

1. Introduction

- 1.1 The purpose of this report is to present the findings of the Air Ventilation Assessment (AVA) – Expert Evaluation (EE) for the proposed desalination plant at Tseung Kwan O Area 137 (the Development).

2. Air Ventilation Assessment

- 2.1 The assessment presents the findings of the evaluation of the wind performance of the Development using the methodology of Air Ventilation Assessment, based on the Technical Circular and “Technical Guide for Air Ventilation Assessment for Development in Hong Kong – Annex A” (the Technical Guide).
- 2.2 The Development consists of multiple administrative and process blocks with a maximum building height of 27mPD. It is situated at the southeast of Fat Tong O next to Kwun Tsai and Tit Cham Chau. The Fat Tong O area is currently undeveloped; the closest building clusters are the Green Valley Landfill and Television Broadcasts Limited TVB City, which are located ~650m and ~1000m away from the development respectively. Considering the development is low-rise in nature, wind impact to these developed clusters is considered insignificant
- 2.3 According to the RAMS wind data, NE, ENE and E winds contribute to 10.3%, 18.7% and 20.4% of the annual wind frequency respectively while the SW, SSW and E winds contribute to 14.3%, 14.4% and 10.6% of the summer wind frequency respectively. Hence, NE, ENE and E winds are identified as the annual prevailing wind direction while SW, SSW and E winds are identified as the summer prevailing wind direction.
- 2.4 Most of the massive buildings of the Development are situated at the southern part of the site. The erected structures disturbed in scatter at northern portion of the site are relatively small in footprint.

3. Conclusion

- 3.1 According to the analysis, the annual prevailing wind comes from NE, ENE and E directions and the summer prevailing wind is from SW, SSW and E direction. Wind is expected to skim over the development or pass through mid-level air path under NE quarter wind. Also, wind from SW quarter would not bring significant impact to the vicinity developed area as it is located beneath of Tin Ha Au.
- 3.2 In general, negative ventilation impact induced by the site is considered insignificant.