

Figure 8.2c presents the predicted changes in 24-hour nitrogen dioxide concentrations during a photochemical smog event. When compared to Figure 5.3c, it can be observed that reductions are predicted across the New Territories and Lantau Island with additional measures in place, whereas increases are predicted across the whole of SAR without the additional measures.

Exceedances of the daily average AQO for RSP ( $180 \mu\text{g}\text{m}^{-3}$ ) were predicted to fall from 3 to 2 at Mong Kok and remain the same (1 exceedance) at Sha Tin and Kwun Tong, thereby not reducing the number of non-complaint AQMS. Figure 8.2d presents the predicted territory-wide changes in RSP concentrations. The daily average RSP concentration is predicted to increase by approximately  $15 \mu\text{g}\text{m}^{-3}$  in the Central/Wan Chai areas without additional measures (c.f. Figure 5.3d). The increase with the additional measures in place is predicted to be about  $7.5 \mu\text{g}\text{m}^{-3}$ .

#### *Maximum Hourly Average Concentrations of Nitrogen Dioxide and Ozone*

Table 8.2j presents the predicted changes in the 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 the threshold concentration and the maximum increase predicted in the model domain. The latter is considered particularly important for the ozone predictions as these are likely to be at a maximum some distance downwind of the urban area.

**Table 8.2j**  
**Changes in Maximum Hourly Average Concentrations ( $\mu\text{g}\text{m}^{-3}$ )**  
**under Typical Photochemical Smog Conditions**

AQMS	Nitrogen dioxide	Threshold	Ozone	Threshold
Central/Western	19.5	280.5	-11.8	251.8
Mong Kok	5.4	294.6	4.3	235.7
Sha Tin	-4.1	304.1	7.0	233.0
Yuen Long	-7.7	307.7	0.9	239.1
Tsuen Wan	-12.7	312.7	2.3	237.7
Kwai Chung	-9.1	309.1	-0.1	240.1
Sham Shui Po	0.0	300.0	2.0	238.0
Kwun Tong	11.8	288.2	3.9	236.1
Tai Po	-7.4	307.4	0.7	239.3
Maximum	36.4	N/A	15.2	N/A
	Chai Wan		Junk Island	

The number of exceedances reported at Mong Kok is predicted to decrease from 5 to 4. The number of exceedances will remain the same at Sham Shui Po and Kwun Tong, relative to the scenario without additional measures. Therefore the Mong Kok AQMS will remain out of compliance with AQO, even with the additional measures