4.6 Impact Monitoring

4.6.1 Prior to commencement of the marine works at SEKD, the project department should consult the mariculturists of the concerned mariculture zones including Ma Wan and Tung Lung Chau. The project department should also inform and update the mariculturists the tentative programme of the marine works in advance.

4.6.2 When the marine works commence, water quality monitoring should be undertaken three days per week, at mid-flood and mid-ebb tides, with sampling/measurement at the designated monitoring stations. In case where the monitoring results indicate that the contaminant concentrations in the water during the dredging and filling activities increase significantly, mitigation measures and construction programme should be reviewed and rescheduled to minimise the impacts. **Table 4.4** shows the Action and Limit levels used for evaluation of water quality monitoring results for selected parameters. For other parameters, Action and Limit levels should be agreed with EPD after completing the baseline monitoring. The interval between two sets of monitoring should not be less than 36 hours except where there are exceedances of Action and/or Limit levels, in which case the monitoring frequency should be increased.

4.6.3 Upon completion of all marine works, a post project monitoring exercise on water quality should be carried out for four weeks in the same manner as the impact monitoring.

Table 4.4 Action and Limit Levels for Water Quality

Parameters	Limit Level	Action
DO at surface, middle and bottom layers (mg/l)	Surface & Middle 4 mg/l or 1%-ile of baseline data for surface and middle layers Bottom 2 mg/l or 1%-ile of baseline data for bottom layer	Surface & Middle 5%-ile of baseline data for surface and middle layers Bottom 5%-ile of baseline data for bottom layer
Depth-averaged SS (mg/l)	99%-ile of baseline or 130% of the SS levels measured at the upstream control station at the same tide of the same day and specific sensitive receiver water quality requirements (e.g. required suspended solids level for concerned sea water intakes)	95%-ile of baseline data or 120% of the SS levels measured at the upstream control station at the same tide of the same day
Depth-averaged Turbidity (NTU)	99%-ile of baseline or 130% of the turbidity measured at the upstream control station at the same tide of the same day	95%-ile of baseline data or 120% of the turbidity levels measured at the upstream control station at the same tide of the same day
Depth-averaged NH_3-N (mg/l)	99%-ile of baseline data or 0.021 mg/l for unionised ammoniacal nitrogen, whichever is greater and specific sensitive receiver water quality requirements (e.g. required NH_3-N for concerned sea water intakes)	95%ile of baseline data
Depth-averaged TIN (mg/l)	99%-ile of baseline data or 0.4 mg/l for the Victoria Harbour, Western Buffer and Eastern Buffer WCZs, whichever is greater	95%-ile of baseline data

Notes:
- "depth-averaged" is calculated by taking the arithmetic means of reading of all three depths.
- For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- For SS and turbidity, non-compliance of the water quality limits occurs when monitoring result is higher than the limits; and
- All the figures given in the table are used for reference only and the EPD may amend the figures whenever it is considered as necessary.