

AQMS. In the absence of the additional measures, increases in nitrogen dioxide concentrations were predicted at all nine AQMS. The most significant deterioration is predicted at the Yuen Long AQMS, where the annual average concentration of nitrogen dioxide is predicted to increase by 11%, relative to levels observed in 1997. Without the additional measures assumed in this analysis, an increase of 17% was predicted. Levels at Sha Tin and Kwai Chung are also predicted to increase by about 8% (instead of 14% without additional measures) relative to 1997.

Figure 8.2a (c.f. Figure 5.3a) 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 approximately  $2.5\mu\text{gm}^{-3}$  relative to 1997 in the western half of the SAR. Such increases are predicted to be particularly marked in the vicinity of Tseun Wan, Tuen Mun and Yuen Long and Sheung Shui/Fanling, with increases of  $5\mu\text{gm}^{-3}$  anticipated. In the absence of the assumed additional measures, the increase in concentrations in much of the western half of the SAR was predicted to be  $5\mu\text{gm}^{-3}$ . Reductions in concentrations are predicted to occur in Kwai Chung, Kowloon, the central part of Hong Kong Island and Lamma Island. These reductions are anticipated to be approximately  $7.5\mu\text{gm}^{-3}$  relative to 1997 levels. Similar reductions are also predicted in an area south-east of Sha Tin.

**Table 8.2h**  
**Annual Average Concentrations of RSP ( $\mu\text{gm}^{-3}$ )**

AQMS	1997	Increment	Total
Central/Western	51	3.0	54.0
Mong Kok	57	6.1	66.1
Sha Tin	49	6.0	55.0
Yuen Long	58	6.8	64.8
Tsuen Wan	54	1.7	55.7
Kwai Chung	46	3.8	50.8
Sham Shui Po	57	4.0	61.0
Kwun Tong	56	4.0	62.0
Tai Po	59	0.7	59.7

The total number of AQMS deemed to be out of compliance with the annual average AQO for RSP will be reduced to six, from the eight stations predicted to be out of compliance without the additional measures in place. Concentrations are still predicted to increase at all of the AQMS. At Yuen Long the annual average is anticipated to increase relative to 1997 by 12%, to approximately  $65\mu\text{gm}^{-3}$  ( $67\mu\text{gm}^{-3}$  without additional measures.)

Figure 8.2b (c.f. 5.3b) shows the predicted changes in RSP levels on a territory-wide basis. Increases of  $5$  to  $7.5\mu\text{gm}^{-3}$  are predicted in the Mong Kok, Tuen Mun and Yuen Long areas. In most of the western part of the New Territories, concentrations are predicted to increase by between  $2.5$  and  $5\mu\text{gm}^{-3}$  relative to 1997 levels. As