

Project Title: Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works

(Application No. EIA-253/2017)

Submission of Information Pursuant to Section 8(1) of the EIAO

- (a) Information on further elaboration and clarification of the difference in air quality impact assessment results on the hourly total suspended particulates (TSP) figures between Table 3.10 “Predicted Construction Dust Impact during Stages of Replanning Works (Unmitigated)” and Appendix 3.8 “Detailed Prediction of Construction Dust Impact (Stage 1) (Unmitigated)”;

Response:

The maximum unmitigated hourly TSP for Stages 1 to 4 are correctly presented in Appendix 3.8 and Appendix 13.2 Summary of Environmental Impacts, in which the results are 316-8818 $\mu\text{g}/\text{m}^3$, 220-3542 $\mu\text{g}/\text{m}^3$, 223-7042 $\mu\text{g}/\text{m}^3$ and 219-11826 $\mu\text{g}/\text{m}^3$ respectively, and exceed the standard 500 $\mu\text{g}/\text{m}^3$ as stipulated in the Technical Memorandum on EIA Process (TM). The maximum hourly TSP figures in Table 3.10 are typos which will not affect the results and conclusions of the air quality impact assessment. Amended table is provided below for reference. With implementation of the mitigation measures as stipulated in the Air Pollution Control (Construction Dust) Regulation, and also dust control measures and good site practices such as watering once per hour on works areas and haul roads, the mitigated dust impact will comply with the requirements of TM and study brief.

Table 3.10 Predicted Construction Dust Impact during Stages of Replanning Works (Unmitigated)

Stage	Maximum Hourly TSP Conc. ($\mu\text{g}/\text{m}^3$)	10 th Highest Daily RSP Conc. ($\mu\text{g}/\text{m}^3$)	Annual RSP Conc. ($\mu\text{g}/\text{m}^3$)	10 th Highest Daily FSP Conc. ($\mu\text{g}/\text{m}^3$)	Annual FSP Conc. ($\mu\text{g}/\text{m}^3$)
1	316 – 8818	78 – 136	33 – 35	58 – 66	24 – 25
2	220 – 3542	77 – 116	32 – 35	58 – 62	23 – 25
3	223 – 7042	77 – 218	33 – 36	58 – 81	23 – 25
4	219 – 11826	77 – 259	32 – 37	58 – 82	23 – 25

Remark: Bolded value shows exceedance of relevant criteria of EIAO-TM/AQO.

- (b) Information on further elaboration and clarification of the maximum hourly TSP concentration in Table 3.4 “Representative Air Sensitive Receivers” (ASRs), deliberating the reasons for dust impacts at ASRs A1, A2, A3 and A5 not solely decrease by the distance from dust source;

Response:

Dust impact at air sensitive receivers (ASRs) is affected not only by the distance from dust source, but also by other key factors, like wind direction, wind speed, and other meteorological factors affecting dispersion. A5 could possibly be influenced by all dust sources in stage 1 at upwind when the wind came from south west, while A1 and A3 would likely be affected by a portion of dust sources in any direction. The maximum hourly TSP at A5 was found at the above mentioned wind direction coupled with poor dispersion condition, which should be the main reason causing the high dust concentration at A5. With implementation of the mitigation measures as stipulated in the Air Pollution Control (Construction Dust) Regulation, and also dust control measures and good site practices such as watering once per hour on works areas and haul roads, the mitigated dust impact will comply with the requirements of TM and study brief.

(c) Information on further elaboration and clarification of the air quality assessment model for vehicular emissions at 10m level in Appendix 3.3 “Calculation of Vehicular Emission Source”;

Response:

The air sensitive receivers (ASRs) at Siu Ho Wan Depot (SHD) Topside Development are located over 350m away from the concerned flyover bridges, comparing with those concerned ASRs which are located at less than 20 meters from a flyover bridge in Hung Shui Kiu (HSK) New Development Area (NDA) EIA. This EIA Report quantifies the potential dust impact, and the contribution from vehicle emission is relatively minor as compare with other sources (i.e. site formation and industrial sources). A sensitivity test on the dust impact from the concerned flyover bridges to the A125 has been conducted, and the results indicated that the associated vehicular air quality impact is insignificant. The model assumption with height capping at 10 metres is considered to be sufficient to address the vehicular air quality impact.

(d) Information on further elaboration and clarification of the landscape and visual design including the provision of setback and landscape features along the northern edge of the depot; and

Response:

To further enhance the landscape and visual elements along the northern edge of the depot, the following enhancement measures as illustrated in Drawing 1 “Landscape Elevation” would be adopted where feasible subject to the detailed design of the depot:

- *Adoption of vertical greening along the depot facade and fence wall; and*
- *Setback of up to 2m along the northern depot boundary abutting the service road for greening and amenity features.*



Drawing 1 – Landscape Elevation for Illustration of Enhancement Measures

Furthermore, for enhancing the connectivity of Topside Development to the waterfront, access points would be reserved along the northern depot boundary to allow vertical connections from the topside development to the waterfront.

