



KANGAROO ISLAND – DREDGING

Community update

Issued 25 November 2022

The Environment Protection Authority (EPA) licenses dredging in accordance with the *Environment Protection Act 1993*, if there is approval from the relevant planning authority. SA Water received Development Approval on 16 February 2022 to build a new seawater desalination plant on Hog Bay Road, Penneshaw (Kangaroo Island).

Dredging of approximately 1,000 m³ will be required to install the two intake pipelines and the outfall pipeline that sits on the seabed. Dredging is expected to take approximately two months to complete.



SA Water's construction partner, John Holland Guidera O'Connor Joint Venture, has engaged Maritime Constructions to construct the marine infrastructure required for the new desalination plant. Maritime Constructions holds EPA licence [42842](#) to undertake dredging at various locations in SA. An approved Dredge Management Plan (DMP) with conditions relating to the management of water quality, noise, and dust is also required. This has been prepared and assessed by the EPA.



Marine life and surrounding environment

If works occur in the vicinity of migratory whales (May–September), the operator of the dredge equipment is required to undertake marine mammal monitoring. Dolphin, seals, sealions and whale sightings, along with their behaviour must be logged. Where a marine mammal is within the relative protective exclusion zones, management actions must be taken, with dredging to cease until any marine mammals have moved outside of the zone.

In assessing the required DMP, the EPA has considered the nature and scale of the dredging and what controls would be required to manage a range of potential project impacts. The EPA considers that with the implementation of the required DMP, licensee reporting and EPA compliance inspections, the project will have minimal environmental impact. Risks to water quality are further minimised due to flushing and the nature of this coastline.

Construction of the causeway, including rock placement, the operation of vessels and the dredge equipment, will generate intermittent noise that may be experienced by residents living close to the construction zone. The EPA expects Maritime Constructions to manage noise by ensuring all equipment is maintained and working effectively, and construction only occurs Monday–Saturday within the hours of 7 am–7 pm, and on Sundays and public holidays within the hours of 9 am–7 pm. Any request to work outside of these hours is subject to EPA approval. It is unlikely that any of the equipment used in this project will cause nuisance vibration.

Impacts to air quality through dust generation is likely within the construction zone, due to the handling of materials with heavy plant, and vehicles using unsealed roads. Dust impacts will be reduced using a water truck (if and when required) and by handling practices that minimise dust and further crushing of rocks.

Dredge Management Plan – EPA requirements

- **Water quality** is to be managed by the licensee observing the turbid plume, and monitoring water quality to manage the risk of potential acid sulfate soils.
- **Seagrass meadows** must be avoided by selecting sand patches for anchoring, with dredged material placed adjacent to the excavated area.
- **Pipeline installation** methodology requires a causeway to be built from the shoreline to facilitate excavator access to the areas to be dredged.
- **Dredged material** from two areas will be reused for the construction of the causeway, and the material from the remaining two areas will be relocated onto sand (at the designated Dredge Material Placement Area selected, due to the seafloor only containing sand). Smothering of seagrass by the placement of spoil material is not permitted.
- **Imported rocks** brought into the site for causeway construction must contain less percentage of clays and fine silts than the receiving environment, the appropriate density to avoid crushing when the civil plant tracks over it.
- **Short-term turbidity** is expected during the installation of the causeway and throughout the dredging itself, however this will not affect the seagrass beds. Live seagrass is impacted by turbidity if the duration of the turbidity is approximately three months or more. Seagrass is entering into its growing and reproductive season and as such will have some resilience to cope with short-term fluxes of turbidity.
- **Desalination plant operations** will require ongoing monitoring of the ecological environment, including seagrass health, and this will be undertaken by SA Water.



[Download the Dredge Management Plan](#)

FURTHER INFORMATION

SA Water has a designated website for all information relating to this project.

Please visit <https://watertalks.sawater.com.au/kangaroo-island-desalination-20>.

Phone: (08) 7424 1685 or **email** tash.wojcik@sawater.com.au

You can also contact the EPA directly on any of the details below.

For **further EPA information** please contact: (08) 8204 2004 – if calling after hours please leave details and your call will be returned as soon as possible during business hours.

Email: engage.epa@sa.gov.au or website: www.epa.sa.gov.au and follow the links to 'Community' → 'Stay informed' → 'Kangaroo Island (SA Water)'.

