These documents are available for download from the EPA website <[www.epa.sa.gov.au](http://www.epa.sa.gov.au)> or by contacting the EPA.

#### Who can I contact for more information on grey water treatment systems?

For more information on grey water systems, please contact the Boating Industry Association of SA (BIASA) on (08) 8212 6000 or visit <[www.boatingsa.com.au](http://www.boatingsa.com.au)>.

## FURTHER INFORMATION

### *Legislation*

Legislation may be viewed on the internet at: <[www.legislation.sa.gov.au](http://www.legislation.sa.gov.au)>

Copies of legislation are available for purchase from:

Service SA Government Legislation Outlet	Telephone:	13 23 24
101 Grenfell Street	Fax:	(08) 8204 1909
Adelaide SA 5000	Internet:	< <a href="http://shop.service.sa.gov.au">shop.service.sa.gov.au</a> >
	Email:	< <a href="mailto:servicesa@saugov.sa.gov.au">servicesa@saugov.sa.gov.au</a> >

### *For general information please contact:*

Environment Protection Authority	Telephone:	(08) 8204 2004
GPO Box 2607	Facsimile:	(08) 8124 4670
Adelaide SA 5001	Freecall (country):	1800 623 445
	Internet:	< <a href="http://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> >