

## 14.3 Traffic Air Quality

**14.3.1** Section 2 of this EIA Report indicated that the layout plan is acceptable in broad terms of air quality to achieve compliance of Air Quality Objectives at the future air quality sensitive receivers within SEKD. For the purpose of this section, additional assessment was carried out to examine the operational phase air quality impacts at those development areas with changes under the land use option. Locations of the air quality assessment points for the land use option are shown in **Drawing No. 22936/EN/341**. The modeling results of the predicted worst-case nitrogen dioxide, respirable suspended particulates, and sulphur dioxide concentrations at the assessment points are tabulated in **Appendix 14A**.

**14.3.2** In the proximity to the Stadium Site 1L, the East Vent Building of the CKR tunnel is identified as the major air pollution source of concern. Assessment points at the boundary of the residential and school site in Area 4A were selected to predict the impacts. Given that the maximum height of schools would not be larger than 40m, the modeling results showed that exceedance of the AQO would not be expected at the residential site and school site in Area 4A.

**14.3.3** Assessment was also carried out to determine the impacts at the school sites in Area 1E, Area 2B and Area 4P/Q. The modeling results showed that the impacts would be similar to those presented in Section 2 of this EIA Report and no exceedance of AQO at sensitive receivers would be expected.

## 14.4 Traffic Noise

**14.4.1** In terms of traffic noise impact, considerations were given to following newly created noise sensitive areas among the option:

- School Village 2B comprised of two secondary schools and two primary schools;
- A primary school and the residential site at 4A;
- School Village 4P comprised of one secondary school and one primary school;
- School Village 4Q comprised of one secondary school and one primary school; and
- A secondary school site at 1E.

**14.4.2** Assessments were carried to identify the potential traffic noise impact and the mitigation measures required based on the option layout. Site layouts, assessment points and proposed mitigation measures are shown in **Drawings Nos. 22936/EN/342 to 345**. Details of the results are given in **Appendix 14B**. Noise contour plots are presented in **Drawings Nos. 22936/EN/385 to 388**. Noise mitigation measures in addition to those listed in the original layout are presented in the following sections.

### 14.4.3 School Village 2B

**14.4.3.1** School Village 2B is partially a replacement of the original School Village 1L. Site 2B is a better location than site 1L since the noisy distributor D5 is avoided. The main noise source is still from distributor D1 for both 2B and 1L sites. Local road L1 also affects School Village 2B to a significant extent. Only two schools were found slightly affected by traffic noise.

**14.4.3.2** Direct measures at roads D1 and L4 are limited at local level by the presence of junctions and site entrance. Therefore, it is necessary to have proper orientation of the schools in order to achieve a better noise environment. The required mitigation measures (see **Drawing No. 22936/EN/343**) are as follows: