

Dredging

Issued December 2010

EPA 925/10: This information sheet is part of a series on environmental management practices for vessel and facility management on marine and inland waters. The information is extracted from the code of practice published in 2008.

Introduction

Dredging can disturb aquatic habitats, spread exotic algae and invertebrates, re-suspend bottom sediments causing increased turbidity, and recirculate toxic metals, hydrocarbons, pathogens and nutrients that are found in sediments in the water column. Turbidity reduces sunlight available to aquatic vegetation, is known to contribute to seagrass loss and affects the safety of bathing waters. Physical disturbance and removal of dredged material in both inland and marine waters can have a substantial immediate and long-term impact on water quality.

Who this applies to

- dredging operators
- slipway operators
- marina operators
- boat yard operators
- boat ramp operators
- boat and yacht club operators

Operators must (required outcomes)

- 1 ensure the necessary development application process is followed
- 2 obtain environmental authorisations (an EPA licence) for prescribed activities of environmental significance.

Operators should (recommended practices)

- 3 avoid dredging near SA Water off-takes. Contact SA Water at least one week prior to dredging in these areas to enable possible adjustments to be made at the off-take
- 4 educate vessel facility users, crew and staff on the importance of not causing further deposition (either directly or through erosion) of material into waterways resulting in the need for dredging
- 5 if an existing vessel channel requires maintenance dredging more than once every four years, investigate reasonable and practicable options to increase circulation, reduce sediment accumulation or realign channel (if it will reduce future need for dredging)
- 6 dredge channels to follow the course of the natural channel if possible
- 7 use tides to assist entry of deep-draught vessels
- 8 avoid temporary spoil sites
- 9 coordinate dredging proposals, particularly with beach renourishment

10 time dredging to occur when impacts are minimised

11 use locally indigenous vegetative plantings to stabilise shorelines and protect disturbed areas from further erosion.

EPA licence requirements

An EPA licence is required for dredging that removes solid matter from the bed of marine or inland waters using any digging or suction apparatus, but excluding works carried out for the establishment of a visual aid to navigation, and any lawful fishing or recreational activity.

Licence conditions will generally prescribe the requirements for:

- the deposition of spoil (and other excavation materials)
- spoil drainage
- avoiding the release of pollutants from dredging equipment.

Important considerations

Considerations for the timing of dredging should include the critical migration or spawning periods of fish, shellfish and birds, the peak periods of recreational use of waters and that dredging in particular seasons may reduce the risk of causing algal blooms, affecting aquaculture and fishery operations or impacting upon seagrass.

The South Australian Research and Development Institute (Aquatic Sciences) or SARDI is a research provider to the fishing, aquaculture and environment industries. Before planning dredging operations, contact SARDI on (08) 8200 2400 for advice on critical migration and spawning periods of aquatic species.

References

EPA, *EPA Guideline: Dredging and earthworks drainage*,
www.epa.sa.gov.au/xstd_files/Water/Guideline/guide_dredging.pdf.

EPA, *Code of practice for vessel and facility management (marine and inland waters)*,
www.epa.sa.gov.au/xstd_files/Water/Code%20of%20practice/vessels.pdf.

Adelaide indigenous plant maps and a list of growers of native plants, www.backyards4wildlife.com.au.

Useful websites

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

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 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>
