

## **Appendix 17.2.7**

Breakdown for Hospital  
Admission, Short-term  
Mortality and Long-term  
Mortality



**Summary**

Overall (Unit Risk)		Cardiovascular Disease						Respiratory Disease					
Major Area	Population (Predicted as of Mid-2031) <sup>[1]</sup>	Total Short-term Hospital Admission Effects <sup>[2]</sup> Incremental Unit Risk per Annum (3RS - 2RS)			Total Short-term Hospital Admission Effects <sup>[2]</sup> Incremental Unit Risk per Annum (3RS - 2RS)			Total Short-term Hospital Admission Effects <sup>[2]</sup> Incremental Unit Risk per Annum (3RS - 2RS)			Total Short-term Hospital Admission Effects <sup>[2]</sup> Incremental Unit Risk per Annum (3RS - 2RS)		
		w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR
Tung Chung	264344	8.20E-06	5.69E-06	1.06E-05	2.93E-05	1.94E-05	3.84E-05	5.75E-06	3.28E-06	8.21E-06	1.71E-05	7.66E-06	2.65E-05
San Tau	769	1.15E-05	7.66E-06	1.51E-05	-2.89E-05	-2.13E-05	-3.62E-05	7.45E-06	3.73E-06	1.11E-05	-2.39E-05	-1.61E-05	-3.16E-05
Sha Lo Wan	30	-4.17E-05	-3.08E-05	-5.22E-05	-2.07E-04	-1.54E-04	-2.58E-04	-3.36E-05	-2.26E-05	-4.47E-05	-1.80E-04	-1.26E-04	-2.34E-04
San Shek Wan	413	-1.86E-05	-1.41E-05	-2.30E-05	-1.18E-05	-8.83E-06	-1.49E-05	-1.62E-05	-1.15E-05	-2.09E-05	-1.30E-05	-9.80E-06	-1.61E-05
Sham Wat	169	7.59E-06	5.00E-06	1.00E-05	3.16E-05	2.03E-05	4.20E-05	5.10E-06	2.60E-06	7.60E-06	1.60E-05	5.33E-06	2.66E-05
Siu Ho Wan	353	6.31E-06	4.41E-06	8.11E-06	7.62E-06	5.22E-06	9.95E-06	4.53E-06	2.65E-06	6.39E-06	6.88E-06	4.49E-06	9.27E-06
Airport	3400	4.65E-05	3.17E-05	6.02E-05	4.52E-04	2.97E-04	5.95E-04	2.68E-05	1.25E-05	4.10E-05	2.34E-04	8.67E-05	3.81E-04

Notes:

[1] Usual residential population for Tung Chung, San Tau, Sha Lo Wan, San Shek Wan, Sham Wat, and Siu Ho Wan; hotel residential population for Airport Island (Land Site).

[2] With reference to incremental change of annual-avg. concentration for averaged daily concentration.

[3] With reference to incremental change of max. daily-avg. concentration.

NO <sub>2</sub> (Nos. of Cases)		Cardiovascular Disease						Respiratory Disease					
Major Area	Population (Predicted as of Mid-2031) <sup>[1]</sup>	Short-term Hospital Admission Effects of NO <sub>2</sub> <sup>[2]</sup> Incremental Cases per Annum (3RS - 2RS)			Short-term Hospital Admission Effects of NO <sub>2</sub> <sup>[2]</sup> Incremental Cases per Annum (3RS - 2RS)			Short-term Hospital Admission Effects of NO <sub>2</sub> <sup>[2]</sup> Incremental Cases per Annum (3RS - 2RS)			Short-term Hospital Admission Effects of NO <sub>2</sub> <sup>[2]</sup> Incremental Cases per Annum (3RS - 2RS)		
		w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR
Tung Chung	264344	1.70E+00	1.24E+00	2.14E+00	4.92E+00	3.60E+00	6.18E+00	1.39E+00	9.29E-01	1.85E+00	4.03E+00	2.69E+00	5.35E+00
San Tau	769	5.41E-03	3.96E-03	6.80E-03	-2.28E-02	-1.67E-02	-2.87E-02	4.43E-03	2.96E-03	5.89E-03	-1.87E-02	-1.25E-02	-2.48E-02
Sha Lo Wan	30	-1.32E-03	-9.69E-04	-1.66E-03	-6.65E-03	-4.87E-03	-8.35E-03	-1.08E-03	-7.24E-04	-1.44E-03	-5.44E-03	-3.64E-03	-7.24E-03
San Shek Wan	413	-8.86E-03	-6.48E-03	-1.11E-02	-4.58E-03	-3.35E-03	-5.75E-03	-7.25E-03	-4.84E-03	-9.64E-03	-3.75E-03	-2.50E-03	-4.98E-03
Sham Wat	169	6.96E-04	5.09E-04	8.75E-04	2.85E-03	2.08E-03	3.58E-03	5.70E-04	3.81E-04	7.58E-04	2.33E-03	1.56E-03	3.10E-03
Siu Ho Wan	353	1.82E-03	1.33E-03	2.29E-03	1.61E-03	1.18E-03	2.02E-03	1.49E-03	9.96E-04	1.98E-03	1.31E-03	8.78E-04	1.75E-03
Airport	3400	1.22E-01	8.96E-02	1.54E-01	9.61E-01	7.03E-01	1.21E+00	1.00E-01	6.70E-02	1.33E-01	7.86E-01	5.26E-01	1.05E+00

Notes:

[1] Usual residential population for Tung Chung, San Tau, Sha Lo Wan, San Shek Wan, Sham Wat, and Siu Ho Wan; hotel residential population for Airport Island (Land Site).

[2] With reference to incremental change of annual-avg. concentration for averaged daily concentration.

[3] With reference to incremental change of max. daily-avg. concentration.

RSP (Nos. of Cases)		Cardiovascular Disease						Respiratory Disease					
Major Area	Population (Predicted as of Mid-2031) <sup>[1]</sup>	Short-term Hospital Admission Effects of RSP <sup>[2]</sup> Incremental Cases per Annum (3RS - 2RS)			Short-term Hospital Admission Effects of RSP <sup>[2]</sup> Incremental Cases per Annum (3RS - 2RS)			Short-term Hospital Admission Effects of RSP <sup>[2]</sup> Incremental Cases per Annum (3RS - 2RS)			Short-term Hospital Admission Effects of RSP <sup>[2]</sup> Incremental Cases per Annum (3RS - 2RS)		
		w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR
Tung Chung	264344	6.32E-02	3.93E-02	8.70E-02	9.08E-02	5.65E-02	1.25E-01	7.12E-02	4.75E-02	9.47E-02	1.02E-01	6.83E-02	1.36E-01
San Tau	769	8.18E-04	5.09E-04	1.13E-03	2.31E-04	1.44E-04	3.18E-04	9.21E-04	6.15E-04	1.23E-03	2.60E-04	1.74E-04	3.46E-04
Sha Lo Wan	30	6.55E-05	4.08E-05	9.02E-05	-3.74E-05	-2.33E-05	-5.15E-05	7.38E-05	4.93E-05	9.82E-05	-4.21E-05	-2.82E-05	-5.61E-05
San Shek Wan	413	3.97E-04	2.47E-04	5.46E-04	-1.60E-03	-9.94E-04	-2.20E-03	4.47E-04	2.99E-04	5.95E-04	-1.80E-03	-1.20E-03	-2.39E-03
Sham Wat	169	2.11E-04	1.31E-04	2.91E-04	1.20E-05	7.46E-06	1.65E-05	2.38E-04	1.59E-04	3.17E-04	1.35E-05	9.02E-06	1.80E-05
Siu Ho Wan	353	4.92E-05	3.06E-05	6.77E-05	9.76E-04	1.34E-03	5.53E-05	3.70E-05	7.37E-05	1.10E-03	7.34E-04	1.46E-03	
Airport	3400	-1.45E-02	-9.01E-03	-1.99E-02	-7.50E-02	-4.67E-02	-1.03E-01	-1.63E-02	-1.09E-02	-2.17E-02	-8.45E-02	-5.64E-02	-1.12E-01

Notes:

[1] Usual residential population for Tung Chung, San Tau, Sha Lo Wan, San Shek Wan, Sham Wat, and Siu Ho Wan; hotel residential population for Airport Island (Land Site).

[2] With reference to incremental change of annual-avg. concentration for averaged daily concentration.

[3] With reference to incremental change of max. daily-avg. concentration.

SO <sub>2</sub> (Nos. of Cases)		Cardiovascular Disease						Respiratory Disease					
Major Area	Population (Predicted as of Mid-2031) <sup>[1]</sup>	Short-term Hospital Admission Effects of SO <sub>2</sub> <sup>[2]</sup> Incremental Cases per Annum (3RS - 2RS)			Short-term Hospital Admission Effects of SO <sub>2</sub> <sup>[2]</sup> Incremental Cases per Annum (3RS - 2RS)			Short-term Hospital Admission Effects of SO <sub>2</sub> <sup>[2]</sup> Incremental Cases per Annum (3RS - 2RS)			Short-term Hospital Admission Effects of SO <sub>2</sub> <sup>[2]</sup> Incremental Cases per Annum (3RS - 2RS)		
		w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR
Tung Chung	264344	4.05E-01	2.20E-01	5.73E-01	2.73E+00	1.48E+00	3.85E+00	5.90E-02	-1.09E-01	2.26E-01	3.97E-01	-7.32E-01	1.52E+00
San Tau	769	2.62E-03	1.42E-03	3.70E-03	3.90E-04	2.12E-04	5.51E-04	3.82E-04	-7.04E-04	1.46E-03	5.68E-05	-1.05E-04	2.18E-04
Sha Lo Wan	30	6.00E-06	3.26E-06	8.47E-06	4.71E-04	2.56E-04	6.65E-04	8.74E-07	-1.61E-06	3.35E-06	6.86E-05	-1.27E-04	2.63E-04
San Shek Wan	413	7.74E-04	4.21E-04	1.09E-03	1.28E-03	6.96E-04	1.81E-03	1.13E-04	-2.08E-04	4.32E-04	1.87E-04	-3.44E-04	7.16E-04
Sham Wat	169	3.76E-04	2.04E-04	5.31E-04	2.48E-03	1.35E-03	3.50E-03	5.47E-05	-1.01E-04	2.10E-04	3.61E-04	-6.66E-04	1.38E-03
Siu Ho Wan	353	3.58E-04	1.95E-04	5.06E-04	1.08E-04	5.88E-05	1.53E-04	5.22E-05	-9.62E-05	2.00E-04	1.58E-05	-2.90E-05	6.04E-05
Airport	3400	5.01E-02	2.72E-02	7.08E-02	6.50E-01	3.53E-01	9.18E-01	7.30E-03	-1.35E-02	2.80E-02	9.46E-02	-1.75E-01	3.63E-01

Notes:

[1] Usual residential population for Tung Chung, San Tau, Sha Lo Wan, San Shek Wan, Sham Wat, and Siu Ho Wan; hotel residential population for Airport Island (Land Site).

[2] With reference to incremental change of annual-avg. concentration for averaged daily concentration.

[3] With reference to incremental change of max. daily-avg. concentration.

