



APPENDIX B

APPENDIX B

AIR QUALITY ASSESSMENTS OF THE PREFERRED OPTIONS

Air Quality Modelling Study

Introduction

1. The method of assessing variations between proposed development options in the initial stages of the Study was to calculate carbon monoxide concentrations at specified locations using data output from the transport model. According to the Evaluation Methodology and Assessment Criteria developed under Phase I of the Study, the same method was to be adopted for the assessment of the Hybrid Options. However, following discussions with EPD an alternative approach to assessing air quality impacts was agreed. As sulphur dioxide from industry and oxides of nitrogen from road traffic are of greater concern than carbon monoxide emissions, it was deemed more appropriate to focus the air quality studies on the former two pollutants.
2. To permit a comparative evaluation of the air quality implications of both industrial developments and vehicular traffic proposals for the Hybrid Options at the different time horizons, a suite of ten linked box models (LBM) were developed. The LBM approach proved to be a successful assessment tool for identifying areas where air quality could become or already is a critical issue in terms of future development and was thus retained for use in the assessment of the Preferred Options. The LBM were designed specifically for use in the TDS Study and as such the results should only be used in the context of this Study.
3. The stated objective of the air quality modelling study was to determine whether development proposals would be likely to result in the exceedance of the Air Quality Objectives within individual Air Control Zones (ACZ).

Methodology

4. It was agreed with EPD that the LBM developed for the assessment of the Hybrid Options to represent the ten individual Air Control Zones within the Territory would be retained for use in the present study of the Preferred Options without any modification to the actual model per se. The delineation between the boundaries would follow, as far as possible, the sub-regional boundaries used in the TDS Study.
5. Both industrial developments and transport routes were included in the assessment of air quality for the two Preferred Options. The results obtained were subsequently used on a comparative basis to identify the relative impacts on air quality arising from each of the options at the three time horizons (2001, 2006, 2011). The formulation of the box model does not allow for vertically disparate emission sources to be simulated together. Currently EPD does not have a model capable of simulating ground level impacts of high level emissions over complex terrain. Since ground level emissions have a more direct impact on the area of concern the box model has been set up to assess only the impact of low level emissions. Emissions from the major utilities have thus been excluded from this simulation.

Data Input

6. The land-use transport model for assessing the performance of the final set of preferred options in terms of land use distributions were adopted for use in the present study. Two scenarios were developed (A and B) with testing carried out at three time horizons. Results

of the transport tests were used for the present evaluation of assessing the impacts of the revised forecasts on future air quality. Input to the transport models has taken account of environmental concerns and has, inter alia, maximised the patronage of public transport, maximised the use of rail rather than road wherever possible, and has progressively eliminated elements which do not achieve the integrated land use-transport-environment goal of the TDS.

7. Emission rates for the vehicular contribution were provided by EPD based on their recent research and development, and are included in Table B1. It should be noted that the breakdown of vehicle categories is not directly comparable to the output generated by the transport model. Emission rates were thus defined which are a reflection of the changes in emission rates at different time horizons.
8. Input data required for assessing the implications of industrial development on air quality required gross floor areas of all industrial units for the existing, and strategic growth situations. Other fuel users which contribute to the cumulative air pollution problem in certain areas, include hotels and restaurants. For the purposes of this Study it was agreed that the SO₂ emission factors would be inflated by 25% while NO_x would be increased by 10% to accommodate the aforementioned emissions.
9. Mixing heights were discussed and the value of 500m was used for each of the Air Control Zones. The adoption of a mixing height which does not reflect diurnal or spatial variations was considered to be the best practical approach for this Study.

Approach

10. At the outset it must be stressed that the method adopted herein is only intended to be used in the comparative evaluation of the Preferred Options. As the results are based on various assumptions they should only be used in the context of this strategic study.
11. The annual values of the Hong Kong Air Quality Objectives were the initial evaluation criteria which were adopted as follows:
 - Annual SO₂ AQO is 80 µg/m³
 - Annual NO₂ AQO is 80 µg/m³
(note that 70% of NO_x is assumed to be NO₂ by weight)
12. The concentration of 40µg/m³ for both SO₂ and NO₂ was used as the trigger level rather than using the AQO directly. For details please refer to the main text.
13. It should also be noted that the modelling calculations were carried out using estimates for NO_x. Discussions in the text also refers to NO₂ so that comparison with the AQO's can be made.
14. Ten distinct Air Control Zones were defined throughout the Territory. Emission rates were calculated for each airshed for both vehicular and industrial emissions and for each Preferred Option.
15. Using a scaling factor for each of the airsheds, determined from the dimensions of each of the boxes and the selected meteorological data, the initial concentrations of SO₂ and NO_x were calculated.

16. For the assessment of traffic related air quality impacts, estimates of NO_x and SO₂ were made for the base growth scenario combined with those assumed to be development components of the Preferred Options. The cumulative impact on air quality within each airshed was assumed to be the combined total of the traffic and industrial emissions.
17. In an attempt to show the indirect or intra-territory effects of air pollution, a series of correlation factors were developed. This final estimate of NO_x and SO₂, indicated the cumulative effect of the proposed developments on air quality in each Air Control Zone and for each option at three time horizons.

Limitations to the Approach

18. While it was acknowledged that there are very real limitations to this approach, it is maintained that this method is a significant improvement on the assessment methodology previously proposed. It may also be concluded that the models provided an effective method of comparing the relative contribution of industrial and traffic related air quality both individually and on a cumulative basis for both development scenarios. Areas where potential air quality problems may arise were able to be identified and the implications on timing and phasing of the assessments was ascertained.
19. It should be noted that the models are not true representations of the "real" situation in terms of total emissions levels or meteorological conditions. The aim of this exercise is to consider the implications of locating development in certain areas and to try to determine any differences between the options specifically for this strategic study. It has been agreed that the "trigger level" for concern regarding future air quality should be 50% of the stated AQO's.
20. Intra-territory pollution factors were simplistically considered, again to indicate whether there are any significant differences between the options. Cross border air quality implications cannot however be considered, and in the cases of the NWNT and NENT these could be severe. Reasons for this include the degree of proposed developments in the Shenzhen SEZ and the less stringent pollution control standards compared with Hong Kong.
21. In this study no account has been taken of topography which is of paramount importance when considering potential air pollution problems.

Results

22. The results obtained from the LBM are given in the following Tables with summary tables provided as Tables 6.1 and 6.2 in the main text.

