dredging. Two control stations with one at the upstream location of the box culvert and one at the open water near the box culvert outlet would be selected. One monitoring station would be located within the section of the box culvert. Biweekly monitoring of the DO levels at the control and monitoring stations would be carried out. When the measured DO level at the monitoring station is below 2mg/L, additional measurement should be carried out on the next day. It is recommended that the action plan should be triggered to implement maintenance dredging under the following conditions:

- The DO levels at the monitoring station are below 2 mg/L for three consecutive measurements on three monitoring days; and
- The DO levels at the monitoring station are lower than the DO levels measured at the two control stations on the same events.
- **4.4.5** The monitoring programme would be reviewed after 2 years of monitoring. If there is no exceedance of the action level, the monitoring programme could be discontinued. If not, the information collected through the two-year monitoring and experience gained from the maintenance dredging should be used to reschedule the monitoring programme.

## 4.5 Baseline Monitoring

- **4.5.1** Baseline conditions for water quality should be established and agreed with DEP prior to the commencement of works. The purposes of the baseline monitoring are to establish ambient conditions prior to the commencement of the works and to demonstrate the suitability of the proposed impact, control and reference monitoring stations. The baseline conditions should normally be established by measuring the water quality parameters specified in Section 4.1. **Table 4.3** summarises the water quality parameters and programme for baseline monitoring.
- **4.5.2** The measurements should be taken at all designated monitoring stations including control stations, 3 days per week, at mid-flood and mid-ebb tides, for four weeks prior to the commencement of marine works. There should not be any marine construction activities in the vicinity of the stations during the baseline monitoring.
- **4.5.3** In exceptional case when insufficient baseline monitoring data or questionable results are obtained, the EMT Leader should seek approval from DEP on an appropriate set of data to be used as baseline reference.

Parameter	Stations	Monitoring Frequency	Total Sampling Days
РН	All	3 days per week	12 days
DO	All	3 days per week	12 days
Temperature	All	3 days per week	12 days
Turbidity	All	3 days per week	12 days
Salinity	All	3 days per week	12 days
Water depth	All	3 days per week	12 days
SS	All	3 days per week	12 days
TIN	All	3 days per week	12 days
Unionised ammonia	All	3 days per week	12 days
Zn	All	3 days per week	12 days
PCBs	All	3 days per week	12 days
TBT	All	3 days per week	12 days
PAHs	All	3 days per week	12 days

 Table 4.3
 Water Quality Parameters and Programme for Baseline Monitoring