**Short-term Hospital Admission Effects of NO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Disease <sub>Cardiovascular</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 155299 Disease <sub>Respiratory</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 169071					<b>Average Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0100 AP <sub>Cardiovascular</sub> = (1.0100 - 1) x 1 / 1.0100 x 1 = 0.0099 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0075 AP <sub>Respiratory</sub> = (1.0075 - 1) x 1 / 1.0075 x 1 = 0.0074		<b>Lower Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0073 AP <sub>Cardiovascular</sub> = (1.0073 - 1) x 1 / 1.0073 x 1 = 0.0072 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0050 AP <sub>Respiratory</sub> = (1.0050 - 1) x 1 / 1.0050 x 1 = 0.0050		<b>Upper Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0126 AP <sub>Cardiovascular</sub> = (1.0126 - 1) x 1 / 1.0126 x 1 = 0.0124 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0100 AP <sub>Respiratory</sub> = (1.0100 - 1) x 1 / 1.0100 x 1 = 0.0099	
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual-avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Hospital Admission Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )	
					NO <sub>2</sub>	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease
Tung Chung	TC-1	R	1966	0.344	1.5E-02	1.2E-02	1.1E-02	7.9E-03	1.8E-02	1.6E-02
	TC-2	R	1966	0.360	1.5E-02	1.2E-02	1.1E-02	8.3E-03	1.9E-02	1.7E-02
	TC-3	R	1966	0.338	1.4E-02	1.2E-02	1.0E-02	7.8E-03	1.8E-02	1.6E-02
	TC-4	R	1966	0.317	1.3E-02	1.1E-02	9.8E-03	7.3E-03	1.7E-02	1.5E-02
	TC-7	R	1966	0.318	1.3E-02	1.1E-02	9.8E-03	7.4E-03	1.7E-02	1.5E-02
	TC-8	R	1966	0.384	1.6E-02	1.3E-02	1.2E-02	8.9E-03	2.0E-02	1.8E-02
	TC-9	R	262	0.376	2.1E-03	1.7E-03	1.6E-03	1.2E-03	2.7E-03	2.3E-03
	TC-10	R	262	0.296	1.7E-03	1.4E-03	1.2E-03	9.1E-04	2.1E-03	1.8E-03
	TC-11	R	262	0.306	1.7E-03	1.4E-03	1.3E-03	9.4E-04	2.2E-03	1.9E-03
	TC-12	R	262	0.309	1.7E-03	1.4E-03	1.3E-03	9.5E-04	2.2E-03	1.9E-03
	TC-13	R	262	0.330	1.9E-03	1.5E-03	1.4E-03	1.0E-03	2.3E-03	2.0E-03
	TC-14	R	262	0.341	1.9E-03	1.4E-03	1.4E-03	1.0E-03	2.4E-03	2.1E-03
	TC-15	R	262	0.355	2.0E-03	1.5E-03	1.5E-03	1.1E-03	2.5E-03	2.2E-03
	TC-29	R	2073	0.283	1.3E-02	1.0E-02	9.2E-03	6.9E-03	1.6E-02	1.4E-02
	TC-30	R	2263	0.272	1.3E-02	1.1E-02	9.7E-03	7.2E-03	1.7E-02	1.4E-02
	TC-31	R	1908	0.299	1.2E-02	1.0E-02	9.0E-03	6.7E-03	1.5E-02	1.3E-02
	TC-32	R	2209	0.250	1.2E-02	9.7E-03	8.7E-03	6.5E-03	1.5E-02	1.3E-02
	TC-33	R	1087	0.255	6.0E-03	4.9E-03	4.4E-03	3.3E-03	7.5E-03	6.5E-03
	TC-34	R	1215	0.282	7.4E-03	6.0E-03	5.4E-03	4.0E-03	9.2E-03	8.0E-03
	TC-35	R	1347	0.289	8.4E-03	6.8E-03	6.1E-03	4.6E-03	1.1E-02	9.1E-03
	TC-36	R	1583	0.251	8.5E-03	7.0E-03	6.3E-03	4.7E-03	1.1E-02	9.3E-03
	TC-37	R	1657	0.212	7.5E-03	6.2E-03	5.5E-03	4.1E-03	9.5E-03	8.2E-03
	TC-38	R	1657	0.228	8.1E-03	6.6E-03	5.9E-03	4.4E-03	1.0E-02	8.8E-03
	TC-39	R	2698	0.237	1.4E-02	1.1E-02	1.0E-02	7.5E-03	1.7E-02	1.5E-02
	TC-40	R	3084	0.244	1.6E-02	1.3E-02	1.2E-02	8.9E-03	2.0E-02	1.8E-02
	TC-41	R	1670	0.246	8.8E-03	7.2E-03	6.5E-03	4.8E-03	1.1E-02	9.6E-03
	TC-42	R	1805	0.249	9.7E-03	7.9E-03	7.1E-03	5.3E-03	1.2E-02	1.1E-02
	TC-43	R	1798	0.245	9.5E-03	7.8E-03	6.9E-03	5.2E-03	1.2E-02	1.0E-02
	TC-44	R	1798	0.237	9.2E-03	7.5E-03	6.7E-03	5.0E-03	1.2E-02	1.0E-02
	TC-45	R	365	0.207	1.6E-03	1.3E-03	1.2E-03	8.9E-04	2.0E-03	1.8E-03
	TC-P5	R	8090	0.309	5.4E-02	4.4E-02	3.9E-02	2.9E-02	6.8E-02	5.9E-02
	TC-P6	R	8090	0.145	2.5E-02	2.1E-02	1.9E-02	1.4E-02	3.2E-02	2.8E-02
TC-P7	R	8090	0.197	3.4E-02	2.8E-02	2.5E-02	1.9E-02	4.3E-02	3.7E-02	
TC-P8	R	29044	0.249	1.6E-01	1.3E-01	1.1E-01	8.5E-02	2.0E-01	1.7E-01	
TC-P9	R	29044	0.314	2.0E-01	1.6E-01	1.4E-01	1.1E-01	2.5E-01	2.1E-01	
TC-P10	R	29044	0.386	2.4E-01	2.0E-01	1.8E-01	1.3E-01	3.0E-01	2.6E-01	
TC-P11	R	29044	0.378	2.4E-01	1.9E-01	1.7E-01	1.3E-01	3.0E-01	2.6E-01	
TC-Others	R	80051	0.286	4.9E-01	4.0E-01	3.6E-01	2.7E-01	6.2E-01	5.4E-01	
<b>Total</b>					<b>1.7E+00</b>	<b>1.4E+00</b>	<b>1.2E+00</b>	<b>9.3E-01</b>	<b>2.1E+00</b>	<b>1.8E+00</b>
San Tau	ST-1	R	2	0.329	1.4E-05	1.2E-05	1.0E-05	7.7E-06	1.8E-05	1.5E-05
	ST-2	R	2	0.277	1.2E-05	9.7E-06	8.7E-06	6.5E-06	1.5E-05	1.3E-05
	ST-3	R	2	0.376	1.6E-05	1.3E-05	1.2E-05	8.8E-06	2.0E-05	1.8E-05
	ST-Others	R	763	0.327	5.4E-03	4.4E-03	3.9E-03	2.9E-03	6.7E-03	5.8E-03
<b>Total</b>					<b>5.4E-03</b>	<b>4.4E-03</b>	<b>4.0E-03</b>	<b>3.0E-03</b>	<b>6.8E-03</b>	<b>5.9E-03</b>
Sha Lo Wan	SLW-1	R	2	-2.648	-1.1E-04	-9.3E-05	-8.3E-05	-6.2E-05	-1.4E-04	-1.2E-04
	SLW-2	R	2	-1.760	-7.6E-05	-6.2E-05	-5.5E-05	-4.1E-05	-9.5E-05	-8.2E-05
	SLW-3	R	5	-1.300	-1.4E-04	-1.1E-04	-1.0E-04	-7.6E-05	-1.8E-04	-1.5E-04
	SLW-Others	R	21	-2.204	-9.9E-04	-8.1E-04	-7.3E-04	-5.4E-04	-1.3E-03	-1.1E-03
<b>Total</b>					<b>-1.3E-03</b>	<b>-1.1E-03</b>	<b>-9.7E-04</b>	<b>-7.2E-04</b>	<b>-1.7E-03</b>	<b>-1.4E-03</b>
San Shek Wan	SSW-1	R	3	-0.260	-1.7E-05	-1.4E-05	-1.2E-05	-9.2E-06	-2.1E-05	-1.8E-05
	SSW-Others	R	410	-1.003	-8.8E-03	-7.2E-03	-6.5E-03	-4.8E-03	-1.1E-02	-9.6E-03
	<b>Total</b>					<b>-8.9E-03</b>	<b>-7.2E-03</b>	<b>-6.5E-03</b>	<b>-4.8E-03</b>	<b>-1.1E-02</b>
Sham Wat	SW-1	R	3	0.131	8.5E-06	6.9E-06	6.2E-06	4.6E-06	1.1E-05	9.2E-06
	SW-1	R	3	0.131	8.5E-06	6.9E-06	6.2E-06	4.6E-06	1.1E-05	9.2E-06
	SW-Others	R	163	0.194	6.8E-04	5.6E-04	5.0E-04	3.7E-04	8.5E-04	7.4E-04

**Short-term Hospital Admission Effects of NO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Disease <sub>Cardiovascular</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 155299 Disease <sub>Respiratory</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 169071					<b>Average Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0100 AP <sub>Cardiovascular</sub> = (1.0100 - 1) x 1 / 1.0100 x 1 = 0.0099 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0075 AP <sub>Respiratory</sub> = (1.0075 - 1) x 1 / 1.0075 x 1 = 0.0074		<b>Lower Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0073 AP <sub>Cardiovascular</sub> = (1.0073 - 1) x 1 / 1.0073 x 1 = 0.0072 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0050 AP <sub>Respiratory</sub> = (1.0050 - 1) x 1 / 1.0050 x 1 = 0.0050		<b>Upper Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0126 AP <sub>Cardiovascular</sub> = (1.0126 - 1) x 1 / 1.0126 x 1 = 0.0124 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0100 AP <sub>Respiratory</sub> = (1.0100 - 1) x 1 / 1.0100 x 1 = 0.0099	
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual-avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Hospital Admission Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )	
					NO <sub>2</sub>	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease
<b>Total</b>					<b>7.0E-04</b>	<b>5.7E-04</b>	<b>5.1E-04</b>	<b>3.8E-04</b>	<b>8.7E-04</b>	<b>7.6E-04</b>
Siu Ho Wan	SHW-1	R	2	0.240	1.0E-05	8.4E-06	7.6E-06	5.6E-06	1.3E-05	1.1E-05
	SHW-2	R	2	0.238	1.0E-05	8.4E-06	7.5E-06	5.6E-06	1.3E-05	1.1E-05
	SHW-3	R	2	0.252	1.1E-05	8.9E-06	7.9E-06	5.9E-06	1.4E-05	1.2E-05
	SHW-Others	R	347	0.240	1.8E-03	1.5E-03	1.3E-03	9.8E-04	2.2E-03	1.9E-03
	<b>Total</b>					<b>1.8E-03</b>	<b>1.5E-03</b>	<b>1.3E-03</b>	<b>1.0E-03</b>	<b>2.3E-03</b>
Airport	AI-C1	R	2200	2.119	1.0E-01	8.2E-02	7.3E-02	5.5E-02	1.3E-01	1.1E-01
	AI-C4	R	1200	0.863	2.2E-02	1.8E-02	1.6E-02	1.2E-02	2.8E-02	2.4E-02
	<b>Total</b>					<b>1.2E-01</b>	<b>1.0E-01</b>	<b>9.0E-02</b>	<b>6.7E-02</b>	<b>1.5E-01</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] In HK in 2012, cardiovascular diseases of heart (ICD10: I00-I99) = 155299 (Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf)). An underestimate because about 10% of all hospital beds are outside HA hospitals.

[3] In HK in 2012, respiratory diseases (ICD10: J00-J99) = 169071 (Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf)). An underestimate because about 10% of all hospital beds are outside HA hospitals.

[4] Wong C.M. et al, 2010.

