

Table 8.2m
Changes in Daily Average Concentrations (μgm^{-3})
under Typical Photochemical Smog Conditions

AQMS	Nitrogen dioxide	Threshold	RSP	Threshold
Central/Western	10.0	140.0	3.1	176.9
Mong Kok	-8.7	158.7	3.9	176.1
Sha Tin	-8.4	158.4	2.1	177.9
Yuen Long	-3.5	153.5	0.5	179.5
Tsuen Wan	-7.4	157.4	0.5	179.5
Kwai Chung	-11.0	161.0	1.9	178.1
Sham Shui Po	-8.8	158.8	1.9	178.1
Kwun Tong	-6.4	156.4	3.7	176.3
Tai Po	-6.7	156.7	0.5	179.5

Analysis of the complete set of AQMS data for 1997 indicates that the number of exceedances of the NO_2 standards reported at Mong Kok is expected to drop from six to three per annum, an indication that this station will remain out of compliance with the AQO. At the Sham Shui Po and Kwun Tong AQMS, exceedances of the AQO are anticipated to reduce from three (without additional measures) to two (with additional measures).

Figure 8.2i presents the predicted territory-wide changes in nitrogen dioxide concentrations during a photochemical smog event. Reduced concentrations are predicted for the majority of the SAR and all of the New Territories a greater area than is shown in Figure 5.3o which assumes that the additional measures are not applied. The most marked area of increased concentrations is along the northern and eastern shore of Hong Kong Island and down the East Lamma Channel.

Two exceedances of AQO for RSP are predicted at Mong Kok AQMS without the application of additional measures. When additional measures are assumed, the number of exceedances is reduced to 1, which renders this station compliant. One exceedance at both Sha Tin and Kwun Tong was predicted.

Figure 8.2j presents the predicted changes in RSP levels across the SAR. The extent of increases in RSP concentrations is less than the scenario in which additional measures are not in place. (c.f. Figure 5.3p). However, an increase in RSP levels is predicted for all parts of the SAR. Increases of greater than $2.5 \mu\text{gm}^{-3}$ are predicted for Kowloon, Kwun Tong and the western half of Hong Kong Island.

Maximum Hourly Average Concentrations of Nitrogen Dioxide and Ozone

Table 8.2n presents the predicted maximum hourly average concentrations of nitrogen dioxide and ozone under typical photochemical smog conditions. In addition to the presentation of predictions at each of the AQMS, the table also shows