

WSR	Description	Sedimentation (with Project)		Sedimentation (Without Project)	
		g/m <sup>2</sup> /day	mm/year	g/m <sup>2</sup> /day	mm/year
WSR 41	Artificial Reef at NE Airport	1.42	0.69	1.21	0.59
WSR 47a	River Trade Terminal	2.99	1.46	0.80	0.39
WSR 47b	River Trade Terminal	2.92	1.42	2.62	1.27
WSR 29	Hau Hok Wan (Horseshoe Crab Habitat)	4.59	2.23	4.69	2.28
WSR 30	Sha Lo Wan (Horseshoe Crab Habitat)	4.65	2.26	4.63	2.25
WSR 31	Sham Wat Wan (Mangrove and Horseshoe Crab Habitat)	4.85	2.36	4.82	2.35
WSR 32	Tai (Mangrove Habitat)	4.23	2.06	4.22	2.05
WSR 33	Tai O Bay	2.21	1.07	2.16	1.05
WSR 34	Yi O (Mangrove and Horseshoe Crab Habitat)	4.22	2.05	4.22	2.05
WSR 50	HKBCF Embayment Area / Sky Pier	3.22	1.57	1.64	0.8

**9.9.3.16** The annual sedimentation rates at major eco-sensitive receivers with the project is ranging from 1.42g/m<sup>2</sup>/day (WSR 41) to 4.85g/m<sup>2</sup>/day (WSR 31), which are far below the assessment criterion of 0.2 kg/m<sup>2</sup>/day. The annual sedimentation rate inside the airport sea channel (WSR 28) with the project decreases from 1.66mm/yr to 1.56mm/yr. The change is 0.1mm/yr or 1mm/10 year. Hence, the impact of project on the sedimentation inside the airport sea channel is minor.

### Summary

**9.9.3.17** In summary, only slight increases or decreases of the water quality parameters would occur as a result of the implementation of the project comparing to the base scenario. In addition, all parameters are expected to comply with the relevant criteria. Significant water quality impacts as a result of the implementation of the project are not anticipated.

### **9.9.4 Accidental Spillage**

**9.9.4.1** Under normal operating circumstances, significant impacts on water quality are not anticipated. In the event that a major spill occurs on the marine viaduct of HKLR and TMCLKL, a defined response plan is required in order to, not only be able to reopen the road as soon as possible to minimise disruption to traffic, but also to minimise effects on the marine ecological resources and water quality. All methods of spill clearance should be environmentally acceptable and should not lead to pollution of the marine environment. The following sections detail the procedures that would be applicable in this situation.

#### Chemical Spillages

**9.9.4.2** For chemical spillages that do not pose fire, explosion or life risks, the spills should be contained, recovered and soaked-up for disposal as chemical waste. Under no circumstances should chemical spillages be washed into the natural streams, or any other natural or man-made water bodies or carrying systems.

#### Oil Spillages

**9.9.4.3** In case of oil spillage, the use of chemical dispersants to break up the oil is not recommended as their use could impact on the surrounding environment and

compound the pollution situation. In addition, the oil spill should be contained in the location of the spill wherever possible.

**9.9.4.4** For all spillages, the acceptable method of control is by “absorption” and then removal of the absorbed waste for disposal by special contractors. Absorption of the oil should be achieved by the use of sawdust or other suitable material. Advice on how to clean-up a chemical spillage if required can be sought from EPD. Contact should be made with EPD’s Chemical Waste Treatment Centre for assistance in disposing of the contaminated sawdust. Source of sawdust for use in case of emergencies can be obtained from Transport Department.

**9.9.4.5** The management and maintenance authority for the venue/roads/parts would be responsible for clearing up a spillage in their responsible area.

**9.9.4.6** The emergency call-out procedure in case oil/chemical spillage on roads in this area:

(a) Police

- to assess the impact of incident and then immediately inform:
  - FSD in case of fire hazard; and
  - TD in case of road closure:
- to set up a Mobile Command Post to co-ordinate the road closure and clearing up operations. All parties concerned might then liaise with the Command Post for updated information; and
- to inform EPD, FEHD and other departments to render assistance if necessary after the immediate traffic and rescue operations completed.

(b) Transport Department

- to inform HyD’s Emergency Co-ordination Centre;
- to liaise with the bus companies, MTRCL, relevant ferry operators on emergency public transport arrangements;
- to disseminate information of emergency public transport arrangements through GIS.

**9.9.4.7** Not Used.

**9.9.4.8** The above measures will reduce the magnitude of any impacts. Notwithstanding it is possible for some of the spilled material to be discharged into the marine environment via the viaduct drainage system. While oil interceptors are not feasible on the marine viaduct, the spill will decay through a variety of means including evaporation, adsorption onto suspended materials and emulsification. Adsorption of oils can be effective means for breaking up the spill. However, the natural process of the spill spreading reduces its thickness and allows the process of wind and wave action in breaking up the spill to increase as well as evaporation and dissolution. Dispersion of any spill will occur more rapidly in higher water flows which occur along the majority of the viaduct length but in lower water flows inside the bays, dispersion could take longer. Notwithstanding, it is likely that a spill would disperse in region of 3-4 days without any long term effects on water quality (ERM 1995).

**9.9.4.9** Based upon this, the emergency response plan would be considered to be sufficient to reduce any impacts to acceptable levels.