**Short-term Hospital Admission Effects of NO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of max. daily conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Disease <sub>Cardiovascular</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 155299 Disease <sub>Respiratory</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 169071					<b>Average Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0100 AP <sub>Cardiovascular</sub> = (1.0100 - 1) x 1 / 1.0100 x 1 = 0.0099 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0075 AP <sub>Respiratory</sub> = (1.0075 - 1) x 1 / 1.0075 x 1 = 0.0074		<b>Lower Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0073 AP <sub>Cardiovascular</sub> = (1.0073 - 1) x 1 / 1.0073 x 1 = 0.0072 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0050 AP <sub>Respiratory</sub> = (1.0050 - 1) x 1 / 1.0050 x 1 = 0.0050		<b>Upper Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0126 AP <sub>Cardiovascular</sub> = (1.0126 - 1) x 1 / 1.0126 x 1 = 0.0124 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0100 AP <sub>Respiratory</sub> = (1.0100 - 1) x 1 / 1.0100 x 1 = 0.0099	
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Max. 24hr Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Hospital Admission Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )	
					NO <sub>2</sub>	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease
Tung Chung	TC-1	R	1966	-0.100	-4.2E-03	-3.4E-03	-3.1E-03	-2.3E-03	-5.3E-03	-4.6E-03
	TC-2	R	1966	-0.079	-3.4E-03	-2.7E-03	-2.5E-03	-1.8E-03	-4.2E-03	-3.6E-03
	TC-3	R	1966	-0.052	-2.2E-03	-1.8E-03	-1.6E-03	-1.2E-03	-2.8E-03	-2.4E-03
	TC-4	R	1966	-0.047	-2.0E-03	-1.6E-03	-1.4E-03	-1.1E-03	-2.5E-03	-2.2E-03
	TC-7	R	1966	-0.031	-1.3E-03	-1.1E-03	-9.4E-04	-7.1E-04	-1.6E-03	-1.4E-03
	TC-8	R	1966	-0.050	-2.1E-03	-1.7E-03	-1.5E-03	-1.2E-03	-2.6E-03	-2.3E-03
	TC-9	R	262	-0.057	-3.2E-04	-2.6E-04	-2.3E-04	-1.8E-04	-4.0E-04	-3.5E-04
	TC-10	R	262	-0.237	-1.3E-03	-1.1E-03	-9.8E-04	-7.3E-04	-1.7E-03	-1.5E-03
	TC-11	R	262	-0.204	-1.2E-03	-9.4E-04	-8.4E-04	-6.3E-04	-1.4E-03	-1.3E-03
	TC-12	R	262	-0.184	-1.0E-03	-8.5E-04	-7.6E-04	-5.7E-04	-1.3E-03	-1.1E-03
	TC-13	R	262	-0.088	-5.0E-04	-4.1E-04	-3.6E-04	-2.7E-04	-6.3E-04	-5.4E-04
	TC-14	R	262	-0.114	-6.4E-04	-5.3E-04	-4.7E-04	-3.5E-04	-8.1E-04	-7.0E-04
	TC-15	R	262	-0.103	-5.8E-04	-4.7E-04	-4.2E-04	-3.2E-04	-7.3E-04	-6.3E-04
	TC-29	R	2073	1.159	5.2E-02	4.2E-02	3.8E-02	2.8E-02	6.5E-02	5.6E-02
	TC-30	R	2263	1.144	5.6E-02	4.6E-02	4.1E-02	3.0E-02	7.0E-02	6.1E-02
	TC-31	R	1908	0.879	3.6E-02	2.9E-02	2.6E-02	2.0E-02	4.5E-02	3.9E-02
	TC-32	R	2209	0.355	1.7E-02	1.4E-02	1.2E-02	9.2E-03	2.1E-02	1.8E-02
	TC-33	R	1087	0.048	1.1E-03	9.1E-04	8.2E-04	6.1E-04	1.4E-03	1.2E-03
	TC-34	R	1215	0.372	9.7E-03	8.0E-03	7.1E-03	5.3E-03	1.2E-02	1.1E-02
	TC-35	R	1347	0.443	1.3E-02	1.1E-02	9.4E-03	7.0E-03	1.6E-02	1.4E-02
	TC-36	R	1583	0.352	1.2E-02	9.8E-03	8.8E-03	6.5E-03	1.5E-02	1.3E-02
	TC-37	R	1657	-0.163	-5.8E-03	-4.7E-03	-4.2E-03	-3.2E-03	-7.3E-03	-6.3E-03
	TC-38	R	1657	0.651	2.3E-02	1.9E-02	1.7E-02	1.3E-02	2.9E-02	2.5E-02
	TC-39	R	2698	0.743	4.3E-02	3.5E-02	3.2E-02	2.4E-02	5.4E-02	4.7E-02
	TC-40	R	3084	0.801	5.3E-02	4.3E-02	3.9E-02	2.9E-02	6.7E-02	5.8E-02
	TC-41	R	1670	0.753	2.7E-02	2.2E-02	2.0E-02	1.5E-02	3.4E-02	2.9E-02
	TC-42	R	1805	0.777	3.0E-02	2.5E-02	2.2E-02	1.6E-02	3.8E-02	3.3E-02
	TC-43	R	1798	0.726	2.8E-02	2.3E-02	2.1E-02	1.5E-02	3.5E-02	3.1E-02
	TC-44	R	1798	0.633	2.4E-02	2.0E-02	1.8E-02	1.3E-02	3.1E-02	2.7E-02
	TC-45	R	365	0.551	4.3E-03	3.5E-03	3.2E-03	2.4E-03	5.4E-03	4.7E-03
	TC-P5	R	8090	-0.122	-2.1E-02	-1.7E-02	-1.6E-02	-1.2E-02	-2.7E-02	-2.3E-02
TC-P6	R	8090	0.246	4.3E-02	3.5E-02	3.1E-02	2.3E-02	5.4E-02	4.7E-02	
TC-P7	R	8090	0.365	6.3E-02	5.2E-02	4.6E-02	3.5E-02	8.0E-02	6.9E-02	
TC-P8	R	29044	-0.230	-1.4E-01	-1.2E-01	-1.1E-01	-7.8E-02	-1.8E-01	-1.6E-01	
TC-P9	R	29044	1.205	7.5E-01	6.2E-01	5.5E-01	4.1E-01	9.5E-01	8.2E-01	
TC-P10	R	29044	1.486	9.3E-01	7.6E-01	6.8E-01	5.1E-01	1.2E+00	1.0E+00	
TC-P11	R	29044	2.846	1.8E+00	1.5E+00	1.3E+00	9.7E-01	2.2E+00	1.9E+00	
TC-Others	R	80051	0.649	1.1E+00	9.1E-01	8.2E-01	6.1E-01	1.4E+00	1.2E+00	
<b>Total</b>					<b>4.9E+00</b>	<b>4.0E+00</b>	<b>3.6E+00</b>	<b>2.7E+00</b>	<b>6.2E+00</b>	<b>5.4E+00</b>
San Tau	ST-1	R	2	-1.608	-6.9E-05	-5.7E-05	-5.1E-05	-3.8E-05	-8.7E-05	-7.5E-05
	ST-2	R	2	-1.363	-5.9E-05	-4.8E-05	-4.3E-05	-3.2E-05	-7.4E-05	-6.4E-05
	ST-3	R	2	-1.171	-5.0E-05	-4.1E-05	-3.7E-05	-2.8E-05	-6.3E-05	-5.5E-05
	ST-Others	R	763	-1.380	-2.3E-02	-1.9E-02	-1.7E-02	-1.2E-02	-2.8E-02	-2.5E-02
<b>Total</b>					<b>-2.3E-02</b>	<b>-1.9E-02</b>	<b>-1.7E-02</b>	<b>-1.2E-02</b>	<b>-2.9E-02</b>	<b>-2.5E-02</b>
Sha Lo Wan	SLW-1	R	2	-12.079	-5.2E-04	-4.2E-04	-3.8E-04	-2.8E-04	-6.5E-04	-5.7E-04
	SLW-2	R	2	-11.632	-5.0E-04	-4.1E-04	-3.7E-04	-2.7E-04	-6.3E-04	-5.4E-04
	SLW-3	R	5	-2.585	-2.8E-04	-2.3E-04	-2.0E-04	-1.5E-04	-3.5E-04	-3.0E-04
	SLW-Others	R	21	-11.855	-5.4E-03	-4.4E-03	-3.9E-03	-2.9E-03	-6.7E-03	-5.8E-03
<b>Total</b>					<b>-6.6E-03</b>	<b>-5.4E-03</b>	<b>-4.9E-03</b>	<b>-3.6E-03</b>	<b>-8.4E-03</b>	<b>-7.2E-03</b>
San Shek Wan	SSW-1	R	3	2.103	1.4E-04	1.1E-04	9.9E-05	7.4E-05	1.7E-04	1.5E-04
	SSW-Others	R	410	-0.535	-4.7E-03	-3.9E-03	-3.4E-03	-2.6E-03	-5.9E-03	-5.1E-03
	<b>Total</b>					<b>-4.6E-03</b>	<b>-3.7E-03</b>	<b>-3.3E-03</b>	<b>-2.5E-03</b>	<b>-5.8E-03</b>
Sham Wat	SW-1	R	3	0.216	1.4E-05	1.1E-05	1.0E-05	7.6E-06	1.7E-05	1.5E-05
	SW-1	R	3	0.216	1.4E-05	1.1E-05	1.0E-05	7.6E-06	1.7E-05	1.5E-05
	SW-Others	R	163	0.804	2.8E-03	2.3E-03	2.1E-03	1.5E-03	3.5E-03	3.1E-03

**Short-term Hospital Admission Effects of NO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of max. daily conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Disease <sub>Cardiovascular</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 155299 Disease <sub>Respiratory</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 169071					<b>Average Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0100 AP <sub>Cardiovascular</sub> = (1.0100 - 1) x 1 / 1.0100 x 1 = 0.0099 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0075 AP <sub>Respiratory</sub> = (1.0075 - 1) x 1 / 1.0075 x 1 = 0.0074		<b>Lower Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0073 AP <sub>Cardiovascular</sub> = (1.0073 - 1) x 1 / 1.0073 x 1 = 0.0072 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0050 AP <sub>Respiratory</sub> = (1.0050 - 1) x 1 / 1.0050 x 1 = 0.0050		<b>Upper Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0126 AP <sub>Cardiovascular</sub> = (1.0126 - 1) x 1 / 1.0126 x 1 = 0.0124 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0100 AP <sub>Respiratory</sub> = (1.0100 - 1) x 1 / 1.0100 x 1 = 0.0099	
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Max. 24hr Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Hospital Admission Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )	
					NO <sub>2</sub>	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease
<b>Total</b>					<b>2.8E-03</b>	<b>2.3E-03</b>	<b>2.1E-03</b>	<b>1.6E-03</b>	<b>3.6E-03</b>	<b>3.1E-03</b>
Siu Ho Wan	SHW-1	R	2	0.194	8.3E-06	6.8E-06	6.1E-06	4.6E-06	1.0E-05	9.1E-06
	SHW-2	R	2	-0.269	-1.2E-05	-9.4E-06	-8.4E-06	-6.3E-06	-1.5E-05	-1.3E-05
	SHW-3	R	2	3.722	1.6E-04	1.3E-04	1.2E-04	8.8E-05	1.2E-04	1.7E-04
	SHW-Others	R	347	0.194	1.4E-03	1.2E-03	1.1E-03	7.9E-04	1.8E-03	1.6E-03
	<b>Total</b>					<b>1.6E-03</b>	<b>1.3E-03</b>	<b>1.2E-03</b>	<b>8.8E-04</b>	<b>2.0E-03</b>
Airport	AI-C1	R	2200	16.389	7.7E-01	6.3E-01	5.7E-01	4.2E-01	9.7E-01	8.4E-01
	AI-C4	R	1200	7.205	1.9E-01	1.5E-01	1.4E-01	1.0E-01	2.3E-01	2.0E-01
	<b>Total</b>					<b>9.6E-01</b>	<b>7.9E-01</b>	<b>7.0E-01</b>	<b>5.3E-01</b>	<b>1.2E+00</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] In HK in 2012, cardiovascular diseases of heart (ICD10: I00-I99) = 155299 (Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf)). An underestimate because about 10% of all hospital beds are outside HA hospitals.

[3] In HK in 2012, respiratory diseases (ICD10: J00-J99) = 169071 (Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf)). An underestimate because about 10% of all hospital beds are outside HA hospitals.

[4] Wong C.M. et al, 2010.

**Short-term Hospital Admission Effects of RSP - Detailed Breakdown (3RS - 2RS)(based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600				Average Value of RR		Lower Value of RR		Upper Value of RR			
Disease <sub>Cardiovascular</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 155299				RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0058		RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0036		RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0080			
Disease <sub>Respiratory</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 169071				AP <sub>Cardiovascular</sub> = (1.0058 - 1) x 1 / 1.0058 x 1 = 0.0058		AP <sub>Cardiovascular</sub> = (1.0036 - 1) x 1 / 1.0036 x 1 = 0.0036		AP <sub>Cardiovascular</sub> = (1.0080 - 1) x 1 / 1.0080 x 1 = 0.0079			
				RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0060		RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0040		RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0080			
				AP <sub>Respiratory</sub> = (1.0060 - 1) x 1 / 1.0060 x 1 = 0.0060		AP <sub>Respiratory</sub> = (1.0040 - 1) x 1 / 1.0040 x 1 = 0.0040		AP <sub>Respiratory</sub> = (1.0080 - 1) x 1 / 1.0080 x 1 = 0.0079			
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual-avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)		Short-term Hospital Admission Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )	
				RSP	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	
Tung Chung	TC-1	R	1966	0.035	8.6E-04	9.7E-04	5.4E-04	6.5E-04	1.2E-03	1.3E-03	
	TC-2	R	1966	0.037	9.1E-04	1.0E-03	5.7E-04	6.8E-04	1.3E-03	1.4E-03	
	TC-3	R	1966	0.041	1.0E-03	1.1E-03	6.3E-04	7.6E-04	1.4E-03	1.5E-03	
	TC-4	R	1966	0.042	1.0E-03	1.2E-03	6.4E-04	7.8E-04	1.4E-03	1.5E-03	
	TC-7	R	1966	0.043	1.1E-03	1.2E-03	6.6E-04	8.0E-04	1.5E-03	1.6E-03	
	TC-8	R	1966	0.045	1.1E-03	1.2E-03	6.9E-04	8.3E-04	1.5E-03	1.7E-03	
	TC-9	R	262	0.045	1.5E-04	1.7E-04	9.2E-05	1.1E-04	2.0E-04	2.2E-04	
	TC-10	R	262	0.042	1.4E-04	1.6E-04	8.6E-05	1.0E-04	1.9E-04	2.1E-04	
	TC-11	R	262	0.044	1.4E-04	1.6E-04	9.0E-05	1.1E-04	2.0E-04	2.2E-04	
	TC-12	R	262	0.043	1.4E-04	1.6E-04	8.8E-05	1.1E-04	1.9E-04	2.1E-04	
	TC-13	R	262	0.049	1.6E-04	1.8E-04	1.0E-04	1.2E-04	2.2E-04	2.4E-04	
	TC-14	R	262	0.047	1.5E-04	1.7E-04	9.6E-05	1.2E-04	2.1E-04	2.3E-04	
	TC-15	R	262	0.047	1.5E-04	1.7E-04	9.6E-05	1.2E-04	2.1E-04	2.3E-04	
	TC-29	R	2073	0.023	6.0E-04	6.7E-04	3.7E-04	4.5E-04	8.2E-04	8.9E-04	
	TC-30	R	2263	0.021	5.9E-04	6.7E-04	3.7E-04	4.5E-04	8.2E-04	8.9E-04	
	TC-31	R	1908	0.026	6.2E-04	7.0E-04	3.9E-04	4.7E-04	8.5E-04	9.3E-04	
	TC-32	R	2209	0.020	5.5E-04	6.2E-04	3.4E-04	4.2E-04	7.6E-04	8.3E-04	
	TC-33	R	1087	0.020	2.7E-04	3.1E-04	1.7E-04	2.0E-04	3.7E-04	4.1E-04	
	TC-34	R	1215	0.024	3.6E-04	4.1E-04	2.3E-04	2.7E-04	5.0E-04	5.5E-04	
	TC-35	R	1347	0.026	4.4E-04	4.9E-04	2.7E-04	3.3E-04	6.0E-04	6.6E-04	
	TC-36	R	1583	0.022	4.4E-04	4.9E-04	2.7E-04	3.3E-04	6.0E-04	6.5E-04	
	TC-37	R	1657	0.011	2.3E-04	2.6E-04	1.4E-04	1.7E-04	3.1E-04	3.4E-04	
	TC-38	R	1657	-0.001	-2.1E-05	-2.3E-05	-1.3E-05	-1.6E-05	-2.9E-05	-3.1E-05	
	TC-39	R	2698	0.002	6.8E-05	7.6E-05	4.2E-05	5.1E-05	9.3E-05	1.0E-04	
	TC-40	R	3084	0.004	1.5E-04	1.7E-04	9.6E-05	1.2E-04	2.1E-04	2.3E-04	
	TC-41	R	1670	0.005	1.0E-04	1.2E-04	6.5E-05	7.9E-05	1.4E-04	1.6E-04	
	TC-42	R	1805	0.003	6.8E-05	7.6E-05	4.2E-05	5.1E-05	9.3E-05	1.0E-04	
	TC-43	R	1798	0.001	2.3E-05	2.5E-05	1.4E-05	1.7E-05	3.1E-05	3.4E-05	
	TC-44	R	1798	0.000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	
	TC-45	R	365	-0.012	-5.5E-05	-6.2E-05	-3.4E-05	-4.1E-05	-7.5E-05	-8.2E-05	
	TC-P5	R	8090	0.010	1.0E-03	1.1E-03	6.3E-04	7.6E-04	1.4E-03	1.5E-03	
	TC-P6	R	8090	-0.045	-4.6E-03	-5.1E-03	-2.8E-03	-3.4E-03	-6.3E-03	-6.8E-03	
TC-P7	R	8090	0.022	2.2E-03	2.5E-03	1.4E-03	1.7E-03	3.1E-03	3.3E-03		
TC-P8	R	29044	0.028	1.0E-02	1.1E-02	6.3E-03	7.7E-03	1.4E-02	1.5E-02		
TC-P9	R	29044	0.006	2.2E-03	2.5E-03	1.4E-03	1.6E-03	3.0E-03	3.3E-03		
TC-P10	R	29044	0.024	8.7E-03	9.8E-03	5.4E-03	6.6E-03	1.2E-02	1.3E-02		
TC-P11	R	29044	0.036	1.3E-02	1.5E-02	8.1E-03	9.8E-03	1.8E-02	2.0E-02		
TC-Others	R	80051	0.019	1.9E-02	2.1E-02	1.2E-02	1.4E-02	2.6E-02	2.8E-02		
<b>Total</b>					<b>6.3E-02</b>	<b>7.1E-02</b>	<b>3.9E-02</b>	<b>4.8E-02</b>	<b>8.7E-02</b>	<b>9.5E-02</b>	
San Tau	ST-1	R	2	0.093	2.3E-06	2.6E-06	1.4E-06	1.8E-06	3.2E-06	3.5E-06	
	ST-2	R	2	0.080	2.0E-06	2.3E-06	1.2E-06	1.5E-06	2.8E-06	3.0E-06	
	ST-3	R	2	0.082	2.1E-06	2.3E-06	1.3E-06	1.5E-06	2.8E-06	3.1E-06	
	ST-Others	R	763	0.085	8.1E-04	9.1E-04	5.0E-04	6.1E-04	1.1E-03	1.2E-03	
<b>Total</b>					<b>8.2E-04</b>	<b>9.2E-04</b>	<b>5.1E-04</b>	<b>6.2E-04</b>	<b>1.1E-03</b>	<b>1.2E-03</b>	
Sha Lo Wan	SLW-1	R	2	0.216	5.4E-06	6.1E-06	3.4E-06	4.1E-06	7.4E-06	8.1E-06	
	SLW-2	R	2	0.168	4.2E-06	4.7E-06	2.6E-06	3.2E-06	5.8E-06	6.3E-06	
	SLW-3	R	5	0.087	5.4E-06	6.1E-06	3.4E-06	4.1E-06	7.5E-06	8.2E-06	
	SLW-Others	R	21	0.192	5.0E-05	5.7E-05	3.1E-05	3.8E-05	6.9E-05	7.6E-05	
<b>Total</b>					<b>6.6E-05</b>	<b>7.4E-05</b>	<b>4.1E-05</b>	<b>4.9E-05</b>	<b>9.0E-05</b>	<b>9.8E-05</b>	
San Shek Wan	SSW-1	R	3	0.047	1.8E-06	2.0E-06	1.1E-06	1.3E-06	2.4E-06	2.6E-06	
	SSW-Others	R	410	0.077	4.0E-04	4.4E-04	2.5E-04	3.0E-04	5.4E-04	5.9E-04	
<b>Total</b>					<b>4.0E-04</b>	<b>4.5E-04</b>	<b>2.5E-04</b>	<b>3.0E-04</b>	<b>5.5E-04</b>	<b>5.9E-04</b>	
Sham Wat	SW-1	R	3	0.028	1.1E-06	1.2E-06	6.5E-07	7.9E-07	1.4E-06	1.6E-06	
	SW-1	R	3	0.028	1.1E-06	1.2E-06	6.5E-07	7.9E-07	1.4E-06	1.6E-06	
	SW-Others	R	163	0.103	2.1E-04	2.4E-04	1.3E-04	1.6E-04	2.9E-04	3.1E-04	

