

1. Introduction

1.1 The purpose of this report is to present the findings of the Marine Traffic Impact Assessment (MTIA) that has been carried out for the proposed desalination plant at Tseung Kwan O (TKO) Area 137, which is near a water space of low level of traffic activities and relatively shallow water.

2. Marine Traffic Impact Assessment

2.1 The Study Area includes the foul area between Tit Cham Chau and Tung Lung Chau, as well as the Tathong Channel. A review of marine facilities, metocean environment, existing/future development and traffic density has been conducted.

2.2 A low level of traffic activities below 50 daily movements have been identified at waterspace near the north-western side of Joss House Bay where small craft and rivertrade vessel are the major component of the traffic mix and regular kaito services from Sai Wan Ho to Tung Lung Island via Joss House Bay operate along its service route near the proposed works site.

2.3 A review on the historical marine hazards using incident records from Marine Department has been conducted. An annual average of 5.8 incidents majority being collision, is identified within the study area.

2.4 Under the proposed development of the desalination plant at Tseung Kwan O, a new seawater inlet and Reverse Osmosis (RO) concentrate outfall would be located near the entrance of Joss Hose Bay south of the facility site.

2.5 Due to the limited density and number of traffic, mainly small craft and river trade vessel, as identified from the visual survey and AIS & Radar data, it is not anticipated that the proposed works will impose adverse impact on the local marine traffic environment.

2.6 In order to minimise disturbance to the ferry traffic in vicinity of the works site during construction, it is recommended that marine works should be scheduled to avoid the ferry services at Joss House Bay Public Pier around the time near the Tin Hau Festival.

2.7 The submarine intake and outfall will be both embedded and located below the existing seabed, with only the intake structure and outfall diffuser erected slightly above the seabed. Disturbance to the seabed will be kept to minimum as far as practicable with majority of the original seabed remained after completion of the works. Given only small or fishing vessels with lower draft are identified within the vicinity. No operational impact to other stakeholders is anticipated.

3. Conclusion

3.1 The results of the MTIA reveal that the proposed marine works may be conducted without imposing undue impacts on local marine traffic environment, activities or in turn, being adversely impacted by local marine activity. No operational impact is anticipated from the intake and outfall structures.