Table B1 - VEHICLES-RELATED EMISSION FACTOR TABLE FOR ALL SCENARIOS

Scenario (I)

Air Control Zone	SO2				
	SPB	PTPCU	Taxi	Car	Goods Vehicle
Harbour	0.192	0.232	0.100	0.002	0.285
Junk Bay	0.187	0.186	0.100	0.002	0.284
Lantau	0.198	0.241	0.100	0.002	0.290
Fanling	0.196	0.238	0.100	0.002	0.292
Port Shelter	0.187	0.186	0.100	0.002	0.284
South HK Island	0.188	0.249	0.100	0.002	0.290
Tolo	0.197	0.301	0.100	0.002	0.295
Tsuen Wan/Kwai Tsing	0.198	0.241	0.100	0.002	0.290
Tuen Mun	0.214	0.202	0.100	0.002	0.294
Yuen Long	0.195	0.175	0.100	0.002	0.288

Air Control Zone	NOX-2001				
	SPB	PTPCU	Taxi	Car	Goods Vehicle
Harbour	4.167	5.776	1.520	1.327	5.806
Junk Bay	3.826	3.423	1.520	1.327	5.743
Lantau	4.512	6.239	1.520	1.327	6.121
Fanling	4.398	6.085	1.520	1.327	6.237
Port Shelter	3.826	3.423	1.520	1.327	5.743
South HK Island	3.879	6.656	1.520	1.327	6.117
Tolo	4.46	9.306	1.520	1.327	6.433
Tsuen Wan/Kwai Tsing	4.512	6.239	1.520	1.327	6.121
Tuen Mun	5.576	4.238	1.520	1.327	6.406
Yuen Long	4.335	2.864	1.520	1.327	6.04

Air Control Zone	NOX-2006				
	SPB	PTPCU	Taxi	Car	Goods Vehicle
Harbour	3.177	5.379	1.530	1.326	4.499
Junk Bay	2.950	3.229	1.530	1.326	4.453
Lantau	3.407	5.803	1.530	1.326	4.731
Fanling	3.331	5.662	1.530	1.326	4.816
Port Shelter	2.950	3.229	1.530	1.326	4.453
South HK Island	2.986	6.184	1.530	1.326	4.728
Tolo	3.372	8.605	1.530	1.326	4.961
Tsuen Wan/Kwai Tsing	3.407	5.803	1.530	1.326	4.731
Tuen Mun	4.116	3.974	1.530	1.326	4.941
Yuen Long	3.289	2.718	1.530	1.326	4.671

Air Control Zone	NOX-2011				
	SPB	PTPCU	Taxi	Car	Goods Vehicle
Harbour	3.177	4.650	1.530	1.326	4.336
Junk Bay	2.950	2.966	1.530	1.326	4.292
Lantau	3.407	4.981	1.530	1.326	4.556
Fanling	3.331	4.871	1.530	1.326	4.637
Port Shelter	2.950	2.966	1.530	1.326	4.292
South HK Island	2.986	5.279	1.530	1.326	4.553
Tolo	3.372	7.175	1.530	1.326	4.774
Tsuen Wan/Kwai Tsing	3.407	4.981	1.530	1.326	4.556
Tuen Mun	4.116	3.549	1.530	1.326	4.755
Yuen Long	3.289	2.567	1.530	1.326	4.499

Note :

(I) Euro I/0.2% S diesel (1995) and Euro II/0.5% S diesel (1997)

Table B2 - VEHICLES-RELATED EMISSION FACTOR TABLE FOR ALL SCENARIOS

Scenario (I) & (II)

Air Control Zone	SO2				
	SPB	PTPCU	Taxi	Car	Goods Vehicle
Harbour	0.192	0.232	0.100	0.002	0.285
Junk Bay	0.187	0.186	0.100	0.002	0.284
Lantau	0.198	0.241	0.100	0.002	0.290
Fanling	0.196	0.238	0.100	0.002	0.292
Port Shelter	0.187	0.186	0.100	0.002	0.284
South HK Island	0.188	0.249	0.100	0.002	0.290
Tolo	0.197	0.301	0.100	0.002	0.295
Tsuen Wan/Kwai Tsing	0.198	0.241	0.100	0.002	0.290
Tuen Mun	0.214	0.202	0.100	0.002	0.294
Yuen Long	0.195	0.175	0.100	0.002	0.288

Air Control Zone	NOX-2001				
	SPB	PTPCU	Taxi	Car	Goods Vehicle
Harbour	4.149	5.608	1.460	1.18	5.514
Junk Bay	3.809	3.298	1.460	1.18	5.358
Lantau	4.493	6.062	1.460	1.18	5.813
Fanling	4.056	5.911	1.460	1.18	7.358
Port Shelter	3.809	3.298	1.460	1.18	5.358
South HK Island	3.862	6.472	1.460	1.18	5.808
Tolo	4.441	9.072	1.460	1.18	6.109
Tsuen Wan/Kwai Tsing	4.493	6.062	1.460	1.18	5.813
Tuen Mun	5.553	4.098	1.460	1.18	6.084
Yuen Long	4.136	2.750	1.460	1.18	5.736

Air Control Zone	NOX-2006				
	SPB	PTPCU	Taxi	Car	Goods Vehicle
Harbour	3.169	5.159	1.460	1.179	4.274
Junk Bay	2.943	3.085	1.460	1.179	4.230
Lantau	3.398	5.587	1.460	1.179	4.495
Fanling	3.107	5.431	1.460	1.180	5.635
Port Shelter	2.943	3.085	1.460	1.179	4.230
South HK Island	2.979	5.935	1.460	1.179	4.492
Tolo	3.363	8.269	1.460	1.179	4.713
Tsuen Wan/Kwai Tsing	3.398	5.567	1.460	1.179	4.495
Tuen Mun	4.103	3.804	1.460	1.179	4.695
Yuen Long	3.280	2.593	1.460	1.180	4.438

Air Control Zone	NOX-2011				
	SPB	PTPCU	Taxi	Car	Goods Vehicle
Harbour	3.169	4.465	1.460	1.179	4.274
Junk Bay	2.943	2.836	1.460	1.179	4.230
Lantau	3.398	4.786	1.460	1.179	4.495
Fanling	3.107	4.680	1.460	1.180	5.635
Port Shelter	2.943	2.836	1.460	1.179	4.230
South HK Island	2.979	5.075	1.460	1.179	4.492
Tolo	3.363	6.910	1.460	1.179	4.713
Tsuen Wan/Kwai Tsing	3.398	4.786	1.460	1.179	4.495
Tuen Mun	4.103	3.400	1.460	1.179	4.695
Yuen Long	3.280	2.449	1.460	1.180	4.438

Note :

(I) Euro I/0.2% S diesel (1995) and Euro II/0.5% S diesel (1997)

(II) Higher penalty for smoky vehicles and Inspection & Maintenance Program (1996)

Table B3 - VEHICLES-RELATED EMISSION FACTOR TABLE FOR ALL SCENARIOS

Scenario (I), (II) & (III)

Air Control Zone	SO2				
	SPB	PTPCU	Taxi	Car	Goods Vehicle
Harbour	0.192	0.232	0.000	0.000	0.285
Junk Bay	0.187	0.186	0.000	0.000	0.284
Lantau	0.198	0.241	0.000	0.000	0.290
Fanling	0.196	0.238	0.000	0.000	0.292
Port Shelter	0.187	0.186	0.000	0.000	0.284
South HK Island	0.188	0.249	0.000	0.000	0.290
Tolo	0.197	0.301	0.000	0.000	0.295
Tsuen Wan/Kwai Tsing	0.198	0.241	0.000	0.000	0.290
Tuen Mun	0.214	0.202	0.000	0.000	0.294
Yuen Long	0.195	0.175	0.000	0.000	0.288

Air Control Zone	NOX-2001				
	SPB	PTPCU	Taxi	Car	Goods Vehicle
Harbour	3.835	5.292	1.170	1.179	5.586
Junk Bay	3.476	2.864	1.170	1.179	5.528
Lantau	4.197	5.770	1.170	1.179	5.879
Fanling	3.737	5.611	1.170	1.179	7.391
Port Shelter	3.476	2.884	1.170	1.179	5.528
South HK Island	3.532	6.200	1.170	1.179	5.875
Tolo	4.142	8.933	1.170	1.179	6.169
Tsuen Wan/Kwai Tsing	4.197	5.770	1.170	1.179	5.879
Tuen Mun	5.315	3.705	1.170	1.179	6.144
Yuen Long	4.011	2.288	1.170	1.179	5.804