**Short-term Hospital Admission Effects of RSP - Detailed Breakdown (3RS - 2RS)(based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Disease <sub>Cardiovascular</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 155299 Disease <sub>Respiratory</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 169071					<b>Average Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0058 AP <sub>Cardiovascular</sub> = (1.0058 - 1) x 1 / 1.0058 x 1 = 0.0058 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0060 AP <sub>Respiratory</sub> = (1.0060 - 1) x 1 / 1.0060 x 1 = 0.0060		<b>Lower Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0036 AP <sub>Cardiovascular</sub> = (1.0036 - 1) x 1 / 1.0036 x 1 = 0.0036 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0040 AP <sub>Respiratory</sub> = (1.0040 - 1) x 1 / 1.0040 x 1 = 0.0040		<b>Upper Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0080 AP <sub>Cardiovascular</sub> = (1.0080 - 1) x 1 / 1.0080 x 1 = 0.0079 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0080 AP <sub>Respiratory</sub> = (1.0080 - 1) x 1 / 1.0080 x 1 = 0.0079	
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual-avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Hospital Admission Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )	
					RSP	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease
				<b>Total</b>	<b>2.1E-04</b>	<b>2.4E-04</b>	<b>1.3E-04</b>	<b>1.6E-04</b>	<b>2.9E-04</b>	<b>3.2E-04</b>
Siu Ho Wan	SHW-1	R	2	0.011	2.8E-07	3.1E-07	1.7E-07	2.1E-07	3.8E-07	4.1E-07
	SHW-2	R	2	0.017	4.3E-07	4.8E-07	2.6E-07	3.2E-07	5.9E-07	6.4E-07
	SHW-3	R	2	0.027	6.8E-07	7.6E-07	4.2E-07	5.1E-07	9.3E-07	1.0E-06
	SHW-Others	R	347	0.011	4.8E-05	5.4E-05	3.0E-05	3.6E-05	6.6E-05	7.2E-05
				<b>Total</b>	<b>4.9E-05</b>	<b>5.5E-05</b>	<b>3.1E-05</b>	<b>3.7E-05</b>	<b>6.8E-05</b>	<b>7.4E-05</b>
Airport	AI-C1	R	2200	-0.480	-1.3E-02	-1.5E-02	-8.2E-03	-9.9E-03	-1.8E-02	-2.0E-02
	AI-C4	R	1200	-0.084	-1.3E-03	-1.4E-03	-7.8E-04	-9.5E-04	-1.7E-03	-1.9E-03
			<b>Total</b>		<b>-1.4E-02</b>	<b>-1.6E-02</b>	<b>-9.0E-03</b>	<b>-1.1E-02</b>	<b>-2.0E-02</b>	<b>-2.2E-02</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] In HK in 2012, cardiovascular diseases of heart (ICD10: I00-I99) = 155299 (Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf)). An underestimate because about 10% of all hospital beds are outside HA hospitals.

[3] In HK in 2012, respiratory diseases (ICD10: J00-J99) = 169071 (Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf)). An underestimate because about 10% of all hospital beds are outside HA hospitals.

[4] Wong C.M. et al, 2010.

**Short-term Hospital Admission Effects of RSP - Detailed Breakdown (3RS - 2RS) (based on incremental change of max. daily conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600				Average Value of RR		Lower Value of RR		Upper Value of RR		
Disease <sub>Cardiovascular</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 155299				RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0058		RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0036		RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0080		
Disease <sub>Respiratory</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 169071				AP <sub>Cardiovascular</sub> = (1.0058 - 1) x 1 / 1.0058 x 1 = 0.0058		AP <sub>Cardiovascular</sub> = (1.0036 - 1) x 1 / 1.0036 x 1 = 0.0036		AP <sub>Cardiovascular</sub> = (1.0080 - 1) x 1 / 1.0080 x 1 = 0.0079		
				RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0060		RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0040		RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0080		
				AP <sub>Respiratory</sub> = (1.0060 - 1) x 1 / 1.0060 x 1 = 0.0060		AP <sub>Respiratory</sub> = (1.0040 - 1) x 1 / 1.0040 x 1 = 0.0040		AP <sub>Respiratory</sub> = (1.0080 - 1) x 1 / 1.0080 x 1 = 0.0079		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Max. 24hr Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Hospital Admission Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )	
					RSP	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease
Tung Chung	TC-1	R	1966	-0.123	-3.0E-03	-3.4E-03	-1.9E-03	-2.3E-03	-4.2E-03	-4.5E-03
	TC-2	R	1966	-0.166	-4.1E-03	-4.6E-03	-2.5E-03	-3.1E-03	-5.6E-03	-6.1E-03
	TC-3	R	1966	-0.216	-5.3E-03	-6.0E-03	-3.3E-03	-4.0E-03	-7.3E-03	-8.0E-03
	TC-4	R	1966	-0.230	-5.7E-03	-6.4E-03	-3.5E-03	-4.3E-03	-7.8E-03	-8.5E-03
	TC-7	R	1966	-0.223	-5.5E-03	-6.2E-03	-3.4E-03	-4.1E-03	-7.6E-03	-8.2E-03
	TC-8	R	1966	0.225	5.5E-03	6.2E-03	3.4E-03	4.2E-03	7.6E-03	8.3E-03
	TC-9	R	262	0.274	9.0E-04	1.0E-03	5.6E-04	6.8E-04	1.2E-03	1.3E-03
	TC-10	R	262	0.313	1.0E-03	1.2E-03	6.4E-04	7.7E-04	1.4E-03	1.5E-03
	TC-11	R	262	0.255	8.4E-04	9.4E-04	5.2E-04	6.3E-04	1.2E-03	1.3E-03
	TC-12	R	262	0.175	5.7E-04	6.5E-04	3.6E-04	4.3E-04	7.9E-04	8.6E-04
	TC-13	R	262	0.438	1.4E-03	1.6E-03	8.9E-04	1.1E-03	2.0E-03	2.2E-03
	TC-14	R	262	0.392	1.3E-03	1.4E-03	8.0E-04	9.7E-04	1.8E-03	1.9E-03
	TC-15	R	262	0.341	1.1E-03	1.3E-03	7.0E-04	8.4E-04	1.5E-03	1.7E-03
	TC-29	R	2073	-0.071	-1.8E-03	-2.1E-03	-1.1E-03	-1.4E-03	-2.5E-03	-2.8E-03
	TC-30	R	2263	-0.025	-7.1E-04	-8.0E-04	-4.4E-04	-5.3E-04	-9.7E-04	-1.1E-03
	TC-31	R	1908	-0.150	-3.6E-03	-4.0E-03	-2.2E-03	-2.7E-03	-4.9E-03	-5.4E-03
	TC-32	R	2209	-0.023	-6.4E-04	-7.2E-04	-4.0E-04	-4.8E-04	-8.8E-04	-9.5E-04
	TC-33	R	1087	-0.027	-3.7E-04	-4.1E-04	-2.3E-04	-2.8E-04	-5.1E-04	-5.5E-04
	TC-34	R	1215	-0.142	-2.2E-03	-2.4E-03	-1.3E-03	-1.6E-03	-3.0E-03	-3.2E-03
	TC-35	R	1347	-0.228	-3.8E-03	-4.3E-03	-2.4E-03	-2.9E-03	-5.3E-03	-5.8E-03
	TC-36	R	1583	-0.175	-3.5E-03	-3.9E-03	-2.2E-03	-2.6E-03	-4.8E-03	-5.2E-03
TC-37	R	1657	-0.022	-4.6E-04	-5.1E-04	-2.8E-04	-3.4E-04	-6.3E-04	-6.8E-04	
TC-38	R	1657	0.005	1.0E-04	1.2E-04	6.5E-05	7.8E-05	1.4E-04	1.6E-04	
TC-39	R	2698	0.013	4.4E-04	4.9E-04	2.7E-04	3.3E-04	6.0E-04	6.6E-04	
TC-40	R	3084	0.010	3.9E-04	4.3E-04	2.4E-04	2.9E-04	5.3E-04	5.8E-04	
TC-41	R	1670	-0.023	-4.8E-04	-5.4E-04	-3.0E-04	-3.6E-04	-6.6E-04	-7.2E-04	
TC-42	R	1805	-0.053	-1.2E-03	-1.3E-03	-7.4E-04	-9.0E-04	-1.6E-03	-1.8E-03	
TC-43	R	1798	-0.067	-1.5E-03	-1.7E-03	-9.4E-04	-1.1E-03	-2.1E-03	-2.3E-03	
TC-44	R	1798	-0.078	-1.8E-03	-2.0E-03	-1.1E-03	-1.3E-03	-2.4E-03	-2.6E-03	
TC-45	R	365	-0.041	-1.9E-04	-2.1E-04	-1.2E-04	-1.4E-04	-2.6E-04	-2.8E-04	
TC-P5	R	8090	-0.066	-6.7E-03	-7.5E-03	-4.2E-03	-5.0E-03	-9.2E-03	-1.0E-02	
TC-P6	R	8090	-0.017	-1.7E-03	-1.9E-03	-1.1E-03	-1.3E-03	-2.4E-03	-2.6E-03	
TC-P7	R	8090	0.327	3.3E-02	3.7E-02	2.1E-02	2.5E-02	4.6E-02	5.0E-02	
TC-P8	R	29044	-0.238	-8.7E-02	-9.7E-02	-5.4E-02	-6.5E-02	-1.2E-01	-1.3E-01	
TC-P9	R	29044	0.090	3.3E-02	3.7E-02	2.0E-02	2.5E-02	4.5E-02	4.9E-02	
TC-P10	R	29044	0.371	1.3E-01	1.5E-01	8.4E-02	1.0E-01	1.9E-01	2.0E-01	
TC-P11	R	29044	0.317	1.2E-01	1.3E-01	7.2E-02	8.7E-02	1.6E-01	1.7E-01	
TC-Others	R	80051	-0.098	-9.8E-02	-1.1E-01	-6.1E-02	-7.4E-02	-1.3E-01	-1.5E-01	
<b>Total</b>					<b>9.1E-02</b>	<b>1.0E-01</b>	<b>5.6E-02</b>	<b>6.8E-02</b>	<b>1.2E-01</b>	<b>1.4E-01</b>
San Tau	ST-1	R	2	0.029	7.3E-07	8.2E-07	4.5E-07	5.5E-07	1.0E-06	1.1E-06
	ST-2	R	2	0.026	6.5E-07	7.3E-07	4.0E-07	4.9E-07	9.0E-07	9.8E-07
	ST-3	R	2	0.017	4.3E-07	4.8E-07	2.6E-07	3.2E-07	5.9E-07	6.4E-07
	ST-Others	R	763	0.024	2.3E-04	2.6E-04	1.4E-04	1.7E-04	3.2E-04	3.4E-04
<b>Total</b>					<b>2.3E-04</b>	<b>2.6E-04</b>	<b>1.4E-04</b>	<b>1.7E-04</b>	<b>3.2E-04</b>	<b>3.5E-04</b>
Sha Lo Wan	SLW-1	R	2	-0.115	-2.9E-06	-3.2E-06	-1.8E-06	-2.2E-06	-4.0E-06	-4.3E-06
	SLW-2	R	2	0.013	3.3E-07	3.7E-07	2.0E-07	2.4E-07	4.5E-07	4.9E-07
	SLW-3	R	5	-0.343	-2.1E-05	-2.4E-05	-1.3E-05	-1.6E-05	-3.0E-05	-3.2E-05
	SLW-Others	R	21	-0.051	-1.3E-05	-1.5E-05	-8.3E-06	-1.0E-05	-1.8E-05	-2.0E-05
<b>Total</b>					<b>-3.7E-05</b>	<b>-4.2E-05</b>	<b>-2.3E-05</b>	<b>-2.8E-05</b>	<b>-5.2E-05</b>	<b>-5.6E-05</b>
San Shek Wan	SSW-1	R	3	-0.172	-6.5E-06	-7.3E-06	-4.0E-06	-4.9E-06	-8.9E-06	-9.7E-06
	SSW-Others	R	410	-0.310	-1.6E-03	-1.8E-03	-9.9E-04	-1.2E-03	-2.2E-03	-2.4E-03
<b>Total</b>					<b>-1.6E-03</b>	<b>-1.8E-03</b>	<b>-9.9E-04</b>	<b>-1.2E-03</b>	<b>-2.2E-03</b>	<b>-2.4E-03</b>
Sham Wat	SW-1	R	3	0.002	7.5E-08	8.5E-08	4.7E-08	5.6E-08	1.0E-07	1.1E-07
	SW-1	R	3	0.002	7.5E-08	8.5E-08	4.7E-08	5.6E-08	1.0E-07	1.1E-07
	SW-Others	R	163	0.006	1.2E-05	1.3E-05	7.4E-06	8.9E-06	1.6E-05	1.8E-05

