

Feasibility study into oyster basket recycling

Issued May 2014

EPA 1043/14: This information sheet summarises the EPA's contribution in the feasibility study to recycle plastic oyster baskets.

Introduction

The EPA has been working with the South Australian Oyster Growers Association, Regional Development Australia Whyalla and Eyre Peninsula and Department for Manufacturing, Innovation, Trade, Resources and Energy or DMITRE (now Department of State Development) on the feasibility of recycling plastic oyster baskets.

In undertaking environmental surveys with industry, the EPA had identified that a significant volume of decommissioned waste oyster baskets were being stockpiled at land-based depots. The baskets have proved difficult to recycle due to mixed construction materials and large amounts of marine bio-fouling. Instead of sending the baskets to landfill, many oyster growers have been stockpiling them on their properties until more environmentally sustainable disposal by recycling becomes available.

Approximately 2.5 million baskets are in use across the industry annually, and every year about 5–10% (150–200 tonnes) of these plastic baskets reach their end of life and must be disposed. It was estimated that it would cost \$600,000 per annum across the industry to dispose of oyster baskets to landfill.

In conjunction with the SA Oyster Growers Association, the EPA was successful in securing \$40,000 to organise and co-manage a feasibility study to identify potential solutions for the recycling of waste plastic materials generated by the oyster industry. The funding was provided as part of the DMITRE's Clever Green Eco-innovation Program.

The aim of the feasibility study was to 'identify cost-effective oyster basket recycling options that will value add to the efficient operation of the industry as a whole'. Key objectives were:

- to identify the different materials being used in the manufacture of oyster baskets and their effective lifecycle
- where the waste was being stockpiled
- how much waste was being generated
- technologies that could minimise the space of the waste for transport purposes
- the logistics and coordination of getting the waste to the recycler
- who could receive and recycle the waste



Oyster basket recycling at Southern Yorke Oysters

- conditions that might apply to recycling and by cost-benefit analysis the best possible options for the oyster industry to dispose and recycle oyster basket waste.

A number of outcomes were identified as a result of the investigation:

- Current (2013) stockpiles of waste oyster baskets in SA were estimated to be approximately 1,300–1,500 tonnes, and growing by approximately 150–200 tonnes per year.
- Waste baskets principally consisted of high-density polyethylene (HDPE) and polypropylene (PP), which in individual polymer form has value as recyclable material.
- To meet the needs of the recycler, the best approach proposed was to involve pre-sorting the waste to separate HDPE and PP and remove contaminants, disposing of residual waste to landfill, shredding plastics onsite to minimise space for transport, and transporting this material to Adelaide, where a rebate would be received from the plastic re-processor.
- The cost of this approach was estimated to range from \$300–\$600/tonne of waste material, or 40–60 cents/basket depending on where the grower was located and the volume and quality of waste baskets.

An important recommendation was for the industry to collaborate and tender out its disposal requirements to the market in order to obtain the best price for recycling disposal and minimise its potential disposal management risks.

The industry association is currently discussing the project recommendations and agreed to seek expressions of interest for a market-based response to identify a suitable and cost-effective way to recycle oyster baskets.

[Obtain the Feasibility Report](#)

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: <ServiceSAcustomerservice@sa.gov.au>

General information

Environment Protection Authority
GPO Box 2607
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Telephone: (08) 8204 2004
Facsimile: (08) 8124 4670

Freecall: 1800 623 445 (country)
Website: <www.epa.sa.gov.au>
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