Air Control Zone	NOX-2006				
	SPB	PTPCU	Taxi	Car	Goods Vehicle
Harbour	2.855	4.907	1.170	1.170	4.234
Junk Bay	2.610	2.726	1.170	1.170	4.189
Lantau	3.102	5.337	1.170	1.170	4.458
Fanling	2.788	5.194	1.170	1.170	5.617
Port Shelter	2.610	2.726	1.170	1.170	4.189
South HK Island	2.649	5.723	1.170	1.170	4.455
Tolo	3.065	8.179	1.170	1.170	4.680
Tsuen Wan/Kwai Tsing	3.102	5.337	1.170	1.170	4.458
Tuen Mun	3.865	3.482	1.170	1.170	4.661
Yuen Long	2.975	2.208	1.170	1.170	4.400

Air Control Zone	NOX-2011				
	SPB	PTPCU	Taxi	Car	Goods Vehicle
Harbour	2.855	4.214	1.170	1.170	4.234
Junk Bay	2.610	2.476	1.170	1.170	4.189
Lantau	3.102	4.556	1.170	1.170	4.458
Fanling	2.788	4.442	1.170	1.170	5.617
Port Shelter	2.610	2.476	1.170	1.170	4.189
South HK Island	2.649	4.864	1.170	1.170	4.455
Tolo	3.065	6.820	1.170	1.170	4.680
Tsuen Wan/Kwai Tsing	3.102	4.556	1.170	1.170	4.458
Tuen Mun	3.865	3.078	1.170	1.170	4.661
Yuen Long	2.975	2.064	1.170	1.170	4.400

Note :

- (I) Euro I/0.2% S diesel (1995) and Euro II/0.5% S diesel (1997)
- (II) Higher penalty for smoky vehicles and Inspection & Maintenance Program (1996)
- (III) Diesel to Petrol Program (1996)

Scenario i

ALL VEHICLES

SUMMARY OF CONCENTRATION DUE TO TRAFFIC DEVELOPMENT

AIR CONTROL ZONE	SO2 Conc. C (µGM ³)						NO2 Conc. C (µGM ³)					
	STRATEGIC GROWTH						STRATEGIC GROWTH					
	2001A1C	2001AK1	2006(A)	2006(B)	2011(A)	2011(B)	2001A1C	2001AK1	2006(A)	2006(B)	2011(A)	2011(B)
1 HARBOUR	2.132	2.142	2.475	2.627	2.757	2.990	34.738	34.918	33.937	35.684	36.141	38.699
2 TSEUNG KWAN O	0.467	0.475	0.539	0.585	0.592	0.634	7.540	7.660	7.430	8.016	7.892	8.365
3 LANTAU	0.511	0.542	0.851	0.983	1.620	2.060	8.116	8.587	11.039	12.624	20.141	25.417
4 FANLING / SHA TAU KOK	0.243	0.278	0.299	0.360	0.337	0.475	3.877	4.430	3.873	4.634	4.182	5.915
5 PORT SHELTER	0.041	0.041	0.048	0.051	0.053	0.057	0.670	0.675	0.655	0.692	0.695	0.741
6 SOUTH HK IS. / LAMMA	0.241	0.250	0.279	0.283	0.415	0.460	4.141	4.282	4.011	4.420	4.247	4.346
7 TOLO	0.601	0.637	0.692	0.759	0.738	0.738	10.265	10.823	9.883	10.721	10.017	10.015
8 TSUEN WAN / KWAI CHUNG	1.516	1.564	1.821	2.080	1.941	2.073	24.453	25.192	24.036	27.017	24.579	25.868
9 TUEN MUN	1.652	1.790	2.439	3.051	2.971	4.072	26.784	28.943	32.144	39.462	37.293	50.018
10 YUEN LONG	0.704	0.764	0.789	0.877	0.842	1.099	10.936	11.838	10.103	11.145	10.421	13.631

NB—Convert NOx to NO2 by x 0.7

Scenario i & ii

ALL VEHICLES

SUMMARY OF CONCENTRATION DUE TO TRAFFIC DEVELOPMENT

AIR CONTROL ZONE	SO2 Conc. C (µGM ³)						NO2 Conc. C (µGM ³)					
	STRATEGIC GROWTH						STRATEGIC GROWTH					
	2001A1C	2001AK1	2006(A)	2006(B)	2011(A)	2011(B)	2001A1C	2001AK1	2006(A)	2006(B)	2011(A)	2011(B)
1 HARBOUR	2.132	2.142	2.475	2.627	2.757	2.990	32.835	33.004	31.962	33.621	34.784	37.292
2 TSEUNG KWAN O	0.467	0.475	0.539	0.585	0.592	0.634	7.079	7.191	6.985	7.539	7.579	8.040
3 LANTAU	0.511	0.542	0.851	0.983	1.620	2.060	7.757	8.204	10.450	11.954	19.584	24.724
4 FANLING / SHA TAU KOK	0.243	0.278	0.299	0.360	0.337	0.475	4.146	4.752	4.053	4.852	4.516	6.369
5 PORT SHELTER	0.041	0.041	0.048	0.051	0.053	0.057	0.633	0.637	0.617	0.652	0.669	0.714
6 SOUTH HK IS. / LAMMA	0.241	0.250	0.279	0.283	0.415	0.460	3.814	4.046	3.779	3.820	5.325	5.831
7 TOLO	0.601	0.637	0.692	0.759	0.738	0.738	9.782	10.320	9.371	10.175	9.746	9.761
8 TSUEN WAN / KWAI CHUNG	1.516	1.564	1.821	2.080	1.941	2.073	23.167	23.867	22.714	25.550	23.859	25.148
9 TUEN MUN	1.652	1.790	2.439	3.051	2.971	4.072	25.404	27.445	30.399	37.357	36.331	48.876
10 YUEN LONG	0.704	0.764	0.789	0.877	0.842	1.099	10.369	11.227	9.552	10.544	10.152	13.286

NB—Convert NOx to NO2 by x 0.7

Scenario i, ii & iii

ALL VEHICLES

SUMMARY OF CONCENTRATION DUE TO TRAFFIC DEVELOPMENT

AIR CONTROL ZONE	SO2 Conc. C (µGM ³)						NO2 Conc. C (µGM ³)					
	STRATEGIC GROWTH						STRATEGIC GROWTH					
	2001A1C	2001AK1	2006(A)	2006(B)	2011(A)	2011(B)	2001A1C	2001AK1	2006(A)	2006(B)	2011(A)	2011(B)
1 HARBOUR	1.472	1.474	1.669	1.775	1.817	1.990	32.163	32.313	30.647	32.246	33.254	35.692
2 TSEUNG KWAN O	0.324	0.330	0.360	0.389	0.390	0.419	6.982	7.094	6.691	7.217	7.246	7.689
3 LANTAU	0.348	0.371	0.604	0.702	1.187	1.495	7.546	7.988	10.047	11.509	16.950	23.903
4 FANLING / SHA TAU KOK	0.216	0.249	0.260	0.317	0.296	0.417	4.121	4.727	3.978	4.770	4.440	6.264
5 PORT SHELTER	0.028	0.029	0.032	0.034	0.035	0.038	0.621	0.625	0.590	0.625	0.639	0.683
6 SOUTH HK IS. / LAMMA	0.178	0.185	0.201	0.204	0.301	0.336	3.848	3.980	3.644	3.683	5.148	5.643
7 TOLO	0.464	0.494	0.520	0.576	0.563	0.561	9.684	10.224	9.113	9.904	8.493	9.502
8 TSUEN WAN / KWAI CHUNG	1.137	1.177	1.371	1.580	1.444	1.552	22.921	23.627	22.091	24.882	23.154	24.417
9 TUEN MUN	1.252	1.366	1.878	2.391	2.319	3.240	25.029	27.088	29.572	36.456	35.441	47.853
10 YUEN LONG	0.548	0.597	0.605	0.677	0.654	0.863	10.336	11.201	9.316	10.292	9.923	13.006

