Appendix 3-8

Construction Approach During Site Formation Stage

Appendix 3-8 Details of Construction Method During Site Formation Stage of the Project Site

Currently, the Project Site comprises a paved car park area in the southern portion of Project Site and a concrete paved vacant area and grass land are located in the northern portion. During the construction phase, construction works will be carried out in stages and the existing paved area at the unaffected area will be maintained so that the soil underneath is not exposed to the atmosphere (i.e. there will be no wind erosion).

As mentioned in Section 3.7.1.2 of the EIA report, assumptions on work areas, works programme, and construction method have been used in order to demonstrate a possible way to mitigate adverse impact due to construction dust emission during the site formation. With this approach, assessment was undertaken according to the methodology described below. During the detailed design stage, alternative construction approach may be proposed provided that it is effective in mitigating the construction dust level to an acceptable level.

In order to minimize dust emission during site formation stage, it is expected that the site formation works will be carried out in stages (see illustration in Figure A). Regular site watering will be applied within the construction site in order to effectively supress dust emission, and that dusty materials will be properly covered to prevent wind erosion. As mentioned above, the Project Site is currently a paved ground/ green field site, as such, the construction works within the active works area will be only emission source as remaining area of the Project Site is covered and will not be affected (i.e. no dust emission for the remaining areas).

With the current construction approach, the air quality assessment has been undertaken accordingly.

Modelling Approach

For the mitigated scenario, the following assumptions have been adopted in the modelling exercise:

- The construction programe of site formation works has been based on the construction programme as shown in **Appendix 1-1** (i.e. 7.5 months). Accordingly, duration of works area is estimated;
- As the construction will be carried out in stages, the duration of construction works in adjacent to an ASR will be relatively short. The construction works will then be moved to another works area which is relatively far away from the ASR (i.e. less affected by construction works);
- Based on the above, the model is driven by the obtained hourly meteorological data (i.e. 8,760 hours/ year) in order to obtain the hourly dust emission levels. The maximum hourly TSP level, daily average RSP and FSP levels, as well as annual average RSP and FSP levels area then derived accordingly;
- During construction, construction activities within the active works area will be the only dust emission source, while the remaining areas of the Project Site is currently paved or covered by grass and will not contribute to any emission (i.e. zero contribution); and
- Dust suppression measures in terms of frequent watering are proposed. Water to be sprayed frequently during construction period. The calculated dust suppression efficiency taken into account the dust suppression measures is provided in **Appendix 3-9**. The concerned dust suppression efficiency has been applied to both the short-term impacts (e.g. hourly and daily) and long-term impacts (e.g. annual).

According to the current construction programme shown in **Appendix 1-1**, the site formation works will commence in April 2017 until half of November in the same year (i.e. 7.5 months).

The site formation will last for about 7.5 months, after that the site will be hard paved and there is no significant air quality impact anticipated at the site. Thus, in assessing the short-term impact (i.e. hourly and daily), it is based on 7.5 months' construction period only. For long-term impact (i.e. annually), there will be no contribution to RSP and FSP levels due to the Project works for the remaining 4.5 months of the year, thus only background level is taken into account during this period of time.

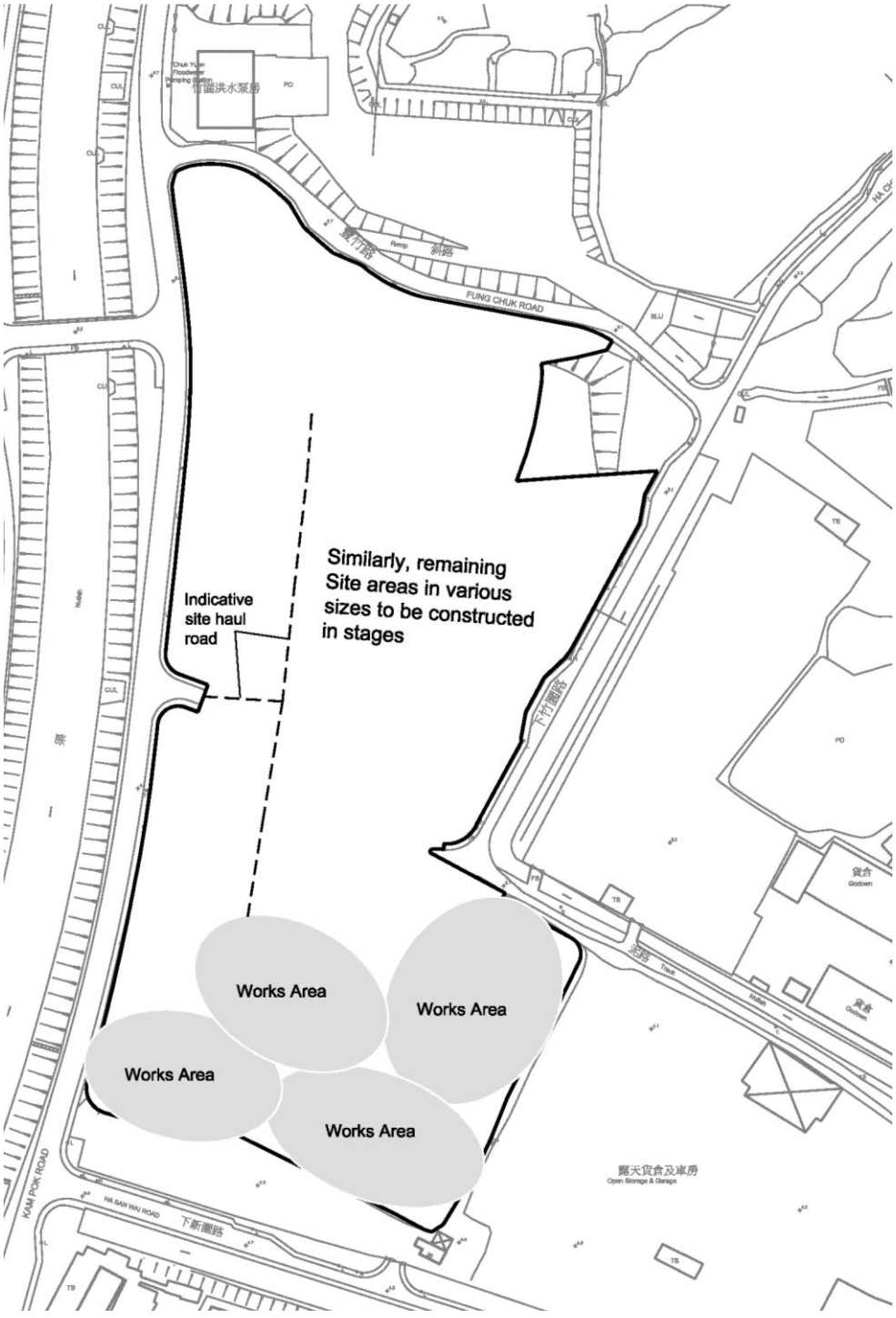

Figure A – Illustration of Site formation Works Constructed in Stages