**Short-term Hospital Admission Effects of RSP - Detailed Breakdown (3RS - 2RS) (based on incremental change of max. daily conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Disease <sub>Cardiovascular</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 155299 Disease <sub>Respiratory</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 169071					<b>Average Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0058 AP <sub>Cardiovascular</sub> = (1.0058 - 1) x 1 / 1.0058 x 1 = 0.0058 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0060 AP <sub>Respiratory</sub> = (1.0060 - 1) x 1 / 1.0060 x 1 = 0.0060		<b>Lower Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0036 AP <sub>Cardiovascular</sub> = (1.0036 - 1) x 1 / 1.0036 x 1 = 0.0036 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0040 AP <sub>Respiratory</sub> = (1.0040 - 1) x 1 / 1.0040 x 1 = 0.0040		<b>Upper Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0080 AP <sub>Cardiovascular</sub> = (1.0080 - 1) x 1 / 1.0080 x 1 = 0.0079 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0080 AP <sub>Respiratory</sub> = (1.0080 - 1) x 1 / 1.0080 x 1 = 0.0079	
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Max. 24hr Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Hospital Admission Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )	
					RSP	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease
<b>Total</b>					<b>1.2E-05</b>	<b>1.4E-05</b>	<b>7.5E-06</b>	<b>9.0E-06</b>	<b>1.7E-05</b>	<b>1.8E-05</b>
Siu Ho Wan	SHW-1	R	2	0.223	5.6E-06	6.3E-06	3.5E-06	4.2E-06	7.7E-06	8.4E-06
	SHW-2	R	2	-0.035	-8.8E-07	-9.9E-07	-5.5E-07	-6.6E-07	-1.2E-06	-1.3E-06
	SHW-3	R	2	0.115	2.9E-06	3.2E-06	1.8E-06	2.2E-06	4.0E-06	4.3E-06
	SHW-Others	R	347	0.223	9.7E-04	1.1E-03	6.0E-04	7.3E-04	1.3E-03	1.5E-03
	<b>Total</b>					<b>9.8E-04</b>	<b>1.1E-03</b>	<b>6.1E-04</b>	<b>7.3E-04</b>	<b>1.3E-03</b>
Airport	AI-C1	R	2200	-2.548	-7.0E-02	-7.9E-02	-4.4E-02	-5.3E-02	-9.7E-02	-1.1E-01
	AI-C4	R	1200	-0.322	-4.8E-03	-5.4E-03	-3.0E-03	-3.6E-03	-6.7E-03	-7.2E-03
	<b>Total</b>					<b>-7.5E-02</b>	<b>-8.4E-02</b>	<b>-4.7E-02</b>	<b>-5.6E-02</b>	<b>-1.0E-01</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] In HK in 2012, cardiovascular diseases of heart (ICD10: I00-I99) = 155299 (Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf)). An underestimate because about 10% of all hospital beds are outside HA hospitals.

[3] In HK in 2012, respiratory diseases (ICD10: J00-J99) = 169071 (Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf)). An underestimate because about 10% of all hospital beds are outside HA hospitals.

[4] Wong C.M. et al, 2010.

**Short-term Hospital Admission Effects of SO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Disease <sub>Cardiovascular</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 155299 Disease <sub>Respiratory</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 169071					<b>Average Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0098 AP <sub>Cardiovascular</sub> = (1.0098 - 1) x 1 / 1.0098 x 1 = 0.0097 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0013 AP <sub>Respiratory</sub> = (1.0013 - 1) x 1 / 1.0013 x 1 = 0.0013		<b>Lower Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0053 AP <sub>Cardiovascular</sub> = (1.0053 - 1) x 1 / 1.0053 x 1 = 0.0053 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = -1.0024 AP <sub>Respiratory</sub> = -(1.0024 - 1) x 1 / 1.0024 x 1 = -0.0024		<b>Upper Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0139 AP <sub>Cardiovascular</sub> = (1.0139 - 1) x 1 / 1.0139 x 1 = 0.0137 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0050 AP <sub>Respiratory</sub> = (1.0050 - 1) x 1 / 1.0050 x 1 = 0.0050	
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual-avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Hospital Admission Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )	
					SO <sub>2</sub>	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease
Tung Chung	TC-1	R	1966	0.065	2.7E-03	3.9E-04	1.5E-03	-7.2E-04	3.8E-03	1.5E-03
	TC-2	R	1966	0.064	2.7E-03	3.9E-04	1.4E-03	-7.1E-04	3.7E-03	1.5E-03
	TC-3	R	1966	0.066	2.7E-03	4.0E-04	1.5E-03	-7.4E-04	3.9E-03	1.5E-03
	TC-4	R	1966	0.066	2.7E-03	4.0E-04	1.5E-03	-7.4E-04	3.9E-03	1.5E-03
	TC-7	R	1966	0.067	2.8E-03	4.0E-04	1.5E-03	-7.5E-04	3.9E-03	1.6E-03
	TC-8	R	1966	0.081	3.4E-03	4.9E-04	1.8E-03	-9.1E-04	4.8E-03	1.9E-03
	TC-9	R	262	0.081	4.5E-04	6.5E-05	2.4E-04	-1.2E-04	6.3E-04	2.5E-04
	TC-10	R	262	0.083	4.6E-04	6.7E-05	2.5E-04	-1.2E-04	6.5E-04	2.6E-04
	TC-11	R	262	0.084	4.7E-04	6.8E-05	2.5E-04	-1.3E-04	6.6E-04	2.6E-04
	TC-12	R	262	0.085	4.7E-04	6.9E-05	2.6E-04	-1.3E-04	6.7E-04	2.6E-04
	TC-13	R	262	0.086	4.8E-04	6.9E-05	2.6E-04	-1.3E-04	6.7E-04	2.7E-04
	TC-14	R	262	0.084	4.7E-04	6.8E-05	2.5E-04	-1.3E-04	6.6E-04	2.6E-04
	TC-15	R	262	0.083	4.6E-04	6.7E-05	2.5E-04	-1.2E-04	6.5E-04	2.6E-04
	TC-29	R	2073	0.050	2.2E-03	3.2E-04	1.2E-03	-5.8E-04	3.1E-03	1.2E-03
	TC-30	R	2263	0.049	2.3E-03	3.4E-04	1.3E-03	-6.3E-04	3.3E-03	1.3E-03
	TC-31	R	1908	0.053	2.1E-03	3.1E-04	1.2E-03	-5.7E-04	3.0E-03	1.2E-03
	TC-32	R	2209	0.050	2.3E-03	3.4E-04	1.3E-03	-6.2E-04	3.3E-03	1.3E-03
	TC-33	R	1087	0.051	1.2E-03	1.7E-04	6.3E-04	-3.1E-04	1.6E-03	6.5E-04
	TC-34	R	1215	0.053	1.4E-03	2.0E-04	7.4E-04	-3.6E-04	1.9E-03	7.6E-04
	TC-35	R	1347	0.055	1.6E-03	2.3E-04	8.5E-04	-4.2E-04	2.2E-03	8.7E-04
	TC-36	R	1583	0.054	1.8E-03	2.6E-04	9.8E-04	-4.8E-04	2.5E-03	1.0E-03
	TC-37	R	1657	0.052	1.8E-03	2.6E-04	9.8E-04	-4.9E-04	2.6E-03	1.0E-03
	TC-38	R	1657	0.048	1.7E-03	2.4E-04	9.1E-04	-4.5E-04	2.4E-03	9.3E-04
	TC-39	R	2698	0.045	2.5E-03	3.7E-04	1.4E-03	-6.8E-04	3.6E-03	1.4E-03
	TC-40	R	3084	0.045	2.9E-03	4.2E-04	1.6E-03	-7.8E-04	4.1E-03	1.6E-03
	TC-41	R	1670	0.045	1.6E-03	2.3E-04	8.6E-04	-4.2E-04	2.2E-03	8.8E-04
	TC-42	R	1805	0.046	1.7E-03	2.5E-04	9.5E-04	-4.7E-04	2.5E-03	9.7E-04
	TC-43	R	1798	0.047	1.8E-03	2.6E-04	9.6E-04	-4.8E-04	2.5E-03	9.9E-04
	TC-44	R	1798	0.049	1.8E-03	2.7E-04	1.0E-03	-5.0E-04	2.6E-03	1.0E-03
	TC-45	R	365	0.050	3.8E-04	5.6E-05	2.1E-04	-1.0E-04	5.4E-04	2.1E-04
	TC-P5	R	8090	0.078	1.3E-02	1.9E-03	7.3E-03	-3.6E-03	1.9E-02	7.4E-03
	TC-P6	R	8090	0.048	8.1E-03	1.2E-03	4.4E-03	-2.2E-03	1.2E-02	4.5E-03
	TC-P7	R	8090	0.076	1.3E-02	1.9E-03	7.1E-03	-3.5E-03	1.8E-02	7.3E-03
TC-P8	R	29044	0.071	4.4E-02	6.3E-03	2.4E-02	-1.2E-02	6.2E-02	2.4E-02	
TC-P9	R	29044	0.079	4.9E-02	7.1E-03	2.6E-02	-1.3E-02	6.9E-02	2.7E-02	
TC-P10	R	29044	0.112	6.8E-02	1.0E-02	3.7E-02	-1.8E-02	9.7E-02	3.8E-02	
TC-P11	R	29044	0.115	7.0E-02	1.0E-02	3.8E-02	-1.9E-02	9.9E-02	3.9E-02	
TC-Others	R	80051	0.053	8.9E-02	1.3E-02	4.8E-02	-2.4E-02	1.3E-01	4.9E-02	
<b>Total</b>					<b>4.1E-01</b>	<b>5.9E-02</b>	<b>2.2E-01</b>	<b>-1.1E-01</b>	<b>5.7E-01</b>	<b>2.3E-01</b>
San Tau	ST-1	R	2	0.165	6.9E-06	1.0E-06	3.8E-06	-1.9E-06	9.8E-06	3.9E-06
	ST-2	R	2	0.171	7.2E-06	1.0E-06	3.9E-06	-1.9E-06	1.0E-05	4.0E-06
	ST-3	R	2	0.150	6.3E-06	9.2E-07	3.4E-06	-1.7E-06	8.9E-06	3.5E-06
	ST-Others	R	763	0.162	2.6E-03	3.8E-04	1.4E-03	-7.0E-04	3.7E-03	1.5E-03
	<b>Total</b>					<b>2.6E-03</b>	<b>3.8E-04</b>	<b>1.4E-03</b>	<b>-7.0E-04</b>	<b>3.7E-03</b>
Sha Lo Wan	SLW-1	R	2	-0.045	-1.9E-06	-2.7E-07	-1.0E-06	5.1E-07	-2.7E-06	-1.1E-06
	SLW-2	R	2	0.043	1.8E-06	2.6E-07	9.8E-07	-4.8E-07	2.5E-06	1.0E-06
	SLW-3	R	5	0.062	6.5E-06	9.5E-07	3.5E-06	-1.8E-06	9.2E-06	3.6E-06
	SLW-Others	R	21	-0.001	-4.5E-07	-6.6E-08	-2.4E-07	1.2E-07	-6.4E-07	-2.5E-07
	<b>Total</b>					<b>6.0E-06</b>	<b>8.7E-07</b>	<b>3.3E-06</b>	<b>-1.6E-06</b>	<b>8.5E-06</b>
San Shek Wan	SSW-1	R	3	0.157	9.9E-06	1.4E-06	5.4E-06	-2.7E-06	1.4E-05	5.5E-06
	SSW-Others	R	410	0.088	7.6E-04	1.1E-04	4.2E-04	-2.1E-04	1.1E-03	4.3E-04
	<b>Total</b>					<b>7.7E-04</b>	<b>1.1E-04</b>	<b>4.2E-04</b>	<b>-2.1E-04</b>	<b>1.1E-03</b>
Sham Wat	SW-1	R	3	0.108	6.8E-06	9.9E-07	3.7E-06	-1.8E-06	9.6E-06	3.8E-06
	SW-1	R	3	0.108	6.8E-06	9.9E-07	3.7E-06	-1.8E-06	9.6E-06	3.8E-06
	SW-Others	R	163	0.105	3.6E-04	5.3E-05	2.0E-04	-9.7E-05	5.1E-04	2.0E-04

