

Kwun Tong AQMS are predicted.

- All AQMS should continue to meet the AQO for ozone.

5.3.3.3 High Growth Scenario (Low End)

This scenario assumes a less significant rate of population growth (Population II) than the High Growth (High End) scenario (Population III) addressed in Section 5.3.3.2. Traffic growth was assumed to be unconstrained and sufficient infrastructure to cater for this level of demand was assumed to have been provided.

Annual Average Concentrations of Nitrogen Dioxide and RSP

Tables 5.3i and 5.3j present the changes in annual average concentrations of nitrogen dioxide and RSP predicted at each of the AQMS in the SAR in 2016 under this scenario.

Table 5.3i
Annual Average Concentrations of Nitrogen Dioxide (μgm^{-3})

| AQMS | 1997 | Increment | Total |
|-----------------|------|-----------|-------|
| Central/Western | 58 | 2.0 | 60.0 |
| Mong Kok | 85 | 3.9 | 88.9 |
| Sha Tin | 49 | 5.7 | 54.7 |
| Yuen Long | 61 | 9.4 | 70.4 |
| Tsuen Wan | 68 | 2.4 | 70.4 |
| Kwai Chung | 49 | 5.9 | 54.9 |
| Sham Shui Po | 71 | 2.8 | 73.8 |
| Kwun Tong | 74 | 5.0 | 79.0 |
| Tai Po | 50 | 0.0 | 50.0 |

The assessment indicates that the nitrogen dioxide concentrations under this scenario are likely to increase at all AQMS. The most significant deterioration in air quality is predicted at the Yuen Long AQMS, where annual average concentrations of nitrogen dioxide are predicted to increase by approximately 15%, relative to levels observed in 1997. Non-compliance with the AQO is anticipated at the Mong Kok AQMS, although for the reasons presented in Section 5.3.3.2, this conclusion needs to be treated with a degree of caution.

Figure 5.3g presents a contour map showing the predicted changes in annual average concentrations of nitrogen dioxide on a territory-wide basis. The figure indicates a general increase in concentrations (by $>5\mu\text{gm}^{-3}$) in the majority of the western half of the SAR. Such increases are predicted to be particularly marked in the vicinity of Fanling, Yuen Long, Tuen Mun, Kam Tin, and Tsuen Wan with increases in excess of $7.5\mu\text{gm}^{-3}$ anticipated. Reduced concentrations of nitrogen dioxide are predicted to occur in the Lei Yue Mun, Kowloon, the central part of Hong Kong Island and Lamma Island. These reductions are anticipated to be up to $7.5\mu\text{gm}^{-3}$. As for the High Growth (High End) scenario, these predictions are considered to be attributable to the relative growth in traffic volumes in these areas and the introduction of tighter