

varied from that employed at the AQMSs, thus only monthly average concentrations were reported. The reported concentrations are presented in Figure 3.1a.

- One of the objectives of the baseline assessment is to identify those areas in which air quality is considered to be poor. Where AQOs with a corresponding averaging time are available, these will be used in the assessment. However, as there is no corresponding AQO for monthly average concentrations of NO₂, a monthly average concentration in excess of 150 µgm⁻³ was used for this assessment to designate the particular site as having "high" concentrations. Those stations designated as having "high" NO₂ levels are presented in Figure 3.1a. It is evident that the majority of these stations are in: the Kowloon Peninsula, particularly Mong Kok (Site numbers 35, 36 and 37) and Hung Hom (Site number 45); or along the northern coast of Hong Kong Island, from Kennedy Town (Site number 15) to Shau Kei Wan (Site number 10). Two sites in the New Territories, at Tuen Mun (Site number 71) and Yuen Long (Site number 74), were also identified as being "high".

Respirable Suspended Particulates

- Roadside concentrations of RSP were analysed to determine the average 24-hour concentration in December 1996 and the number of instances in which the corresponding AQO was breached. The data summarised in Table 3.1d reports the range of observations and the daily average concentrations. The daily average AQO for RSP is 180 µgm⁻³ and was breached a total of 38 times over the month at ten monitoring stations. Figure 3.1c summarises data for the frequency and locations of these reported exceedances. It is evident that the majority of the concentrations reported to be in excess of the AQO (a total of 17) were in the Tuen Mun/Yuen Long area (Station numbers 71, 65 and 74). Ten such exceedances were reported in Hong Kong Island, while eleven were reported in Kowloon. The highest reported concentrations were recorded at the Castle Peak Rd site in Yuen Long. The Heung Sze Wui site in Tuen Mun recorded the most exceedances over the one-month monitoring period.

Table 3.1d
Daily Average RSP Concentrations Reported in the
1996 Saturation Monitoring Project

Site Number/Address	Range (µgm ⁻³)	Mean (µgm ⁻³)
02/Queen's Rd	99 - 200	151
05/Hennessy Rd	94 - 190	149
07/SOGO	78 - 104	89
08/King's Rd	96 - 165	131
10/Shau Kei Wan Rd	97 - 172	135
15/Belcher St	103 - 226	159
35/Argyle St	122 - 222	172
36/Nathan Rd	106 - 213	154

Site Number/Address	Range (μgm^{-3})	Mean (μgm^{-3})
32a/Mong Kok AQMS	82 - 169	129
37/Shanghai St	103 - 191	148
45/Ma Tau Wai Rd	119 - 225	160
65/Sha Tsui Rd	60 - 196	117
71/Heung Sze Wui	122 - 235	192
74/Castle Peak Rd	93 - 254	183
78/Junk Bay	53 - 118	84

Data From Air Quality Monitoring Stations

Nitrogen Dioxide

Nitrogen dioxide concentrations were reported at all nine AQMSs. A summary of the results of the data analysis is presented in Table 3.1e. Eight exceedances of the hourly average concentrations were reported in total, four of which were reported at the Mong Kok AQMS and two each at the Kwun Tong and Sham Shui Po AQMSs. According to the *APCO*, up to three exceedances are permitted before the station is considered non compliant (see Table 3.1a), hence only the Mong Kok AQMS is out of compliance with the Ordinance. This represents a deterioration of the conditions reported in the EPD's 1996 annual report on air quality⁽¹⁾.

Daily average concentrations in excess of the AQO were also reported at these stations and at Tai Po. In order to remain in compliance, a station cannot report exceedances on more than one occasion. Therefore, all stations were deemed compliant with the exception of the Mong Kok, Sham Shui Po and Kwun Tong AQMS. This represents a deterioration of the conditions reported in the EPD's 1996 annual report on air quality where only Mong Kok and Shum Shui Po were deemed non compliant.

With the exception of the Mong Kok AQMS, all stations were within the annual average AQO. The conditions at this station met the annual average AQO in 1996 and hence the reported exceedance of the AQO is considered to reflect a general deterioration in air quality at Mong Kok. Figure 3.1d presents the distribution of annual average concentrations across the SAR.

⁽¹⁾ Environmental Protection Department (1997) *Op cit.*