

# Department of Transport

## Sewage Strategy

This section provides information on the Department's *Strategy for Management of Sewage Discharge from Vessels into the Marine Environment*.

Introduction

Scope of the Strategy

Benefits of the Strategy

Outline of the Strategy

Evaluation

Implementation of the Strategy

Role of Participating

Definitions

### Introduction

The discharge of sewage from commercial and recreational vessels into Western Australian State and inland waters can, under some circumstances, cause an unacceptable risk to public health, loss of amenity and possible degradation of the environment through nutrient enrichment.

Most boat owners are environmentally conscious and do not wish to harm the environment or compromise the health or enjoyment of other users.

There is currently some confusion about what regulations exist in relation to sewage discharge and what are acceptable practices.

There is a need for clear and easily understood guidelines covering sewage discharge and the promotion of acceptable practice through education.

Confusion also exists amongst boat designers and builders who are expecting changes to the regulations but are unsure what direction those changes might take.

Consequently, a working group was formed to examine issues in respect to the discharge of sewage into the marine environment. The working group comprised representatives of the Department of Transport, the Department of Health, the Department of Environmental Protection, the Swan River Trust, the Department of Conservation and Land Management, the Department of Fisheries and the Rottnest Island Authority.

Development of this strategy for managing the discharge of sewage from vessels into the marine environment of Western Australia has been based on feedback received on the discussion paper and the advice of participating agencies.

## Scope of the strategy

The Strategy is designed to manage the discharge of sewage from commercial and recreational vessels into the State and inland waters of Western Australia. It:

- recognises the requirements of individual boat owners, their boat type, methods and areas of operation, while being cognisant of available onshore support infrastructure;
- allows boat operators a degree of flexibility in how they can effectively manage the discharge of sewage generated on board, having regard to the nature and area of operation of their vessels; and
- is flexible enough to respond to any future health and environmental concerns, which may be raised in specific areas.

## Benefits of the strategy

It is anticipated that the strategy will reduce the risk to public health arising from:

- swimming in or having contact with water that has been contaminated by human waste;
- eating seafood which may have been contaminated by human waste; and
- reduce the risk of degradation of the marine environment due to nutrient enrichment from vessel sewage.

## Outline of the strategy

Given the vast length of the Western Australian coastline, the distance between facilities and the great variation in and separation of vessel concentrations, it is inevitable that sewage will be discharged into some parts of the marine environment.

While this strategy is aimed at limiting sewage discharge it also recognises that there are circumstances when it is both necessary and acceptable to allow some discharge of sewage into the marine environment.

This strategy proposes to establish three sewage discharge zones based on the degree of risk to public health and/or the environment:

- areas of water where sewage discharge must be prohibited for health and/or environmental reasons;
- areas where treated sewage discharge would be acceptable; and
- areas, mostly well offshore, where untreated sewage can safely be discharged from vessels.

Public observance of these zones will protect health, maintain recreational amenity and reduce the risk of environmental degradation.

## **Zone 1 : No discharge zone**

The discharge of sewage from vessels, whether it is treated or untreated, will be prohibited in Zone 1. The no discharge zone will include:

- marinas, yacht clubs, boat harbours and ports/maritime export facilities;
- most inland waters;
- the Rottnest Island Marine Reserve;
- marine nature reserves and sanctuary zones within marine parks;
- designated areas of marine parks, marine management areas or fish habitat protection areas, where the dilution/dissipation factor is not deemed to be satisfactory;
- within 500 metres of any aquaculture operation;
- within 100 metres of any recognised swimming area; and
- other designated areas of high environmental value.

## **Zone 2 : No discharge except for vessels with approved treatment systems**

Sewage treated to an approved standard can be discharged in Zone 2. The treated sewage discharge zone will include designated areas outside of Zone 1 such as:

- parts of estuaries, marine parks and fish habitat protection areas, where the dilution factor is deemed to be satisfactory; and
- waters more than 20 metres from a stationary vessel or person in the water.

## **Standard for treated sewage**

The Department of Health will have responsibility for approving sewage treatment devices that operate to an acceptable standard for discharge in this zone.

The discharge specification is:

Thermo tolerant Coliforms	Less than 125 / 100 ml
Solids	No visible floating solids

## **Zone 3 : Open Zone**

Untreated sewage may be discharged from vessels within Zone 3.

Zone 3 comprises all State Waters except:

- those waters which are within Zone 1 or Zone 2;
- waters within 500 metres of land; and
- waters within 100 metres of a stationary vessel or person in the water.

# Evaluation

Effectiveness of this strategy will be evaluated five years after introduction in terms of:

- public health objectives;
- the level of compliance, water quality and nutrient levels at pre-determined locations;
- requirements in terms of demand for and location of shore-based facilities including public toilets or pumpout and dumping facilities;
- success and appropriateness of educational material; and
- developments in other States/Territories and overseas.

