

Wastewater management requirements for vessels on marine waters

Issued July 2010

EPA 909/10: This information sheet summarises the requirements of the Code of practice for vessel and facility management (marine and inland waters), introduced in 2008, specifically the new black water and grey water requirements for owners and operators of marine vessels.

Introduction

Wastewater can cause significant harm when it is released from vessels into the marine environment, especially in sensitive aquatic areas, near aquaculture leases and near people in the water.

These risks are present particularly in marinas and sheltered bays, where the increasing number of overnight vessels with wastewater-producing facilities creates a higher concentration of wastewater, affecting those on board, other recreational water users and the environment.

It is very important for vessel operators to take steps to reduce the impact of their wastewater and the associated risks to the environment and public health. The code of practice sets out new requirements designed to help you achieve this, including:

- containment of wastewater
- onboard treatment
- changes in onboard behaviour
- the introduction of discharge zones.

New requirements

The new requirements are set out in the *Code of practice for vessel and facility management (marine and inland waters)*. This code is linked to the *Environment Protection (Water Quality) Policy 2003*, and supersedes the *Code of practice for vessels on inland waters (2003)*. It contains compulsory requirements that you must follow when managing black water (toilet waste) and grey water (wastewater that has been used in the kitchen, showers, sinks and laundry) on your vessel.

The EPA recommends that unless you can treat your wastewater on board, wastewater should be contained on your vessel until you can dispose of it properly in a land-based waste disposal system. Look out for marinas that provide wastewater pump-out stations and other services to help you protect the environment.

However, you can legally release wastewater into the ocean if you follow these rules.

Black water

You can only release **black water** into the ocean if:

- your boat is moving
- your boat is at least 3 nautical miles from land, an aquaculture lease (eg tuna, oyster or mussel farms) or any people in the water
- it has been put through a macerator before it is released (this helps the waste to break down more easily in the ocean)
- it has not been treated with a formaldehyde-based treatment.

If you have treated the black water to the following standards then you can release it closer to land, but **not** near swimmers or within 3 nautical miles of aquaculture leases:

- suspended solids 35 mg/L
- biochemical oxygen demand 25 mg/L
- chemical oxygen demand 125 mg/L
- pH 6 to 8.5
- enterococci 40 cells/0.1L

Grey water

You can only release **grey water** into the ocean if:

- your boat is at least 1 nautical mile from land or any people in the water
- your boat is at least 3 nautical miles from an aquaculture lease (eg tuna, oyster and mussel farms)
- it does not have anything visibly floating in it.

If you have treated the grey water to the following standards then you can release it closer to land or swimmers, but **not** within 3 nautical miles of aquaculture leases:

- suspended solids 50 mg/L
- total grease 25 mg/L
- nitrogen 10 mg/L
- phosphorus 1 mg/L
- enterococci 40 cells/0.1L

If your vessel cannot structurally support a system that treats grey water to the above standards, please contact the EPA to discuss other options.

The EPA recommends that you obtain a complete copy of the code of practice and other relevant information (including the *EPA Guideline: Managing vessel wastewaters for black and/or grey water* (2010) and *FAQ: Wastewater requirements for vessels on marine waters* (2010). See the contact details at the end of this information sheet or visit www.epa.sa.gov.au/vfm.

Recommended practices

While the following practices are not compulsory, the EPA recommends them for vessel operators who wish to take further steps to reduce the risk of harm to people and the environment.

Black water

- Use land-based toilet amenities when possible.

- Retain all black water on board your vessel for disposal into land-based wastewater collection facilities.
- Install low-flush toilets – there are systems that use only 0.4L of water per flush.
- Ensure the black water collection, holding and transfer system meets Australian Standard AS 3542–1996, *Pleasure boats – toilet waste collection, holding and transfer systems*.
- Install an onboard wastewater treatment system that surpasses the discharge standards mentioned above, reducing your environmental impact even more.
- Consider an onboard wastewater management system that can retain, treat and control the discharge of wastewater. Look for options that will allow you to plumb your system into land-based wastewater management systems during extended mooring periods and a GPS function that will aid you to discharge the wastewater in acceptable areas.
- Perform regular inspections and maintenance of all wastewater equipment to make sure it is working properly. Keep logs and invoices for these activities.
- Maintain a log for all discharges into land-based wastewater management facilities.
- Plan voyages with the location of waste collection facilities in mind.

Grey water

- Check product labels and use low-nitrogen and non-phosphorus detergents.
- Keep instructions and reminders on your vessel. This can include stickers and signs to advise people on practices when cooking, cleaning, showering and washing.
- Scrape leftover food scraps into garbage bins (bonus points for using biodegradable bags that can be placed into green waste bins for composting) before washing them.
- Avoid adding cooking oils, greases and dairy products to dishwater where possible – dispose of them with the food scraps.
- Use all soaps and cleaners sparingly.
- Use land-based amenities to shower and wash dishes and clothing when possible.
- Retain all grey water on board your vessel for disposal into land-based wastewater collection facilities.
- Install water-saving devices such as low-flow shower heads and tap aerators.
- Install an onboard wastewater treatment system that surpasses the discharge standards mentioned above, reducing your environmental impact even more.
- Consider an onboard wastewater management system that can retain, treat and control the discharge of wastewater. Look for options that will allow you to plumb your system into land-based wastewater management systems during extended mooring periods and a GPS function that will aid you to discharge the wastewater in acceptable areas.
- Perform regular inspections of and organise services for all wastewater equipment to make sure it is working properly. Keep logs and invoices for these activities.
- Maintain a log for all discharges into land-based wastewater management facilities.
- Avoid running the shower, washing machine and dishwasher simultaneously if you have a treatment system onboard.
- Maintain a log for all discharges into land-based wastewater management facilities.
- Plan voyages with the location of waste collection facilities in mind.

Implementation and enforcement

The EPA's implementation strategy for the code includes public awareness-raising, education, voluntary and regulatory compliance, and enforcement strategies to ensure that the timeframes developed in this code of practice are met.

Vessels will be inspected for compliance with the black and grey water requirements and may be subject to enforcement if they are non-compliant. If you are a vessel operator experiencing difficulties with achieving compliance then you should

notify the EPA in writing as soon as possible. In your letter you should clearly outline the circumstances resulting in the non-compliance.

Mandatory provisions of this code of practice may be enforced on vessel owners and operators in the following ways:

- Issuing an Environment Protection Order (EPO) to gain compliance with the policy.
- Issuing an expiation notice (on-the-spot fine) of \$300 for a breach of a mandatory provision.
- Issuing an EPO as well as an on-the-spot fine for a breach of a mandatory provision.
- Issuing an on-the-spot fine for failing to comply with an EPO.
- Prosecuting through the court (maximum penalty \$30,000).

Officers from the EPA, local councils, and other government authorities are authorised to enforce the *Environment Protection (Water Quality) Policy 2003*.

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

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

Copies of legislation are available for purchase from:

Service SA Government Legislation Outlet	Telephone:	13 23 24
Adelaide Service SA Centre	Facsimile:	(08) 8204 1909
108 North Terrace	Website:	< shop.service.sa.gov.au >
Adelaide SA 5000		

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
	Website:	< www.epa.sa.gov.au >
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