NB—Convert NOx to NO2 by x 0.7

a1

AIR CONTROL ZONE	2001A													
	SO2							NO2						
	INDUSTRY ALL IND	VEHICLE					TOTAL	INDUSTRY ALL IND	VEHICLE					TOTAL
	SPB	PTPCU	TAXI	CAR	GV			SPB	PTPCU	TAXI	CAR	GV		
1 HARBOUR	32.634	0.036	0.203	0.397	0.009	1.539	34.818	5.772	0.545	3.517	4.222	4.063	21.980	40.098
2 TSEUNG KWAN O	7.799	0.007	0.040	0.082	0.002	0.347	8.277	1.380	0.100	0.818	0.876	0.910	4.930	8.815
3 LANTAU	7.853	0.054	0.024	0.100	0.002	0.340	8.374	1.389	0.885	0.422	1.067	0.891	5.040	9.674
4 FANLING / SHA TAU KOK	2.528	0.005	0.013	0.018	0.000	0.214	2.779	0.447	0.089	0.218	0.194	0.221	3.202	4.371
5 PORT SHELTER	3.654	0.001	0.009	0.014	0.001	0.068	3.746	0.646	0.010	0.133	0.147	0.254	0.968	2.159
6 SOUTH HK ISL / LAMMA	3.657	0.006	0.033	0.032	0.001	0.180	3.898	0.649	0.083	0.606	0.345	0.418	2.350	4.451
7 TOLO	7.964	0.018	0.052	0.076	0.002	0.484	8.597	1.409	0.290	1.113	0.811	0.915	7.366	11.905
8 TSUEN WAN / KWAI TSING	28.079	0.043	0.101	0.154	0.004	1.175	29.556	4.967	0.684	1.840	1.642	2.003	17.368	28.504
9 TUEN MUN	33.789	0.051	0.135	0.205	0.005	1.253	35.437	5.977	0.880	2.095	2.182	2.159	18.798	32.092
10 YUEN LONG	3.389	0.014	0.019	0.056	0.001	0.614	4.094	0.599	0.227	0.236	0.595	0.629	9.036	11.323

AIR CONTROL ZONE	2001A													
	SO2							NO2						
	INDUSTRY IND-IO OPTION A	VEHICLE					TOTAL	INDUSTRY IND-IO OPTION A	VEHICLE					TOTAL
	SPB	PTPCU	TAXI	CAR	GV			SPB	PTPCU	TAXI	CAR	GV		
1 HARBOUR	21.436	0.036	0.203	0.397	0.009	1.539	23.620	3.852	0.545	3.517	4.222	4.063	21.980	38.178
2 TSEUNG KWAN O	5.972	0.007	0.040	0.082	0.002	0.347	6.450	1.009	0.100	0.818	0.876	0.910	4.930	6.444
3 LANTAU	7.791	0.054	0.024	0.100	0.002	0.340	8.312	1.367	0.885	0.422	1.067	0.891	5.040	9.652
4 FANLING / SHA TAU KOK	2.387	0.005	0.013	0.018	0.000	0.214	2.638	0.418	0.089	0.218	0.194	0.221	3.202	4.342
5 PORT SHELTER	3.398	0.001	0.009	0.014	0.001	0.068	3.490	0.733	0.010	0.133	0.147	0.254	0.968	2.246
6 SOUTH HK ISL / LAMMA	2.803	0.006	0.033	0.032	0.001	0.160	3.035	0.496	0.083	0.606	0.345	0.418	2.350	4.298
7 TOLO	7.413	0.018	0.052	0.076	0.002	0.484	8.046	1.306	0.290	1.113	0.811	0.915	7.366	11.802
8 TSUEN WAN / KWAI TSING	16.945	0.043	0.101	0.154	0.004	1.175	18.422	3.143	0.684	1.840	1.642	2.003	17.368	26.680
9 TUEN MUN	27.797	0.051	0.135	0.205	0.005	1.253	29.445	4.296	0.880	2.095	2.182	2.159	18.798	30.411
10 YUEN LONG	3.243	0.014	0.018	0.056	0.001	0.614	3.948	0.561	0.227	0.236	0.595	0.629	9.036	11.285

AIR CONTROL ZONE	2001A													
	SO2							NO2						
	INDUSTRY IND-IO OPTION B	VEHICLE					TOTAL	INDUSTRY IND-IO OPTION B	VEHICLE					TOTAL
	SPB	PTPCU	TAXI	CAR	GV			SPB	PTPCU	TAXI	CAR	GV		
1 HARBOUR	19.278	0.036	0.203	0.397	0.009	1.539	21.462	3.410	0.545	3.517	4.222	4.063	21.980	37.736
2 TSEUNG KWAN O	5.489	0.007	0.040	0.082	0.002	0.347	5.947	0.967	0.100	0.818	0.876	0.910	4.930	6.402
3 LANTAU	7.762	0.054	0.024	0.100	0.002	0.340	8.303	1.376	0.885	0.422	1.067	0.891	5.040	9.661
4 FANLING / SHA TAU KOK	2.356	0.005	0.013	0.018	0.000	0.214	2.607	0.417	0.089	0.218	0.194	0.221	3.202	4.341
5 PORT SHELTER	3.348	0.001	0.009	0.014	0.001	0.068	3.440	0.592	0.010	0.133	0.147	0.254	0.968	2.105
6 SOUTH HK ISL / LAMMA	2.709	0.006	0.033	0.032	0.001	0.180	2.941	0.479	0.083	0.606	0.345	0.418	2.350	4.281
7 TOLO	7.318	0.018	0.052	0.076	0.002	0.484	7.851	1.294	0.290	1.113	0.811	0.915	7.366	11.790
8 TSUEN WAN / KWAI TSING	14.817	0.043	0.101	0.154	0.004	1.175	16.294	2.621	0.684	1.840	1.642	2.003	17.368	26.158
9 TUEN MUN	26.720	0.051	0.135	0.205	0.005	1.253	28.398	4.726	0.880	2.095	2.182	2.159	18.798	30.641
10 YUEN LONG	3.207	0.014	0.018	0.056	0.001	0.614	3.912	0.567	0.227	0.236	0.595	0.629	9.036	11.291