## Implementation of the strategy

A working group with representation from participating agencies will coordinate the implementation of this strategy.

The initial emphasis will be on education rather than regulatory enforcement - except where regulations currently exist or where discharges represent a clear risk to public health or the environment.

Each agency will be responsible for its own costs in respect to compliance monitoring and education.

Participating agencies will cooperate in compliance monitoring and enforcement.

## Role of participating agencies

### Department of Transport

- Coordinate working group to ensure consistency of implementation.
- Liaise with boat designers and builders.
- Liaise with boating groups and associations and industry groups.
- Assist in the provision of educational and later compliance strategies.
- Provide educational material to the owners of registered vessels, managers of ports, boat harbours, marinas and other relevant maritime facilities.
- Liaise with relevant agencies in the other States / NT who are developing similar strategies.
- Organise recordings of details of installed marine sanitation devices on recreational and commercial vessel registers.

### Department of Health

- Monitor the success of the strategy in relation to public health issues.
- Prescribe an acceptable and achievable standard of treatment for sewage treatment.
- Test sewage treatment devices submitted by manufacturers against the standard.
- Establish and publish a register of sewage treatment devices that reach the desired standard.

## **Rottnest Island Authority**

- Define appropriate discharge zones for the Rottnest Marine Reserve.
- Enhance the education campaign in relation to sewage discharge in the Rottnest Island Reserve area.

Further information on waste discharge from vessels and water quality monitoring is available on the [Rottnest Island Authority website](#).

## **Department of Environmental and Conservation**

- Provide advice on environmental protection issues and, where required, respond to and/or assess matters that may result in an unacceptable environmental impact.
- Define appropriate discharge zones in waters (other than the Swan and Canning Rivers) which are under its authority.
- Provide educational material to support the zones.
- Define appropriate discharge zones in their areas of responsibility; Marine Parks, Marine Management Areas and Marine Nature Reserves and gazette Regulations under the Conservation and Land Management Act to enable enforcement of these controls.
- Provide educational material to support the zones.
- Place conditions on commercial tourism operations licensed to operate in marine conservation zones.

Further information on marine conservation reserves is available on the [Department for Environment and Conservation website](#).

## **Swan River Trust**

- Define appropriate discharge zones applicable in the Swan and Canning Rivers.
- Provide educational material to support the zones.

## **Department of Fisheries**

- Define appropriate discharge zones in their areas of responsibility, for example fish habitat protection areas.
- Provide educational material to support the zones.
- Incorporate sewage discharge restrictions on commercial and charter fishing licenses if appropriate.

# Definitions

## Coastal waters

Waters of the State of Western Australia, other than inland waters to the limit of State waters.

## Fish habitat protection area

An area set aside under section 115 of the Fish Resource Management Act, 1994 to protect fish, fish habitats and the aquatic environment.

## Inland waters

Waters that are contained in any lake, river or estuary or by any breakwater.

## Marine management areas

Marine management areas are reserves that provide a formal integrated management framework for areas that have high conservation values and intensive multiple use. There are no marine management areas as yet in the State.

## Marine nature reserves

This category of marine reserve is created for conservation and scientific research. No extractive activities are permitted. The Hamelin Pool Marine Nature Reserve is the only reserve of this type in the State.

## Marine parks

Marine Parks are multiple use reserves, which provide for recreational and commercial use where these activities do not compromise the conservation values. Marine parks can be zoned using the following four statutory zones;

- Sanctuary Zone;
- Recreation Zone;
- General Use Zone; and
- Special Purpose Zone.

There are currently six marine parks in the State – Shark Bay, Ningaloo, Shoalwater Islands, Marmion, Rowley Shoals, and the Swan River Estuary Marine Park.

## Marine reserves

Marine conservation reserves are vested in the Marine Parks and Reserves Authority (MPRA) and managed by the Department of Environment and Conservation. There are three categories of marine conservation reserves under the Conservation and Land Management Act Marine Nature Reserves, Marine Parks and Marine Management Areas.

## Marine Sanitation Device (MSD)

Any sanitation device for use on vessels to receive, treat, retain or dispose of human body wastes, including holding tanks designed to be emptied by an external sewage receival unit.

## **Rottnest Island Marine Reserve**

Rottnest Island and the surrounding islands and water are vested as an A class reserve. The boundary of the marine reserve encloses 1,700 hectares of water surrounding the Island. Boundary locations are noted in the Rottnest Island Marine and Boating Guide and on the chart WA 412.

### **Sewage**

Human body wastes and the wastes from a marine sanitation device.

### **Treated sewage**

Sewage that has been treated to meet the proposed discharge standard as set out in Section 4 Zone 2.

### **Vessels**

Includes anything used or capable of being used in navigation by water and includes air-cushioned vessels, barges or lighters used for commercial purposes. It includes vessels of any form of movement or propulsion and vessels which are normally stationary.