**Short-term Hospital Admission Effects of SO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Disease <sub>Cardiovascular</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 155299 Disease <sub>Respiratory</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 169071					<b>Average Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0098 AP <sub>Cardiovascular</sub> = (1.0098 - 1) x 1 / 1.0098 x 1 = 0.0097 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0013 AP <sub>Respiratory</sub> = (1.0013 - 1) x 1 / 1.0013 x 1 = 0.0013		<b>Lower Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0053 AP <sub>Cardiovascular</sub> = (1.0053 - 1) x 1 / 1.0053 x 1 = 0.0053 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = -1.0024 AP <sub>Respiratory</sub> = -(1.0024 - 1) x 1 / 1.0024 x 1 = -0.0024		<b>Upper Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0139 AP <sub>Cardiovascular</sub> = (1.0139 - 1) x 1 / 1.0139 x 1 = 0.0137 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0050 AP <sub>Respiratory</sub> = (1.0050 - 1) x 1 / 1.0050 x 1 = 0.0050	
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual-avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Hospital Admission Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )	
				SO <sub>2</sub>	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease
<b>Total</b>					<b>3.8E-04</b>	<b>5.5E-05</b>	<b>2.0E-04</b>	<b>-1.0E-04</b>	<b>5.3E-04</b>	<b>2.1E-04</b>
Siu Ho Wan	SHW-1	R	2	0.048	2.0E-06	2.9E-07	1.1E-06	-5.4E-07	2.8E-06	1.1E-06
	SHW-2	R	2	0.057	2.4E-06	3.5E-07	1.3E-06	-6.4E-07	3.4E-06	1.3E-06
	SHW-3	R	2	0.104	4.4E-06	6.4E-07	2.4E-06	-1.2E-06	6.2E-06	2.4E-06
	SHW-Others	R	347	0.048	3.5E-04	5.1E-05	1.9E-04	-9.4E-05	4.9E-04	2.0E-04
	<b>Total</b>					<b>3.6E-04</b>	<b>5.2E-05</b>	<b>1.9E-04</b>	<b>-9.6E-05</b>	<b>5.1E-04</b>
Airport	AI-C1	R	2200	0.854	4.0E-02	5.8E-03	2.2E-02	-1.1E-02	5.6E-02	2.2E-02
	AI-C4	R	1200	0.416	1.1E-02	1.5E-03	5.7E-03	-2.8E-03	1.5E-02	5.9E-03
	<b>Total</b>					<b>5.0E-02</b>	<b>7.3E-03</b>	<b>2.7E-02</b>	<b>-1.3E-02</b>	<b>7.1E-02</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] In HK in 2012, cardiovascular diseases of heart (ICD10: I00-I99) = 155299 (Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf)). An underestimate because about 10% of all hospital beds are outside HA hospitals.

[3] In HK in 2012, respiratory diseases (ICD10: J00-J99) = 169071 (Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf)). An underestimate because about 10% of all hospital beds are outside HA hospitals.

[4] Wong C.M. et al, 2010.

**Short-term Hospital Admission Effects of SO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of max. daily conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Disease <sub>Cardiovascular</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 155299 Disease <sub>Respiratory</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 169071					Average Value of RR RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0098 AP <sub>Cardiovascular</sub> = (1.0098 - 1) x 1 / 1.0098 x 1 = 0.0097 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0013 AP <sub>Respiratory</sub> = (1.0013 - 1) x 1 / 1.0013 x 1 = 0.0013		Lower Value of RR RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0053 AP <sub>Cardiovascular</sub> = (1.0053 - 1) x 1 / 1.0053 x 1 = 0.0053 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = -1.0024 AP <sub>Respiratory</sub> = -(1.0024 - 1) x 1 / 1.0024 x 1 = -0.0024		Upper Value of RR RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0139 AP <sub>Cardiovascular</sub> = (1.0139 - 1) x 1 / 1.0139 x 1 = 0.0137 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0050 AP <sub>Respiratory</sub> = (1.0050 - 1) x 1 / 1.0050 x 1 = 0.0050	
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Max. 24hr Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Hospital Admission Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )	
					SO <sub>2</sub>	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease
Tung Chung	TC-1	R	1966	0.203	8.4E-03	1.2E-03	4.6E-03	-2.3E-03	1.2E-02	4.7E-03
	TC-2	R	1966	0.193	8.0E-03	1.2E-03	4.3E-03	-2.1E-03	1.1E-02	4.5E-03
	TC-3	R	1966	0.186	7.7E-03	1.1E-03	4.2E-03	-2.1E-03	1.1E-02	4.3E-03
	TC-4	R	1966	0.186	7.7E-03	1.1E-03	4.2E-03	-2.1E-03	1.1E-02	4.3E-03
	TC-7	R	1966	0.187	7.8E-03	1.1E-03	4.2E-03	-2.1E-03	1.1E-02	4.3E-03
	TC-8	R	1966	0.005	2.1E-04	3.1E-05	1.1E-04	-5.7E-05	3.0E-04	1.2E-04
	TC-9	R	262	0.004	2.2E-05	3.3E-06	1.2E-05	-6.0E-06	3.2E-05	1.3E-05
	TC-10	R	262	0.011	6.2E-05	9.0E-06	3.4E-05	-1.7E-05	8.7E-05	3.4E-05
	TC-11	R	262	0.011	6.2E-05	9.0E-06	3.4E-05	-1.7E-05	8.7E-05	3.4E-05
	TC-12	R	262	0.011	6.2E-05	9.0E-06	3.4E-05	-1.7E-05	8.7E-05	3.4E-05
	TC-13	R	262	0.011	6.2E-05	9.0E-06	3.4E-05	-1.7E-05	8.7E-05	3.4E-05
	TC-14	R	262	0.009	5.1E-05	7.4E-06	2.7E-05	-1.4E-05	7.1E-05	2.8E-05
	TC-15	R	262	0.005	2.8E-05	4.1E-06	1.5E-05	-7.5E-06	4.0E-05	1.6E-05
	TC-29	R	2073	0.238	1.0E-02	1.5E-03	5.6E-03	-2.8E-03	1.5E-02	5.8E-03
	TC-30	R	2263	0.237	1.1E-02	1.6E-03	6.1E-03	-3.0E-03	1.6E-02	6.3E-03
	TC-31	R	1908	0.250	1.0E-02	1.5E-03	5.5E-03	-2.7E-03	1.4E-02	5.6E-03
	TC-32	R	2209	0.248	1.2E-02	1.7E-03	6.3E-03	-3.1E-03	1.6E-02	6.4E-03
	TC-33	R	1087	0.251	5.8E-03	8.4E-04	3.1E-03	-1.5E-03	8.1E-03	3.2E-03
	TC-34	R	1215	0.255	6.5E-03	9.5E-04	3.5E-03	-1.8E-03	9.2E-03	3.6E-03
	TC-35	R	1347	0.260	7.4E-03	1.1E-03	4.0E-03	-2.0E-03	1.0E-02	4.1E-03
	TC-36	R	1583	0.261	8.7E-03	1.3E-03	4.7E-03	-2.3E-03	1.2E-02	4.9E-03
	TC-37	R	1657	0.259	9.1E-03	1.3E-03	4.9E-03	-2.4E-03	1.3E-02	5.1E-03
	TC-38	R	1657	0.266	9.3E-03	1.4E-03	5.1E-03	-2.5E-03	1.3E-02	5.2E-03
	TC-39	R	2698	0.252	1.4E-02	2.1E-03	7.8E-03	-3.9E-03	2.0E-02	8.0E-03
	TC-40	R	3084	0.249	1.6E-02	2.4E-03	8.8E-03	-4.3E-03	2.3E-02	9.0E-03
	TC-41	R	1670	0.254	8.9E-03	1.3E-03	4.9E-03	-2.4E-03	1.3E-02	5.0E-03
	TC-42	R	1805	0.259	9.9E-03	1.4E-03	5.4E-03	-2.6E-03	1.4E-02	5.5E-03
	TC-43	R	1798	0.263	1.0E-02	1.5E-03	5.4E-03	-2.7E-03	1.4E-02	5.6E-03
	TC-44	R	1798	0.272	1.0E-02	1.5E-03	5.6E-03	-2.8E-03	1.5E-02	5.7E-03
	TC-45	R	365	0.284	2.2E-03	3.2E-04	1.2E-03	-5.9E-04	3.1E-03	1.2E-03
	TC-P5	R	8090	0.096	1.6E-02	2.4E-03	8.9E-03	-4.4E-03	2.3E-02	9.1E-03
	TC-P6	R	8090	0.303	5.2E-02	7.5E-03	2.8E-02	-1.4E-02	7.3E-02	2.9E-02
TC-P7	R	8090	0.005	8.7E-04	1.3E-04	4.7E-04	-2.3E-04	1.2E-03	4.8E-04	
TC-P8	R	29044	0.233	1.4E-01	2.1E-02	7.7E-02	-3.8E-02	2.0E-01	8.0E-02	
TC-P9	R	29044	0.267	1.6E-01	2.4E-02	8.9E-02	-4.4E-02	2.3E-01	9.1E-02	
TC-P10	R	29044	1.542	9.4E-01	1.4E-01	5.1E-01	-2.5E-01	1.3E+00	5.3E-01	
TC-P11	R	29044	1.309	8.0E-01	1.2E-01	4.4E-01	-2.2E-01	1.1E+00	4.5E-01	
TC-Others	R	80051	0.241	4.1E-01	5.9E-02	2.2E-01	-1.1E-01	5.7E-01	2.3E-01	
<b>Total</b>					<b>2.7E+00</b>	<b>4.0E-01</b>	<b>1.5E+00</b>	<b>-7.3E-01</b>	<b>3.9E+00</b>	<b>1.5E+00</b>
San Tau	ST-1	R	2	0.022	9.4E-07	1.4E-07	5.1E-07	-2.5E-07	1.3E-06	5.3E-07
	ST-2	R	2	0.019	8.1E-07	1.2E-07	4.4E-07	-2.2E-07	1.2E-06	4.5E-07
	ST-3	R	2	0.031	1.3E-06	1.9E-07	7.0E-07	-3.5E-07	1.8E-06	7.2E-07
	ST-Others	R	763	0.024	3.9E-04	5.6E-05	2.1E-04	-1.0E-04	5.5E-04	2.2E-04
	<b>Total</b>					<b>3.9E-04</b>	<b>5.7E-05</b>	<b>2.1E-04</b>	<b>-1.0E-04</b>	<b>5.5E-04</b>
Sha Lo Wan	SLW-1	R	2	1.070	4.5E-05	6.6E-06	2.4E-05	-1.2E-05	6.4E-05	2.5E-05
	SLW-2	R	2	0.645	2.7E-05	4.0E-06	1.5E-05	-7.3E-06	3.8E-05	1.5E-05
	SLW-3	R	5	0.185	1.9E-05	2.8E-06	1.1E-05	-5.2E-06	2.8E-05	1.1E-05
	SLW-Others	R	21	0.857	3.8E-04	5.5E-05	2.1E-04	-1.0E-04	5.4E-04	2.1E-04
	<b>Total</b>					<b>4.7E-04</b>	<b>6.9E-05</b>	<b>2.6E-04</b>	<b>-1.3E-04</b>	<b>6.7E-04</b>
San Shek Wan	SSW-1	R	3	0.085	5.4E-06	7.9E-07	2.9E-06	-1.5E-06	7.6E-06	3.0E-06
	SSW-Others	R	410	0.148	1.3E-03	1.9E-04	6.9E-04	-3.4E-04	1.8E-03	7.1E-04
	<b>Total</b>					<b>1.3E-03</b>	<b>1.9E-04</b>	<b>7.0E-04</b>	<b>-3.4E-04</b>	<b>1.8E-03</b>
Sham Wat	SW-1	R	3	0.039	2.4E-06	3.6E-07	1.3E-06	-6.6E-07	3.5E-06	1.4E-06
	SW-1	R	3	0.039	2.4E-06	3.6E-07	1.3E-06	-6.6E-07	3.5E-06	1.4E-06
	SW-Others	R	163	0.720	2.5E-03	3.6E-04	1.3E-03	-6.6E-04	3.5E-03	1.4E-03