a2

AIR CONTROL ZONE	2001B													
	SO2							NO2						
	INDUSTRY ALL IND	SPB	PTPCU	TAXI	CAR	GV	TOTAL	INDUSTRY ALL IND	SPB	PTPCU	TAXI	CAR	GV	TOTAL
1 HARBOUR	32.986	0.036	0.205	0.409	0.009	1.535	35.180	5.835	0.552	3.546	4.348	4.169	21.919	40.370
2 TSEUNG KWAN O	7.854	0.007	0.040	0.084	0.002	0.352	8.339	1.389	0.100	0.623	0.898	0.945	5.002	8.957
3 LANTAU	8.493	0.056	0.024	0.105	0.002	0.361	9.040	1.502	0.895	0.422	1.116	0.924	5.340	10.199
4 FANLING / SHA TAU KOK	2.545	0.006	0.013	0.018	0.001	0.237	2.820	0.450	0.090	0.226	0.195	0.238	3.552	4.752
5 PORT SHELTER	3.660	0.001	0.009	0.014	0.001	0.070	3.754	0.847	0.010	0.135	0.153	0.269	0.989	2.204
6 SOUTH HK ISL / LAMMA	3.679	0.006	0.033	0.033	0.001	0.188	3.920	0.851	0.085	0.616	0.348	0.424	2.468	4.592
7 TOLO	8.093	0.018	0.053	0.077	0.002	0.518	8.762	1.432	0.293	1.120	0.820	0.956	7.884	12.505
8 TSUEN WAN / KWAI TSING	28.356	0.044	0.101	0.156	0.004	1.212	29.873	5.016	0.694	1.846	1.660	2.053	17.921	29.160
9 TUEN MUN	33.920	0.052	0.135	0.206	0.005	1.331	35.649	6.000	0.893	2.096	2.191	2.275	19.988	33.444
10 YUEN LONG	3.390	0.014	0.020	0.058	0.001	0.655	4.139	0.600	0.228	0.239	0.615	0.677	9.638	11.998

AIR CONTROL ZONE	2001B													
	SO2							NO2						
	INDUSTRY IND-IO OPTION A	SPB	PTPCU	TAXI	CAR	GV	TOTAL	INDUSTRY IND-IO OPTION A	SPB	PTPCU	TAXI	CAR	GV	TOTAL
1 HARBOUR	20.978	0.036	0.205	0.409	0.009	1.535	23.172	3.781	0.552	3.546	4.348	4.169	21.919	38.316
2 TSEUNG KWAN O	3.997	0.007	0.040	0.084	0.002	0.352	4.482	0.859	0.100	0.623	0.898	0.945	5.002	8.227
3 LANTAU	8.431	0.056	0.024	0.105	0.002	0.361	8.978	1.480	0.895	0.422	1.116	0.924	5.340	10.177
4 FANLING / SHA TAU KOK	2.404	0.006	0.013	0.018	0.001	0.237	2.679	0.421	0.090	0.226	0.195	0.238	3.552	4.723
5 PORT SHELTER	3.358	0.001	0.009	0.014	0.001	0.070	3.452	0.715	0.010	0.135	0.153	0.269	0.989	2.272
6 SOUTH HK ISL / LAMMA	2.815	0.006	0.033	0.033	0.001	0.188	3.056	0.498	0.085	0.616	0.348	0.424	2.468	4.439
7 TOLO	7.543	0.018	0.053	0.077	0.002	0.518	8.212	1.330	0.293	1.120	0.820	0.956	7.884	12.403
8 TSUEN WAN / KWAI TSING	17.222	0.044	0.101	0.156	0.004	1.212	18.739	3.195	0.694	1.846	1.660	2.053	17.921	27.369
9 TUEN MUN	27.928	0.052	0.135	0.206	0.005	1.331	29.657	4.309	0.893	2.096	2.191	2.275	19.988	31.753
10 YUEN LONG	3.244	0.014	0.020	0.058	0.001	0.655	3.993	0.561	0.228	0.239	0.615	0.677	9.638	11.959

AIR CONTROL ZONE	2001B													
	SO2							NO2						
	INDUSTRY IND-IO OPTION B	SPB	PTPCU	TAXI	CAR	GV	TOTAL	INDUSTRY IND-IO OPTION B	SPB	PTPCU	TAXI	CAR	GV	TOTAL
1 HARBOUR	19.630	0.036	0.205	0.409	0.009	1.535	21.824	3.472	0.552	3.546	4.348	4.169	21.919	38.007
2 TSEUNG KWAN O	5.524	0.007	0.040	0.084	0.002	0.352	6.009	0.977	0.100	0.623	0.898	0.945	5.002	8.545
3 LANTAU	8.422	0.056	0.024	0.105	0.002	0.361	8.969	1.490	0.895	0.422	1.116	0.924	5.340	10.187
4 FANLING / SHA TAU KOK	2.372	0.006	0.013	0.018	0.001	0.237	2.647	0.420	0.090	0.226	0.195	0.238	3.552	4.722
5 PORT SHELTER	3.354	0.001	0.009	0.014	0.001	0.070	3.448	0.593	0.010	0.135	0.153	0.269	0.989	2.150
6 SOUTH HK ISL / LAMMA	2.721	0.006	0.033	0.033	0.001	0.188	2.962	0.481	0.085	0.616	0.348	0.424	2.468	4.422
7 TOLO	7.448	0.018	0.053	0.077	0.002	0.518	8.117	1.317	0.293	1.120	0.820	0.956	7.884	12.390
8 TSUEN WAN / KWAI TSING	15.094	0.044	0.101	0.156	0.004	1.212	16.611	2.670	0.694	1.846	1.660	2.053	17.921	26.844
9 TUEN MUN	26.851	0.052	0.135	0.206	0.005	1.331	28.580	4.750	0.893	2.096	2.191	2.275	19.988	32.194
10 YUEN LONG	3.208	0.014	0.020	0.058	0.001	0.655	3.957	0.567	0.228	0.239	0.615	0.677	9.638	11.965

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AIR CONTROL ZONE	2006A													
	SO2							NO2						
	INDUSTRY ALL IND	VEHICLE					TOTAL	INDUSTRY ALL IND	VEHICLE					TOTAL
	SPB	PTPCU	TAXI	CAR	GV		SPB	PTPCU	TAXI	CAR	GV			
1 HARBOUR	33.226	0.040	0.214	0.499	0.009	1.748	35.737	5.877	0.459	3.458	5.348	4.290	19.344	38.776
2 TSEUNG KWAN O	8.377	0.007	0.043	0.109	0.002	0.396	8.934	1.482	0.082	0.620	1.163	1.049	4.364	6.761
3 LANTAU	9.073	0.067	0.031	0.132	0.003	0.580	9.885	1.605	0.807	0.503	1.414	1.162	6.599	12.060
4 FANLING / SHA TAU KOK	2.591	0.007	0.015	0.023	0.001	0.296	2.932	0.458	0.082	0.235	0.247	0.296	3.380	4.899
5 PORT SHELTER	3.673	0.001	0.011	0.019	0.001	0.085	3.789	0.650	0.009	0.150	0.202	0.304	0.936	2.251
6 SOUTH HK ISL / LAMMA	3.682	0.006	0.034	0.041	0.001	0.182	3.948	0.651	0.068	0.582	0.438	0.412	2.061	4.221
7 TOLO	8.233	0.021	0.057	0.100	0.002	0.581	8.994	1.456	0.252	1.120	1.068	1.114	6.815	11.624
8 TSUEN WAN / KWAI TSING	28.389	0.048	0.105	0.174	0.005	1.403	30.104	5.018	0.579	1.790	1.866	2.327	16.024	27.604
9 TUEN MUN	34.240	0.060	0.145	0.245	0.006	1.522	36.219	6.057	0.774	2.109	2.629	2.846	16.802	31.217
10 YUEN LONG	4.171	0.016	0.023	0.075	0.002	0.703	4.989	0.738	0.197	0.259	0.800	0.900	7.958	10.852

