



## ▶ FLINDERS PORTS

# Outer Harbor dredging – EPA licence application

Issued 5 November 2018 – updated 13 November 2018

In July 2017 Flinders Ports Pty Ltd lodged a development application with the Development Assessment Commission (now the State Commission Assessment Panel) to widen the existing Outer Harbor shipping channel to accommodate larger vessels.

In May 2018, the Minister for Planning [approved the application](#) after extensive consideration, including seeking input from the Environment Protection Authority (EPA) to ensure that the impact on the environment was minimised as much as possible. The Minister approved the application subject to eight conditions, many of which were recommended by the EPA.

Dredging in the early 2000s led to seagrass loss due to turbidity (discolouration and cloudiness in the water) blocking light. The focus of the [EPA's recommendations for the 2019 dredging project](#) was to require Flinders Ports to use the best available modern dredging methods to reduce the impact on the environment and loss of seagrass. As a result, the proposed methodology is predicted to greatly reduce the area of total seagrass loss (by up to 82%) compared to the original proposal, with seagrass loss being limited to the channel area being dredged and an area adjacent to the channel. The seagrass in the area potentially affected by the dredging is dominated by the *Heterozostera* species, which is expected to recover from disturbance substantially quicker than other types of seagrass.



## Regulation under the Environment Protection Act

Following approval of its development application, Flinders Ports is required to apply for a licence under the *Environment Protection Act 1993* before it can commence dredging.

A licence enables the EPA to place conditions on how the work is undertaken.

The EPA can place detailed conditions on the licence including implementation of a dredge management plan, water quality monitoring, and requiring that data is made available to the public.

*Photo taken by EPA staff monitoring local waters in and around Outer Harbor*



## Environmental Monitoring Program & Dredge Management Plan

Another condition of the development approval requires Flinders Ports to prepare an environmental monitoring program (EMP) which:

- will measure the zones of seagrass impact predicted in the hydrodynamic modelling; and
- incorporates as a minimum, the monitoring of seagrass conditions using a 'before and after control impact' design - measuring seagrass health metrics at an appropriate spatial and temporal frequency.

The Minister for Planning's approval requires this environmental monitoring program to be approved by the EPA and implemented by Flinders Ports. In addition, the licence conditions will require Flinders Ports to prepare a dredge management plan (DMP) to the reasonable satisfaction of the EPA prior to commencement of the dredging works.

The DMP will provide real-time 'alarm' and 'halt work' triggers and management actions if triggers for turbidity levels are exceeded. It also needs to include:

- real-time access to water quality data at monitoring sites; and
- appropriate management of biosecurity risks, as endorsed by the department of Primary Industries and Regions SA.

## Independent monitoring

In addition to monitoring probes placed by Flinders Ports, the EPA will also undertake its own monitoring program.

# Environment protection challenges

The EPA can impose licence conditions to minimise the turbidity (discolouration and cloudiness in the water) caused by the dredging. Around four hectares of seagrass loss is expected to occur directly as a result of the dredging in the channel, where seagrass is currently around the edges of the existing channel (see yellow shaded area in the picture on the bottom right of this page).

In the nearshore areas, it is expected that there will be turbidity generated by the dredge whilst in operation, and this will also cause some seagrass loss. The primary focus for the EPA is the impact on the light available for the seagrass to photosynthesise in these areas.



Scientific modelling has predicted a maximum of 250 hectares of seagrass could be lost in a worst case scenario. EPA licence conditions however, require mitigation throughout the dredging operation to ensure the loss is significantly less.

The EPA can also require that work ceases in certain conditions and does not recommence until conditions improve. The criteria that will trigger this is currently being determined by EPA staff, based on data and scientific modelling.

The dredge spoil is a mix of sand, silt and clay and is not contaminated with toxic substances. It will be disposed at sea in the same area that was used in the previous dredge operation, preventing the need for land based disposal. Land based disposal is not favoured as it would cause significant impact on sensitive habitats such as mangroves and samphire.

The movement of any cloudy plume will be dependent on the weather.

In summer, plumes will typically head to the north with the dominant southerly winds. The intensity of the plume in these locations is anticipated to be less than the resuspension of sediment caused by a windy day. In winter, the plume will typically move to the south with the prevailing weather and currents.



## Have your views considered

The EPA licence application assessment process provides an opportunity for public comment and submissions, about elements of the licence that the community would like the EPA to take into consideration.

In assessing the application, the EPA will also be considering previous feedback from the community, prior environmental performance, the availability of new data or scientific information, and new technologies.

The EPA is inviting written submissions in regards to the application. Submissions can be made in writing, either by post or email (please contact us if you require assistance to make a written submission) to:

**Environment Protection Authority  
Compliance – Flinders Ports Dredging Proposal  
GPO Box 2607  
Adelaide SA 5001  
[engage.epa@sa.gov.au](mailto:engage.epa@sa.gov.au)**

The EPA will forward all submissions (with personal details removed) to Flinders Ports. Flinders Ports will have an opportunity to respond and the EPA will produce a summary to outline the reasons for any alterations made to the licence following this consultation process. All feedback to the EPA will be considered prior to finalising the licence.

For more information please visit our website: [www.epa.sa.gov.au](http://www.epa.sa.gov.au) and follow the links to 'Business and Industry', then 'Industry Updates', email [engage.epa@sa.gov.au](mailto:engage.epa@sa.gov.au) or phone (08) 8124 4216.

**Submissions close 30 November 2018.**



## Flinders Ports community engagement

Flinders Ports has created a specific section on its website for all the latest project information.

Please visit [www.flindersports.com.au/channelwidening](http://www.flindersports.com.au/channelwidening) for further information, and to register your contact details to receive regular project updates and invitations to information sessions.

If you have any specific questions about the project or would like to discuss registering your details with a member of the Flinders Ports project team, please see the contact details below.

FURTHER INFORMATION

*For further EPA information please contact:*

Compliance Branch  
Environment Protection Authority  
GPO Box 2607, Adelaide SA 5001  
p: (08) 8124 4216  
e: [engage.epa@sa.gov.au](mailto:engage.epa@sa.gov.au)  
[www.epa.sa.gov.au](http://www.epa.sa.gov.au)  
(please follow the links to 'Business and Industry' then 'Industry updates')

*For Flinders Ports information please contact:*

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