

### Recommended conditions:

1. The dredging methodology to be used must implement the 'no side casting of the Cutter Suction Dredger (CSD)' option presented in the Flinders Ports Pty Ltd Outer Harbor Channel Widening DA Report – Addendum #2 as prepared by Arup Pty Ltd on 6 November 2017 or similar method that can achieve an equivalent (or better) environmental outcome.
2. Prior to the commencement of dredging works, an Environmental Monitoring Program (EMP) must be prepared to the reasonable satisfaction of the EPA. The EMP must be designed to demonstrate and validate the zones of seagrass impact predicted in the hydrodynamic modelling documented in the Technical Memorandum prepared by BMT WBM on 23 October 2017 and incorporate, as a minimum, the monitoring of seagrass conditions using a 'before after control impact' (BACI) design measuring appropriate seagrass health metrics at an appropriate spatial and temporal frequency. The EMP must then be implemented.
3. Prior to the commencement of dredging works, a Dredge Management Plan (DMP) must be prepared and submitted to the reasonable satisfaction of the EPA which is designed to provide real time adaptive management of dredge plumes (incorporation 'alarm' and 'hold' triggers and management actions if triggers are exceeded) and incorporates, as a minimum, details about the following:
  - a. The use of continuous (10 minute interval or similar) turbidity and light logging (using calibrated remote and telemetered instruments with self-cleaning capability);
  - b. Water sampling (at an appropriate spatial and temporal frequency) to monitor total suspended solids (TSS) and chlorophyll to enable comprehensive seasonal calibration of relationships between other parameters;
  - c. The use of probes or similar to monitor dissolved oxygen, pH, salinity, temperature (at an appropriate spatial and temporal frequency);
  - d. Real time access to telemetered stations so that raw data can be obtained in an appropriate electronic format;
  - e. Implementation of additional mitigation measures for any dredging works undertaken between December to February;
  - f. Appropriate management of *Caulerpa taxifolia* within the Outer Harbor shipping channel to ensure that dredging near the Outer Harbor breakwater and swing basin (where *Caulerpa taxifolia* infestations are known to occur) would not spread fragments of *Caulerpa taxifolia* throughout the nearshore marine environment.
4. Dredging works conducted in the vicinity of the Outer Harbor port entrance/passenger terminal must be undertaken during the day-time and/or at times of favourable weather conditions with respect to human noise sensitive receivers (i.e. receivers upwind of dredging works).
5. Piling works within 1600 metres of noise sensitive receivers must only occur between 7am to 7pm Monday to Saturday.
6. Piling works must not be undertaken on a Sunday.

7. Any piling works must be undertaken in accordance with the DPTI Underwater Piling Guidelines (2012).

**The following notes provide important information for the benefit of the applicant and are requested to be included in any approval:**

- The applicant is reminded of its general environmental duty, as required by Section 25 of the *Environment Protection Act 1993*, to take all reasonable and practicable measures to ensure that the activities on the whole site, including during construction, do not pollute the environment in a way which causes or may cause environmental harm.
- An environmental authorisation in the form of a licence is required for the operation of this development. The applicant is required to contact the Environment Protection Authority before acting on this approval to ascertain licensing requirements. Information on applying for a licence (including licence application forms) can be accessed here: [http://www.epa.sa.gov.au/business\\_and\\_industry/applying\\_for\\_a\\_licence](http://www.epa.sa.gov.au/business_and_industry/applying_for_a_licence)
- EPA information sheets, guidelines documents, codes of practice, technical bulletins etc. can be accessed on the following web site: <http://www.epa.sa.gov.au>