AIR CONTROL ZONE	2006A													
	SO2							NO2						
	INDUSTRY IND-IO OPTION A	VEHICLE					TOTAL	INDUSTRY IND-IO OPTION A	VEHICLE					TOTAL
	SPB	PTPCU	TAXI	CAR	GV		SPB	PTPCU	TAXI	CAR	GV			
1 HARBOUR	20.789	0.040	0.214	0.499	0.009	1.748	23.300	3.751	0.459	3.458	5.348	4.290	19.344	36.650
2 TSEUNG KWAN O	3.448	0.007	0.043	0.109	0.002	0.396	4.003	0.592	0.082	0.620	1.163	1.049	4.364	7.841
3 LANTAU	9.010	0.067	0.031	0.132	0.003	0.580	9.822	1.583	0.807	0.503	1.414	1.162	6.599	12.068
4 FANLING / SHA TAU KOK	2.449	0.007	0.015	0.023	0.001	0.296	2.790	0.429	0.082	0.235	0.247	0.296	3.380	4.670
5 PORT SHELTER	3.348	0.001	0.011	0.019	0.001	0.085	3.462	0.710	0.009	0.150	0.202	0.304	0.936	2.311
6 SOUTH HK ISL / LAMMA	2.918	0.006	0.034	0.041	0.001	0.182	3.082	0.498	0.068	0.582	0.438	0.412	2.061	4.068
7 TOLO	7.982	0.021	0.057	0.100	0.002	0.581	8.443	1.354	0.252	1.120	1.068	1.114	6.815	11.722
8 TSUEN WAN / KWAI TSING	17.234	0.048	0.105	0.174	0.005	1.403	18.969	3.200	0.578	1.790	1.866	2.327	16.024	25.786
9 TUEN MUN	28.248	0.060	0.145	0.245	0.006	1.522	30.227	4.365	0.774	2.109	2.629	2.846	16.802	29.525
10 YUEN LONG	4.025	0.016	0.023	0.075	0.002	0.703	4.843	0.698	0.197	0.259	0.800	0.900	7.958	10.813

AIR CONTROL ZONE	2006A													
	SO2							NO2						
	INDUSTRY IND-IO OPTION B	VEHICLE					TOTAL	INDUSTRY IND-IO OPTION B	VEHICLE					TOTAL
	SPB	PTPCU	TAXI	CAR	GV		SPB	PTPCU	TAXI	CAR	GV			
1 HARBOUR	19.870	0.040	0.214	0.499	0.009	1.748	22.381	3.515	0.459	3.458	5.348	4.290	19.344	36.414
2 TSEUNG KWAN O	6.047	0.007	0.043	0.109	0.002	0.396	6.604	1.070	0.082	0.620	1.163	1.049	4.364	8.349
3 LANTAU	9.002	0.067	0.031	0.132	0.003	0.580	9.614	1.592	0.807	0.503	1.414	1.162	6.599	12.077
4 FANLING / SHA TAU KOK	2.418	0.007	0.015	0.023	0.001	0.296	2.759	0.428	0.082	0.235	0.247	0.296	3.380	4.869
5 PORT SHELTER	3.357	0.001	0.011	0.019	0.001	0.085	3.483	0.596	0.009	0.150	0.202	0.304	0.936	2.197
6 SOUTH HK ISL / LAMMA	2.723	0.006	0.034	0.041	0.001	0.182	2.987	0.482	0.068	0.582	0.438	0.412	2.061	4.052
7 TOLO	7.587	0.021	0.057	0.100	0.002	0.581	8.348	1.342	0.252	1.120	1.068	1.114	6.815	11.710
8 TSUEN WAN / KWAI TSING	15.107	0.048	0.105	0.174	0.005	1.403	16.842	2.872	0.579	1.790	1.866	2.327	16.024	25.258
9 TUEN MUN	27.171	0.060	0.145	0.245	0.006	1.522	29.150	4.806	0.774	2.109	2.629	2.846	16.802	29.966
10 YUEN LONG	3.988	0.016	0.023	0.075	0.002	0.703	4.806	0.705	0.197	0.259	0.800	0.900	7.958	10.819

b2

AIR CONTROL ZONE	2006B													
	SO2							NO2						
	INDUSTRY ALL IND	VEHICLE					TOTAL	INDUSTRY ALL IND	VEHICLE					TOTAL
	SPB	PTPCU	TAXI	CAR	GV		SPB	PTPCU	TAXI	CAR	GV			
1 HARBOUR	34.801	0.043	0.215	0.513	0.010	1.870	37.451	6.156	0.495	3.462	5.498	4.410	20.692	40.713
2 TSEUNG KWAN O	9.522	0.008	0.045	0.117	0.002	0.422	10.116	1.684	0.090	0.644	1.255	1.118	4.643	9.434
3 LANTAU	8.321	0.074	0.030	0.146	0.003	0.688	10.261	1.649	0.892	0.492	1.561	1.244	7.805	13.642
4 FANLING / SHA TAU KOK	3.200	0.008	0.015	0.024	0.001	0.314	3.562	0.566	0.099	0.240	0.258	0.314	3.557	5.034
5 PORT SHELTER	3.717	0.001	0.011	0.020	0.001	0.090	3.840	0.658	0.009	0.154	0.217	0.318	0.988	2.341
6 SOUTH HK ISL / LAMMA	3.715	0.006	0.034	0.041	0.001	0.182	3.979	0.657	0.070	0.593	0.435	0.404	2.063	4.221
7 TOLO	8.566	0.023	0.057	0.101	0.002	0.601	8.350	1.515	0.278	1.115	1.080	1.123	7.050	12.159
8 TSUEN WAN / KWAI TSING	28.865	0.054	0.108	0.174	0.005	1.626	30.833	5.106	0.649	1.840	1.869	2.372	18.585	30.400
9 TUEN MUN	34.836	0.078	0.152	0.250	0.006	2.512	37.832	6.182	0.976	2.199	2.676	2.957	27.462	42.431
10 YUEN LONG	5.789	0.019	0.023	0.076	0.002	0.789	6.679	1.024	0.226	0.269	0.817	0.940	8.686	11.962

AIR CONTROL ZONE	2006B													
	SO2							NO2						
	INDUSTRY IND-IO OPTION A	VEHICLE					TOTAL	INDUSTRY IND-IO OPTION A	VEHICLE					TOTAL
	SPB	PTPCU	TAXI	CAR	GV		SPB	PTPCU	TAXI	CAR	GV			
1 HARBOUR	22.369	0.043	0.215	0.513	0.010	1.870	25.019	4.025	0.495	3.462	5.498	4.410	20.692	38.582
2 TSEUNG KWAN O	4.603	0.008	0.045	0.117	0.002	0.422	5.197	0.766	0.090	0.644	1.255	1.118	4.643	8.516
3 LANTAU	9.258	0.074	0.030	0.146	0.003	0.688	10.198	1.627	0.892	0.492	1.561	1.244	7.805	13.620
4 FANLING / SHA TAU KOK	3.058	0.008	0.015	0.024	0.001	0.314	3.420	0.537	0.099	0.240	0.258	0.314	3.557	5.005
5 PORT SHELTER	3.390	0.001	0.011	0.020	0.001	0.090	3.513	0.731	0.009	0.154	0.217	0.318	0.986	2.414
6 SOUTH HK ISL / LAMMA	2.851	0.006	0.034	0.041	0.001	0.182	3.115	0.504	0.070	0.593	0.435	0.404	2.063	4.068
7 TOLO	8.015	0.023	0.057	0.101	0.002	0.601	8.799	1.417	0.276	1.115	1.080	1.123	7.050	12.061
8 TSUEN WAN / KWAI TSING	17.731	0.054	0.108	0.174	0.005	1.626	19.699	3.294	0.649	1.840	1.869	2.372	18.585	28.588
9 TUEN MUN	28.843	0.076	0.152	0.250	0.006	2.512	31.839	4.452	0.976	2.199	2.676	2.957	27.462	40.721
10 YUEN LONG	5.643	0.019	0.023	0.076	0.002	0.789	6.533	0.986	0.226	0.269	0.817	0.940	8.686	11.924