**Short-term Hospital Admission Effects of SO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of max. daily conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Disease <sub>Cardiovascular</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 155299 Disease <sub>Respiratory</sub> : nos. of diseases in 2012 <sup>[2]</sup> = 169071					<b>Average Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0098 AP <sub>Cardiovascular</sub> = (1.0098 - 1) x 1 / 1.0098 x 1 = 0.0097 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0013 AP <sub>Respiratory</sub> = (1.0013 - 1) x 1 / 1.0013 x 1 = 0.0013		<b>Lower Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = 1.0053 AP <sub>Cardiovascular</sub> = (1.0053 - 1) x 1 / 1.0053 x 1 = 0.0053 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[4]</sup> = -1.0024 AP <sub>Respiratory</sub> = -(1.0024 - 1) x 1 / 1.0024 x 1 = -0.0024		<b>Upper Value of RR</b> RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0139 AP <sub>Cardiovascular</sub> = (1.0139 - 1) x 1 / 1.0139 x 1 = 0.0137 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0050 AP <sub>Respiratory</sub> = (1.0050 - 1) x 1 / 1.0050 x 1 = 0.0050	
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Max. 24hr Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Hospital Admission Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )		Short-term Hospital Admission Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Disease / Population <sub>HK</sub> )	
					SO <sub>2</sub>	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease	Respiratory Disease	Cardiovascular Disease
<b>Total</b>					<b>2.5E-03</b>	<b>3.6E-04</b>	<b>1.3E-03</b>	<b>-6.7E-04</b>	<b>3.5E-03</b>	<b>1.4E-03</b>
Siu Ho Wan	SHW-1	R	2	0.000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	SHW-2	R	2	-0.195	-8.2E-06	-1.2E-06	-4.5E-06	2.2E-06	-1.2E-05	-4.6E-06
	SHW-3	R	2	2.762	1.2E-04	1.7E-05	6.3E-05	-3.1E-05	1.6E-04	6.5E-05
	SHW-Others	R	347	0.000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	<b>Total</b>					<b>1.1E-04</b>	<b>1.6E-05</b>	<b>5.9E-05</b>	<b>-2.9E-05</b>	<b>1.5E-04</b>
Airport	AI-C1	R	2200	11.125	5.2E-01	7.5E-02	2.8E-01	-1.4E-01	7.3E-01	2.9E-01
	AI-C4	R	1200	5.309	1.3E-01	2.0E-02	7.3E-02	-3.6E-02	1.9E-01	7.5E-02
	<b>Total</b>					<b>6.5E-01</b>	<b>9.5E-02</b>	<b>3.5E-01</b>	<b>-1.7E-01</b>	<b>9.2E-01</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] In HK in 2012, cardiovascular diseases of heart (ICD10: I00-I99) = 155299 (Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf)). An underestimate because about 10% of all hospital beds are outside HA hospitals.

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[4] Wong C.M. et al, 2010.

**Summary**

**Overall (Unit Risk)**

Major Area	Population (PreFicteF as of MIF-2031) [1]	Long-term Mortality Effects of FSP (3RS - 2RS)		
		Incremental Unit Risk per Annum for All-causes Premature Death		
		w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR
Tung Chung	264344	3.99E-07	1.03E-07	7.68E-07
San Tau	769	5.65E-07	1.45E-07	1.09E-06
Sha Lo Wan	30	6.61E-07	1.70E-07	1.27E-06
San Shek Wan	413	5.20E-07	1.34E-07	1.00E-06
Sham Wat	169	2.94E-07	7.56E-08	5.66E-07
Siu Ho Wan	353	2.26E-07	5.83E-08	4.36E-07

Note: [1] Usual residential population

**Overall (Unit Risk)**

Major Area	Population (PreFicteF as of MIF-2031) [1]	Total Short-term Mortality Effects (3RS - 2RS) <sup>[2]</sup>			Total Short-term Mortality Effects (3RS - 2RS) <sup>[3]</sup>		
		Incremental Unit Risk per Annum for All-causes Premature Death			Incremental Unit Risk per Annum for All-causes Premature Death		
		w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR
Tung Chung	264344	2.23E-06	1.40E-06	3.06E-06	7.86E-06	4.67E-06	1.10E-05
San Tau	769	3.07E-06	1.81E-06	4.32E-06	-8.07E-06	-5.47E-06	-1.06E-05
Sha Lo Wan	30	-1.17E-05	-8.01E-06	-1.54E-05	-5.81E-05	-3.99E-05	-7.62E-05
San Shek Wan	413	-5.27E-06	-3.70E-06	-6.83E-06	-3.23E-06	-2.15E-06	-4.32E-06
Sham Wat	169	2.00E-06	1.15E-06	2.85E-06	8.39E-06	4.79E-06	1.20E-05
Siu Ho Wan	353	1.73E-06	1.09E-06	4.53E-07	2.00E-06	1.18E-06	2.83E-06
Airport	3400	1.27E-05	7.92E-06	1.75E-05	1.22E-04	7.18E-05	1.71E-04

Notes:

[1] Usual residential population for Tung Chung, San Tau, Sha Lo Wan, San Shek Wan, Sham Wat, and Siu Ho Wan; hotel residential population for Airport Island (Land Site).

[2] With reference to incremental change of annual-avg. concentration for averaged daily concentration.

[3] With reference to incremental change of max. daily-avg. concentration.

**NO<sub>x</sub> (Nos. of Cases)**

Major Area	Population (PreFicteF as of MIF-2031) [1]	Short-term Mortality Effects of NO <sub>2</sub> <sup>[2]</sup>			Short-term Mortality Effects of NO <sub>2</sub> <sup>[3]</sup>		
		Incremental Cases for All-causes Premature Death (3RS - 2RS)			Incremental Cases for All-causes Premature Death (3RS - 2RS)		
		w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR
Tung Chung	264344	4.73E-01	3.18E-01	6.27E-01	1.37E+00	9.21E-01	1.82E+00
San Tau	769	1.51E-03	1.01E-03	2.00E-03	-6.36E-03	-4.27E-03	-8.43E-03
Sha Lo Wan	30	-3.69E-04	-2.48E-04	-4.89E-04	-1.85E-03	-1.24E-03	-2.45E-03
San Shek Wan	413	-2.47E-03	-1.66E-03	-3.27E-03	-1.27E-03	-8.57E-04	-1.69E-03
Sham Wat	169	1.94E-04	1.30E-04	2.57E-04	7.93E-04	5.33E-04	1.05E-03
Siu Ho Wan	353	5.07E-04	3.41E-04	1.91E-06	4.47E-04	3.01E-04	5.93E-04
Airport	3400	3.41E-02	2.29E-02	4.52E-02	2.68E-01	1.80E-01	3.55E-01

Notes:

[1] Usual residential population for Tung Chung, San Tau, Sha Lo Wan, San Shek Wan, Sham Wat, and Siu Ho Wan; hotel residential population for Airport Island (Land Site).

[2] With reference to incremental change of annual-avg. concentration for averaged daily concentration.

[3] With reference to incremental change of max. daily-avg. concentration.

**RSP (Nos. of Cases)**

Major Area	Population (PreFicteF as of MIF-2031) [1]	Short-term Mortality Effects of RSP <sup>[2]</sup>			Short-term Mortality Effects of RSP <sup>[3]</sup>		
		Incremental Cases for All-causes Premature Death (3RS - 2RS)			Incremental Cases for All-causes Premature Death (3RS - 2RS)		
		w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR
Tung Chung	264344	1.50E-02	6.80E-03	2.35E-02	2.16E-02	9.78E-03	3.38E-02
San Tau	769	1.95E-04	8.81E-05	3.05E-04	5.50E-05	2.49E-05	8.60E-05
Sha Lo Wan	30	1.56E-05	7.05E-06	2.44E-05	-8.91E-06	-4.03E-06	-1.39E-05
San Shek Wan	413	9.45E-05	4.27E-05	1.48E-04	-3.80E-04	-1.72E-04	-5.95E-04
Sham Wat	169	5.03E-05	2.28E-05	7.87E-05	2.85E-06	1.29E-06	4.47E-06
Siu Ho Wan	353	1.17E-05	5.29E-06	1.83E-05	2.32E-04	1.05E-04	3.63E-04
Airport	3400	-3.45E-03	-1.56E-03	-5.39E-03	-1.79E-02	-8.07E-03	-2.79E-02

Notes:

[1] Usual residential population for Tung Chung, San Tau, Sha Lo Wan, San Shek Wan, Sham Wat, and Siu Ho Wan; hotel residential population for Airport Island (Land Site).

[2] With reference to incremental change of annual-avg. concentration for averaged daily concentration.

[3] With reference to incremental change of max. daily-avg. concentration.

**SO<sub>2</sub> (Nos. of Cases)**

Major Area	Population (PreFicteF as of MIF-2031) [1]	Short-term Mortality Effects of SO <sub>2</sub> <sup>[2]</sup>			Short-term Mortality Effects of SO <sub>2</sub> <sup>[3]</sup>		
		Incremental Cases for All-causes Premature Death (3RS - 2RS)			Incremental Cases for All-causes Premature Death (3RS - 2RS)		
		w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR	w/ Avg. Value of RR	w/ Lower Value of RR	w/ Upper Value of RR
Tung Chung	264344	1.02E-01	4.50E-02	1.58E-01	6.86E-01	3.03E-01	1.06E+00
San Tau	769	6.59E-04	2.91E-04	1.02E-03	9.80E-05	4.33E-05	1.52E-04
Sha Lo Wan	30	1.51E-06	6.66E-07	2.34E-06	1.18E-04	5.23E-05	1.84E-04
San Shek Wan	413	1.95E-04	8.60E-05	3.02E-04	3.22E-04	1.42E-04	5.00E-04
Sham Wat	169	9.45E-05	4.17E-05	1.47E-04	6.23E-04	2.75E-04	9.67E-04
Siu Ho Wan	353	9.01E-05	3.98E-05	1.40E-04	2.72E-05	1.20E-05	4.22E-05
Airport	3400	1.26E-02	5.57E-03	1.96E-02	1.63E-01	7.22E-02	2.54E-01

Notes:

[1] Usual residential population for Tung Chung, San Tau, Sha Lo Wan, San Shek Wan, Sham Wat, and Siu Ho Wan; hotel residential population for Airport Island (Land Site).

[2] With reference to incremental change of annual-avg. concentration for averaged daily concentration.

[3] With reference to incremental change of max. daily-avg. concentration.

