

the threshold concentration and the maximum increase predicted in the model domain.

Table 8.2n
Changes in the Maximum Hourly Average Concentrations (μgm^{-3})
under Typical Photochemical Smog Conditions

AQMS	Nitrogen dioxide	Threshold	Ozone	Threshold
Central/Western	14.7	285.3	-7.4	252.2
Mong Kok	-3.0	303.0	12.3	245.1
Sha Tin	-11.6	311.6	11.2	236.8
Yuen Long	-15.3	315.3	1.7	239.3
Tsuen Wan	-27.9	327.9	3.8	239.8
Kwai Chung	-24.9	324.9	-1.1	240.3
Sham Shui Po	-11.3	311.3	9.1	239.3
Kwun Tong	2.3	297.7	13.9	238.8
Tai Po	-20.5	320.5	1.2	239.4
Maximum	23.3 Junk Island	N/A	6 Junk Island	N/A

The number of exceedances at the Mong Kok AQMS is predicted to reduce from 4 to 3 with the additional measures in place, which will render the station compliant with the AQO. No non-compliant AQMS are predicted, although exceedances are still predicted at Shum Shui Po and Kwun Tong.

Figure 8.2k presents the predicted changes in peak nitrogen dioxide concentrations on a territory-wide basis. It is evident from the figure that significant decreases in concentrations are predicted over quite large areas of the SAR, particularly in the New Territories and Hong Kong Island South. Reductions in NO_2 concentrations in these areas range from $5 \mu\text{gm}^{-3}$ to in excess of $20 \mu\text{gm}^{-3}$. The principal areas of increased concentrations are to the east of Hong Kong Island, in the vicinity of Chai Wan and Tseung Kwan O and in Central/Western.

Three exceedances of hourly O_3 concentrations are predicted at Sha Tin, which is the same as the Medium Growth scenario without additional measures.

Figure 8.2l shows the predicted changes in ozone concentrations across the SAR, most notable are the significant increases in ozone levels relative to 1997 in an area extending from Sha Tin to Tseung Kwan O.

Conclusions

The following general conclusions can be drawn from the analysis presented above.