AIR CONTROL ZONE	2006B													
	SO2							NO2						
	INDUSTRY IND-IO OPTION B	VEHICLE					TOTAL	INDUSTRY IND-IO OPTION B	VEHICLE					TOTAL
	SPB	PTPCU	TAXI	CAR	GV		SPB	PTPCU	TAXI	CAR	GV			
1 HARBOUR	21.445	0.043	0.215	0.513	0.010	1.870	24.095	3.793	0.495	3.462	5.498	4.410	20.692	38.350
2 TSEUNG KWAN O	7.182	0.008	0.045	0.117	0.002	0.422	7.786	1.272	0.090	0.644	1.255	1.118	4.643	9.022
3 LANTAU	8.250	0.074	0.030	0.146	0.003	0.688	10.190	1.636	0.892	0.492	1.561	1.244	7.805	13.629
4 FANLING / SHA TAU KOK	3.027	0.008	0.015	0.024	0.001	0.314	3.389	0.535	0.099	0.240	0.258	0.314	3.557	5.003
5 PORT SHELTER	3.411	0.001	0.011	0.020	0.001	0.090	3.534	0.803	0.009	0.154	0.217	0.318	0.986	2.286
6 SOUTH HK ISL / LAMMA	2.757	0.006	0.034	0.041	0.001	0.182	3.021	0.488	0.070	0.593	0.435	0.404	2.063	4.052
7 TOLO	7.820	0.023	0.057	0.101	0.002	0.601	8.704	1.401	0.278	1.115	1.080	1.123	7.050	12.045
8 TSUEN WAN / KWAI TSING	15.603	0.054	0.108	0.174	0.005	1.626	17.571	2.760	0.649	1.840	1.869	2.372	18.585	28.054
9 TUEN MUN	27.766	0.076	0.152	0.250	0.006	2.512	30.762	4.911	0.976	2.199	2.676	2.957	27.462	41.180
10 YUEN LONG	5.607	0.019	0.023	0.076	0.002	0.789	6.497	0.992	0.226	0.269	0.817	0.940	8.686	11.930

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AIR CONTROL ZONE	2011A													
	SO2							NO2						
	INDUSTRY ALL IND	SPB	PTPCU	VEHICLE			TOTAL	INDUSTRY ALL IND	SPB	PTPCU	VEHICLE			TOTAL
			TAXI	CAR	GV					TAXI	CAR	GV		
1 HARBOUR	35.536	0.044	0.206	0.604	0.009	1.950	38.349	6.286	0.504	2.874	6.467	4.330	20.794	41.256
2 TSEUNG KWAN O	9.170	0.006	0.044	0.129	0.002	0.448	9.802	1.622	0.088	0.564	1.378	1.117	4.759	9.529
3 LANTAU	9.892	0.089	0.042	0.188	0.004	0.749	10.964	1.750	1.070	0.596	2.018	1.743	8.251	15.428
4 FANLING / SHA TAU KOK	2.843	0.007	0.015	0.024	0.001	0.387	3.277	0.503	0.085	0.208	0.258	0.299	4.308	5.661
5 PORT SHELTER	3.722	0.001	0.012	0.023	0.001	0.094	3.852	0.658	0.009	0.142	0.244	0.318	0.999	2.370
6 SOUTH HK ISL. / LAMMA	4.134	0.010	0.030	0.056	0.001	0.280	4.511	0.731	0.115	0.443	0.597	0.547	3.064	5.497
7 TOLO	8.719	0.022	0.055	0.097	0.002	0.700	9.594	1.542	0.259	0.895	1.036	1.107	7.904	12.742
8 TSUEN WAN / KWAI TSING	28.861	0.051	0.107	0.205	0.005	1.501	31.729	5.282	0.610	1.553	2.193	2.459	18.516	28.613
9 TUEN MUN	35.198	0.063	0.146	0.260	0.007	1.893	37.367	6.226	0.809	1.880	2.785	3.020	18.892	33.612
10 YUEN LONG	4.977	0.017	0.023	0.078	0.002	0.806	5.903	0.880	0.199	0.246	0.838	0.923	8.833	11.920

AIR CONTROL ZONE	2011A													
	SO2							NO2						
	INDUSTRY IND-IO OPTION A	SPB	PTPCU	VEHICLE			TOTAL	INDUSTRY IND-IO OPTION A	SPB	PTPCU	VEHICLE			TOTAL
			TAXI	CAR	GV					TAXI	CAR	GV		
1 HARBOUR	22.993	0.044	0.206	0.604	0.009	1.950	25.906	4.139	0.504	2.874	6.467	4.330	20.794	39.109
2 TSEUNG KWAN O	4.516	0.006	0.044	0.129	0.002	0.448	5.148	0.789	0.088	0.564	1.378	1.117	4.759	8.896
3 LANTAU	9.713	0.089	0.042	0.188	0.004	0.749	10.785	1.707	1.070	0.596	2.018	1.743	8.251	15.385
4 FANLING / SHA TAU KOK	2.655	0.007	0.015	0.024	0.001	0.387	3.089	0.466	0.085	0.208	0.258	0.299	4.308	5.624
5 PORT SHELTER	3.045	0.001	0.012	0.023	0.001	0.094	3.175	0.736	0.009	0.142	0.244	0.318	0.999	2.448
6 SOUTH HK ISL. / LAMMA	2.607	0.010	0.030	0.056	0.001	0.280	2.984	0.538	0.115	0.443	0.597	0.547	3.064	5.304
7 TOLO	8.123	0.022	0.055	0.097	0.002	0.700	8.998	1.437	0.259	0.895	1.036	1.107	7.904	12.637
8 TSUEN WAN / KWAI TSING	17.973	0.051	0.107	0.205	0.005	1.501	19.841	3.486	0.610	1.553	2.193	2.459	16.516	26.797
9 TUEN MUN	29.184	0.063	0.146	0.260	0.007	1.893	31.353	4.476	0.809	1.880	2.785	3.020	18.892	31.862
10 YUEN LONG	4.828	0.017	0.023	0.078	0.002	0.806	5.754	0.841	0.199	0.246	0.838	0.923	8.833	11.681