(e) Information on further elaboration and clarification of the considerations given to choose the Western Station Option instead of the Central Station Option.

Response:

The existing AEL/TCL lines have shared tracks along most of the southern perimeter of the site, and start bifurcated to four tracks (two outer ones for TCL and two inner for AEL). The western station option has least disruption arising from station works to the operating tracks in the vicinity. The existing AEL/TCL are two key rail lines linking the Lantau and Urban areas and disruption to their services should be avoided.

The central location by realigning the TCL/AEL towards Siu Ho Wan Depot (SHD) was studied. The central station location by realigning TCL/AEL towards SHD would intrude across the test track which would disrupt the function of test track and temporary closure of TCL/AEL for track connection. This option is therefore causing disruption to train services and not considered viable.

The central location by extending the TCL tracks at the side of the shared tracks was studied and it has the following issues:

- The platform of the station under this option will be located at the tracks which are being share-used by TCL/AEL and longer additional TCL tracks modification would be required.
- Considering station platform has to be on flat level, extensive site formation works would need to be conducted in the vicinity of the operating tracks at the central location for Central Station option. The hard rock located at the location of Central Station (**Figure 1** refers) will induce extra difficulties and great risks to the modification works next to the live tracks with both AEL/TCL running at over 130kph at this location. The extensive site formation works which would result in higher construction waste is also considered to be less environmental friendly.



Figure 1 – Rock Level at SHO Central Location

- Because of the existing track configuration, the southern side platform of the central station option will encroach into existing North Lantau Highway (NLH). As indicated in **Figure 2 & 3**, permanent NLH road realignment, extending to the ramp of Tuen Mun Chek Lap Kok Link Road, will be required. Key issue arising from this realignment is that it will need to cut into the existing slope adjoining to the southern side of NLH. Slope works required for the realigned NLH would create a Natural Terrain Hazard to a large extent of the hillslope at the vicinity and may extend beyond the Country Park boundary (i.e. Lantau North (Extension))

Country Park). Moreover, the realignment works at affected area and the potential natural terrain improvement works will also encroach into Tai Ho Priority Site (indicative works area is approximate 1ha) and may impact directly on both existing vegetation and natural habitats.

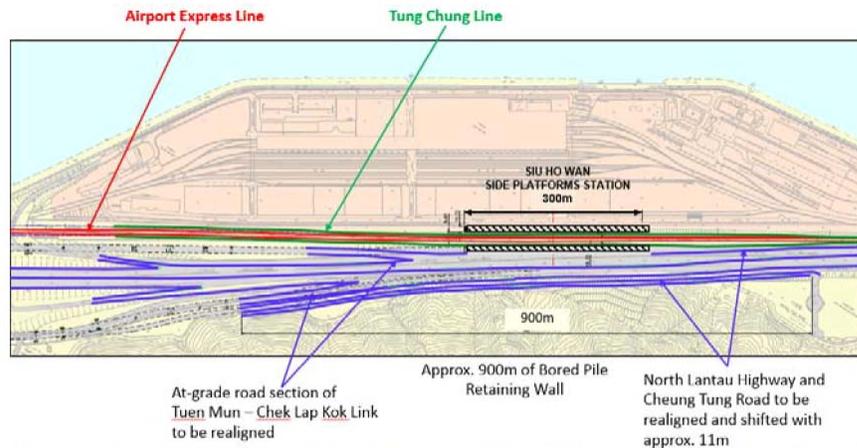


Figure 2 – NLH Road Realignment for Station at Central Location



Figure 3 - Potential Construction Works within Tai Ho Priority Site

- Furthermore, relatively higher construction dust, noise, waste and water quality impacts is anticipated from the construction works involved which would also result in higher indirect impact to the Tai Ho Priority Site. In view of this, this station option is not preferred from environmental point of view.

In addition the planned public transport interchange (PTI) will need to be located at the side of the station to facilitate road/rail interchange. The proposed public road connecting to the SHD site is the planned Tai Ho Interchange, which is located to the west of the site. Minimising the travelling distance between the PTI and Tai Ho Interchange would be favorable from planning perspective. For the Central Station option, the road leading to the PTI from Tai Ho Interchange will have to route through a longer length within the proposed SHD Topside Development than for the Western Station option, as such Central Station option is less desirable from planning perspective.

Based on the above factors considered, Western Station is recommended.

The location of the station option have been reviewed and presented in Section 2.3.7-2.3.10 and Appendix 2.2B of the EIA Report. The station option evaluation is presented above with further supplementary information for better illustration.