AIR CONTROL ZONE	2011A													
	SO2							NO2						
	INDUSTRY IND-IO OPTION B	SPB	PTPCU	VEHICLE			TOTAL	INDUSTRY IND-IO OPTION B	SPB	PTPCU	VEHICLE			TOTAL
			TAXI	CAR	GV					TAXI	CAR	GV		
1 HARBOUR	21.861	0.044	0.206	0.604	0.009	1.950	24.674	3.867	0.504	2.874	6.467	4.330	20.794	38.637
2 TSEUNG KWAN O	6.801	0.006	0.044	0.129	0.002	0.448	7.433	1.203	0.088	0.564	1.378	1.117	4.759	9.110
3 LANTAU	9.704	0.089	0.042	0.188	0.004	0.749	10.776	1.716	1.070	0.596	2.018	1.743	8.251	15.384
4 FANLING / SHA TAU KOK	2.823	0.007	0.015	0.024	0.001	0.387	3.057	0.484	0.085	0.208	0.258	0.299	4.308	5.622
5 PORT SHELTER	3.410	0.001	0.012	0.023	0.001	0.094	3.540	0.603	0.009	0.142	0.244	0.318	0.999	2.315
6 SOUTH HK ISL. / LAMMA	2.948	0.010	0.030	0.056	0.001	0.280	3.325	0.521	0.115	0.443	0.597	0.547	3.064	5.287
7 TOLO	8.028	0.022	0.055	0.097	0.002	0.700	8.903	1.420	0.259	0.895	1.036	1.107	7.904	12.620
8 TSUEN WAN / KWAI TSING	18.553	0.051	0.107	0.205	0.005	1.501	18.421	2.928	0.610	1.553	2.193	2.459	16.516	25.259
9 TUEN MUN	28.108	0.063	0.146	0.260	0.007	1.893	30.277	4.972	0.809	1.880	2.785	3.020	18.892	32.358
10 YUEN LONG	4.792	0.017	0.023	0.078	0.002	0.806	5.718	0.848	0.199	0.246	0.838	0.923	8.833	11.888

AIR CONTROL ZONE	2011B													
	SO2							NO2						
	INDUSTRY ALL IND	SPB	PTPCU	VEHICLE			TOTAL	INDUSTRY ALL IND	SPB	PTPCU	VEHICLE			TOTAL
			TAXI	CAR	GV					TAXI	CAR	GV		
1 HARBOUR	37.829	0.048	0.210	0.845	0.010	2.166	40.709	6.656	0.557	2.922	6.911	4.845	23.104	44.896
2 TSEUNG KWAN O	11.023	0.009	0.046	0.136	0.003	0.470	11.685	1.950	0.098	0.578	1.452	1.188	4.991	10.257
3 LANTAU	12.798	0.111	0.045	0.268	0.005	1.579	14.805	2.264	1.336	0.639	2.869	2.387	17.397	26.891
4 FANLING / SHA TAU KOK	4.362	0.010	0.016	0.034	0.001	0.396	4.819	0.771	0.128	0.218	0.363	0.397	4.424	6.301
5 PORT SHELTER	4.001	0.001	0.012	0.025	0.001	0.101	4.140	0.708	0.010	0.142	0.266	0.324	1.074	2.524
6 SOUTH HK ISL / LAMMA	4.164	0.011	0.031	0.059	0.001	0.329	4.595	0.736	0.120	0.450	0.634	0.630	3.598	6.168
7 TOLO	9.448	0.023	0.055	0.099	0.002	0.669	10.295	1.671	0.279	0.895	1.064	1.148	7.554	12.611
8 TSUEN WAN / KWAI TSING	30.158	0.058	0.108	0.208	0.005	1.739	32.278	5.334	0.701	1.570	2.224	2.519	19.136	31.484
9 TUEN MUN	36.156	0.096	0.148	0.281	0.007	3.590	40.277	6.395	1.239	1.896	3.005	3.301	40.330	56.166
10 YUEN LONG	7.670	0.020	0.026	0.083	0.002	0.868	8.688	1.357	0.242	0.272	0.890	1.008	9.532	13.300

AIR CONTROL ZONE	2011B													
	SO2							NO2						
	INDUSTRY IND-IO OPTION A	SPB	PTPCU	VEHICLE			TOTAL	INDUSTRY IND-IO OPTION A	SPB	PTPCU	VEHICLE			TOTAL
			TAXI	CAR	GV					TAXI	CAR	GV		
1 HARBOUR	25.430	0.048	0.210	0.845	0.010	2.166	28.610	4.556	0.557	2.922	6.911	4.845	23.104	42.896
2 TSEUNG KWAN O	7.578	0.009	0.046	0.136	0.003	0.470	8.238	1.289	0.098	0.578	1.452	1.188	4.991	9.596
3 LANTAU	12.735	0.111	0.045	0.268	0.005	1.579	14.742	2.242	1.336	0.639	2.869	2.387	17.397	26.889
4 FANLING / SHA TAU KOK	4.145	0.010	0.016	0.034	0.001	0.396	4.802	0.728	0.128	0.218	0.363	0.397	4.424	6.259
5 PORT SHELTER	3.702	0.001	0.012	0.025	0.001	0.101	3.841	0.814	0.010	0.142	0.266	0.324	1.074	2.630
6 SOUTH HK ISL / LAMMA	3.034	0.011	0.031	0.059	0.001	0.329	3.465	0.537	0.120	0.450	0.634	0.630	3.598	5.969
7 TOLO	8.839	0.023	0.055	0.099	0.002	0.669	9.688	1.567	0.279	0.895	1.064	1.148	7.554	12.507
8 TSUEN WAN / KWAI TSING	18.970	0.058	0.108	0.208	0.005	1.739	21.088	3.528	0.701	1.570	2.224	2.519	19.136	29.678
9 TUEN MUN	30.145	0.096	0.148	0.281	0.007	3.590	34.266	4.638	1.239	1.896	3.005	3.301	40.330	54.409
10 YUEN LONG	7.521	0.020	0.026	0.083	0.002	0.868	8.519	1.319	0.242	0.272	0.890	1.008	9.532	13.262

AIR CONTROL ZONE	2011B													
	SO2							NO2						
	INDUSTRY IND-IO OPTION B	SPB	PTPCU	VEHICLE			TOTAL	INDUSTRY IND-IO OPTION B	SPB	PTPCU	VEHICLE			TOTAL
			TAXI	CAR	GV					TAXI	CAR	GV		
1 HARBOUR	23.900	0.048	0.210	0.845	0.010	2.166	26.980	4.227	0.557	2.922	6.911	4.845	23.104	42.567
2 TSEUNG KWAN O	8.646	0.009	0.046	0.136	0.003	0.470	9.308	1.529	0.098	0.578	1.452	1.188	4.991	9.836
3 LANTAU	12.726	0.111	0.045	0.268	0.005	1.579	14.733	2.251	1.336	0.639	2.869	2.387	17.397	26.878
4 FANLING / SHA TAU KOK	4.113	0.010	0.016	0.034	0.001	0.396	4.570	0.728	0.128	0.218	0.363	0.397	4.424	6.258
5 PORT SHELTER	3.688	0.001	0.012	0.025	0.001	0.101	3.827	0.852	0.010	0.142	0.266	0.324	1.074	2.468
6 SOUTH HK ISL / LAMMA	2.940	0.011	0.031	0.059	0.001	0.329	3.371	0.520	0.120	0.450	0.634	0.630	3.598	5.952
7 TOLO	8.744	0.023	0.055	0.099	0.002	0.669	9.593	1.547	0.279	0.895	1.064	1.148	7.554	12.487
8 TSUEN WAN / KWAI TSING	16.842	0.058	0.108	0.208	0.005	1.739	18.960	2.979	0.701	1.570	2.224	2.519	19.136	29.129
9 TUEN MUN	29.099	0.096	0.148	0.281	0.007	3.590	33.190	5.142	1.239	1.896	3.005	3.301	40.330	54.913
10 YUEN LONG	7.484	0.020	0.026	0.083	0.002	0.868	8.482	1.324	0.242	0.272	0.890	1.008	9.532	13.267