**Long-term Mortality Effects of FSP - Detailed Breakdown (3RS - 2RS) (based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>(1)</sup> = 7154600 Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>(2)</sup> = 42017 Mortality <sub>Cardiopulmonary</sub> : nos. of deaths in 2012 <sup>(3)</sup> = 19952 Mortality <sub>Lung Cancer</sub> : nos. of deaths in 2011 <sup>(4)</sup> = 3893					Average Value of RR RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.04 AP <sub>All</sub> = (1.04 - 1) x 1 / 1.04 x 1 = 0.0385 RR <sub>Cardiopulmonary</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.06 AP <sub>Cardiopulmonary</sub> = (1.06 - 1) x 1 / 1.06 x 1 = 0.0566 RR <sub>Lung Cancer</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.08 AP <sub>Lung Cancer</sub> = (1.08 - 1) x 1 / 1.08 x 1 = 0.0741			Lower Value of RR RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.01 AP <sub>All</sub> = (1.01 - 1) x 1 / 1.01 x 1 = 0.0099 RR <sub>Cardiopulmonary</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.02 AP <sub>Cardiopulmonary</sub> = (1.02 - 1) x 1 / 1.02 x 1 = 0.0196 RR <sub>Lung Cancer</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.01 AP <sub>Lung Cancer</sub> = (1.01 - 1) x 1 / 1.01 x 1 = 0.0099			Upper Value of RR RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.08 AP <sub>All</sub> = (1.08 - 1) x 1 / 1.08 x 1 = 0.0741 RR <sub>Cardiopulmonary</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.10 AP <sub>Cardiopulmonary</sub> = (1.1 - 1) x 1 / 1.1 x 1 = 0.0909 RR <sub>Lung Cancer</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.16 AP <sub>Lung Cancer</sub> = (1.16 - 1) x 1 / 1.16 x 1 = 0.1379		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Long-term Mortality Effects of FSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Long-term Mortality Effects of FSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Long-term Mortality Effects of FSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					FSP	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality
Tung Chung	TC-1	R	1966	0.021	9.3E-04	6.5E-04	1.7E-04	2.4E-04	2.3E-04	2.2E-05	1.8E-03	1.0E-03	3.1E-04
	TC-2	R	1966	0.023	1.0E-03	7.1E-04	1.8E-04	2.6E-04	2.5E-04	2.4E-05	2.0E-03	1.1E-03	3.4E-04
	TC-3	R	1966	0.023	1.0E-03	7.1E-04	1.8E-04	2.6E-04	2.5E-04	2.4E-05	2.0E-03	1.1E-03	3.4E-04
	TC-4	R	1966	0.022	9.8E-04	6.8E-04	1.7E-04	2.5E-04	2.4E-04	2.3E-05	1.9E-03	1.1E-03	3.2E-04
	TC-7	R	1966	0.023	1.0E-03	7.1E-04	1.8E-04	2.6E-04	2.5E-04	2.4E-05	2.0E-03	1.1E-03	3.4E-04
	TC-8	R	1966	0.024	1.1E-03	7.4E-04	1.9E-04	2.7E-04	2.6E-04	2.5E-05	2.1E-03	1.2E-03	3.5E-04
	TC-9	R	262	0.025	1.5E-04	1.0E-04	2.6E-05	3.8E-05	3.6E-05	3.5E-06	2.8E-04	1.7E-04	4.9E-05
	TC-10	R	262	0.022	1.3E-04	9.1E-05	2.3E-05	3.4E-05	3.2E-05	3.1E-06	2.5E-04	1.5E-04	4.3E-05
	TC-11	R	262	0.020	1.2E-04	8.3E-05	2.1E-05	3.0E-05	2.9E-05	2.8E-06	2.3E-04	1.3E-04	3.9E-05
	TC-12	R	262	0.020	1.2E-04	8.3E-05	2.1E-05	3.0E-05	2.9E-05	2.8E-06	2.3E-04	1.3E-04	3.9E-05
	TC-13	R	262	0.025	1.5E-04	1.0E-04	2.6E-05	3.8E-05	3.6E-05	3.5E-06	2.8E-04	1.7E-04	4.9E-05
	TC-14	R	262	0.026	1.5E-04	1.1E-04	2.7E-05	4.0E-05	3.7E-05	3.7E-06	3.0E-04	1.7E-04	5.1E-05
	TC-15	R	262	0.025	1.5E-04	1.0E-04	2.6E-05	3.8E-05	3.6E-05	3.5E-06	2.8E-04	1.7E-04	4.9E-05
	TC-29	R	2073	0.015	7.0E-04	4.9E-04	1.3E-04	1.8E-04	1.7E-04	1.7E-05	1.4E-03	7.9E-04	2.3E-04
	TC-30	R	2263	0.014	7.2E-04	5.0E-04	1.3E-04	1.8E-04	1.7E-04	1.7E-05	1.4E-03	8.0E-04	2.4E-04
	TC-31	R	1908	0.017	7.3E-04	5.1E-04	1.3E-04	1.9E-04	1.8E-04	1.7E-05	1.4E-03	8.2E-04	2.4E-04
	TC-32	R	2209	0.015	7.5E-04	5.2E-04	1.3E-04	1.9E-04	1.8E-04	1.8E-05	1.4E-03	8.4E-04	2.5E-04
	TC-33	R	1087	0.016	3.9E-04	2.7E-04	7.0E-05	1.0E-04	9.5E-05	9.4E-06	7.6E-04	4.4E-04	1.3E-04
	TC-34	R	1215	0.018	4.9E-04	3.5E-04	8.8E-05	1.3E-04	1.2E-04	1.2E-05	9.5E-04	5.5E-04	1.6E-04
	TC-35	R	1347	0.019	5.8E-04	4.0E-04	1.0E-04	1.5E-04	1.4E-04	1.4E-05	1.1E-03	6.5E-04	1.9E-04
	TC-36	R	1583	0.019	6.8E-04	4.7E-04	1.2E-04	1.7E-04	1.6E-04	1.6E-05	1.3E-03	7.6E-04	2.3E-04
	TC-37	R	1657	0.019	7.1E-04	5.0E-04	1.3E-04	1.8E-04	1.7E-04	1.7E-05	1.4E-03	8.0E-04	2.4E-04
	TC-38	R	1657	0.014	5.2E-04	3.7E-04	9.4E-05	1.3E-04	1.3E-04	1.2E-05	1.0E-03	5.9E-04	1.7E-04
	TC-39	R	2698	0.012	7.3E-04	5.1E-04	1.3E-04	1.9E-04	1.8E-04	1.7E-05	1.4E-03	8.2E-04	2.4E-04
	TC-40	R	3084	0.011	7.7E-04	5.4E-04	1.4E-04	2.0E-04	1.9E-04	1.8E-05	1.5E-03	8.6E-04	2.5E-04
	TC-41	R	1670	0.011	4.1E-04	2.9E-04	7.4E-05	1.1E-04	1.0E-04	9.9E-06	8.0E-04	4.7E-04	1.4E-04
	TC-42	R	1805	0.011	4.5E-04	3.1E-04	8.0E-05	1.2E-04	1.1E-04	1.1E-05	8.6E-04	5.0E-04	1.5E-04
	TC-43	R	1798	0.012	4.9E-04	3.4E-04	8.7E-05	1.3E-04	1.2E-04	1.2E-05	9.4E-04	5.5E-04	1.6E-04
	TC-44	R	1798	0.013	5.3E-04	3.7E-04	9.4E-05	1.4E-04	1.3E-04	1.3E-05	1.0E-03	5.9E-04	1.8E-04
	TC-45	R	365	0.018	1.5E-04	1.0E-04	2.6E-05	3.8E-05	3.6E-05	3.5E-06	2.9E-04	1.7E-04	4.9E-05
	TC-P5	R	8090	0.025	4.6E-03	3.2E-03	8.2E-04	1.2E-03	1.1E-03	1.1E-04	8.8E-03	5.1E-03	1.5E-03
TC-P6	R	8090	0.028	5.1E-03	3.6E-03	9.1E-04	1.3E-03	1.2E-03	1.2E-04	9.9E-03	5.7E-03	1.7E-03	
TC-P7	R	8090	0.032	5.8E-03	4.1E-03	1.0E-03	1.5E-03	1.4E-03	1.4E-04	1.1E-02	6.6E-03	1.9E-03	
TC-P8	R	29044	0.015	9.8E-03	6.9E-03	1.8E-03	2.5E-03	2.4E-03	2.3E-04	1.9E-02	1.1E-02	3.3E-03	
TC-P9	R	29044	0.013	8.5E-03	6.0E-03	1.5E-03	2.2E-03	2.1E-03	2.0E-04	1.6E-02	9.6E-03	2.8E-03	
TC-P10	R	29044	0.016	1.0E-02	7.3E-03	1.9E-03	2.7E-03	2.5E-03	2.5E-04	2.0E-02	1.2E-02	3.5E-03	
TC-P11	R	29044	0.021	1.4E-02	9.6E-03	2.5E-03	3.5E-03	3.3E-03	3.3E-04	2.7E-02	1.5E-02	4.6E-03	
TC-Others	R	80051	0.017	3.0E-02	2.1E-02	5.4E-03	7.9E-03	7.4E-03	7.3E-04	5.9E-02	3.4E-02	1.0E-02	
<b>Total</b>					<b>1.1E-01</b>	<b>7.4E-02</b>	<b>1.9E-02</b>	<b>2.7E-02</b>	<b>2.6E-02</b>	<b>2.5E-03</b>	<b>2.0E-01</b>	<b>1.2E-01</b>	<b>3.5E-02</b>
San Tau	ST-1	R	2	0.027	1.2E-06	8.5E-07	2.2E-07	3.1E-07	3.0E-07	2.9E-08	2.3E-06	1.4E-06	4.1E-07
	ST-2	R	2	0.024	1.1E-06	7.6E-07	1.9E-07	2.8E-07	2.6E-07	2.6E-08	2.1E-06	1.2E-06	3.6E-07
	ST-3	R	2	0.024	1.1E-06	7.6E-07	1.9E-07	2.8E-07	2.6E-07	2.6E-08	2.1E-06	1.2E-06	3.6E-07
	ST-Others	R	763	0.025	4.3E-04	3.0E-04	7.7E-05	1.1E-04	1.0E-04	1.0E-05	8.3E-04	4.8E-04	1.4E-04
	<b>Total</b>					<b>4.3E-04</b>	<b>3.0E-04</b>	<b>7.7E-05</b>	<b>1.1E-04</b>	<b>1.1E-04</b>	<b>1.0E-05</b>	<b>8.4E-04</b>	<b>4.9E-04</b>
Sha Lo Wan	SLW-1	R	2	0.030	1.4E-06	9.5E-07	2.4E-07	3.5E-07	3.3E-07	3.2E-08	2.6E-06	1.5E-06	4.5E-07
	SLW-2	R	2	0.031	1.4E-06	9.8E-07	2.5E-07	3.6E-07	3.4E-07	3.3E-08	2.7E-06	1.6E-06	4.7E-07
	SLW-3	R	5	0.023	2.6E-06	1.8E-06	4.6E-07	6.7E-07	6.3E-07	6.2E-08	5.0E-06	2.9E-06	8.6E-07
	SLW-Others	R	21	0.031	1.4E-05	1.0E-05	2.6E-06	3.7E-06	3.5E-06	3.5E-07	2.8E-05	1.6E-05	4.8E-06
	<b>Total</b>					<b>2.0E-05</b>	<b>1.4E-05</b>	<b>3.5E-06</b>	<b>5.1E-06</b>	<b>4.8E-06</b>	<b>4.7E-07</b>	<b>3.8E-05</b>	<b>2.2E-05</b>
San Shek Wan	SSW-1	R	3	0.023	1.6E-06	1.1E-06	2.8E-07	4.0E-07	3.8E-07	3.7E-08	3.0E-06	1.7E-06	5.2E-07
	SSW-Others	R	410	0.023	2.1E-04	1.5E-04	3.8E-05	5.5E-05	5.2E-05	5.1E-06	4.1E-04	2.4E-04	7.1E-05
	<b>Total</b>					<b>2.1E-04</b>	<b>1.5E-04</b>	<b>3.8E-05</b>	<b>5.5E-05</b>	<b>5.2E-05</b>	<b>5.1E-06</b>	<b>4.1E-04</b>	<b>2.4E-04</b>
Sham Wat	SW-1	R	3	0.013	8.8E-07	6.2E-07	1.6E-07	2.3E-07	2.1E-07	2.1E-08	1.7E-06	9.9E-07	2.9E-07
	SW-1	R	3	0.013	8.8E-07	6.2E-07	1.6E-07	2.3E-07	2.1E-07	2.1E-08	1.7E-06	9.9E-07	2.9E-07
	SW-Others	R	163	0.013	4.8E-05	3.3E-05	8.5E-06	1.2E-05	1.2E-05	1.1E-06	9.2E-05	5.4E-05	1.6E-05

**Long-term Mortality Effects of FSP - Detailed Breakdown (3RS - 2RS) (based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>[2]</sup> = 42017 Mortality <sub>Cardiopulmonary</sub> : nos. of deaths in 2012 <sup>[3]</sup> = 19952 Mortality <sub>Lung Cancer</sub> : nos. of deaths in 2011 <sup>[4]</sup> = 3893					<b>Average Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.04 AP <sub>All</sub> = (1.04 - 1) x 1 / 1.04 x 1 = 0.0385 RR <sub>Cardiopulmonary</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.06 AP <sub>Cardiopulmonary</sub> = (1.06 - 1) x 1 / 1.06 x 1 = 0.0566 RR <sub>Lung Cancer</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.08 AP <sub>Lung Cancer</sub> = (1.08 - 1) x 1 / 1.08 x 1 = 0.0741			<b>Lower Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.01 AP <sub>All</sub> = (1.01 - 1) x 1 / 1.01 x 1 = 0.0099 RR <sub>Cardiopulmonary</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.02 AP <sub>Cardiopulmonary</sub> = (1.02 - 1) x 1 / 1.02 x 1 = 0.0196 RR <sub>Lung Cancer</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.01 AP <sub>Lung Cancer</sub> = (1.01 - 1) x 1 / 1.01 x 1 = 0.0099			<b>Upper Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.08 AP <sub>All</sub> = (1.08 - 1) x 1 / 1.08 x 1 = 0.0741 RR <sub>Cardiopulmonary</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.10 AP <sub>Cardiopulmonary</sub> = (1.1 - 1) x 1 / 1.1 x 1 = 0.0909 RR <sub>Lung Cancer</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.16 AP <sub>Lung Cancer</sub> = (1.16 - 1) x 1 / 1.16 x 1 = 0.1379		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Long-term Mortality Effects of FSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Long-term Mortality Effects of FSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Long-term Mortality Effects of FSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality
<b>Total</b>					<b>5.0E-05</b>	<b>3.5E-05</b>	<b>8.9E-06</b>	<b>1.3E-05</b>	<b>1.2E-05</b>	<b>1.2E-06</b>	<b>9.6E-05</b>	<b>5.6E-05</b>	<b>1.6E-05</b>
Siu Ho Wan	SHW-1	R	2	0.010	4.5E-07	3.2E-07	8.1E-08	1.2E-07	1.1E-07	1.1E-08	8.7E-07	5.1E-07	1.5E-07
	SHW-2	R	2	0.011	5.0E-07	3.5E-07	8.9E-08	1.3E-07	1.2E-07	1.2E-08	9.6E-07	5.6E-07	1.7E-07
	SHW-3	R	2	0.013	5.9E-07	4.1E-07	1.0E-07	1.5E-07	1.4E-07	1.4E-08	1.1E-06	6.6E-07	2.0E-07
	SHW-Others	R	347	0.010	7.8E-05	5.5E-05	1.4E-05	2.0E-05	1.9E-05	1.9E-06	1.5E-04	8.8E-05	2.6E-05
	<b>Total</b>					<b>8.0E-05</b>	<b>5.6E-05</b>	<b>1.4E-05</b>	<b>2.1E-05</b>	<b>1.9E-05</b>	<b>1.9E-06</b>	<b>1.5E-04</b>	<b>9.0E-05</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] Total nos. of deaths in hospital for all-causes in HK in 2012 = 43672; deaths from external causes of morbidity and mortality = 1655. Hence, total natural deaths = 43672 - 1655 = 42017.

(Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf))

[3] In HK in 2012, nos. of deaths in hospital from cardiovascular diseases of heart (ICD10: I00-I99) = 10320; nos. of deaths in hospital from respiratory diseases (ICD10: J00-J99) = 9632. Total nos. of deaths in hospital from cardiopulmonary in HK in 2012 = 10320 + 9632 = 19952.

[4] nos. of deaths in hospital from malignant neoplasm of Trachea, bronchus and lung in HK in 2012 (ICD10: C33-C34) = 3893 (Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf))

[5] ACS study by Pope et al, 2002.

**Short-term Mortality Effects of NO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>[2]</sup> = 42017 Mortality <sub>Cardiovascular</sub> : nos. of deaths in 2012 <sup>[3]</sup> = 10320 Mortality <sub>Respiratory</sub> : nos. of deaths in 2012 <sup>[4]</sup> = 9632					Average Value of RR RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0103 AP <sub>All</sub> = (1.0103 - 1) x 1 / 1.0103 x 1 = 0.0102 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0138 AP <sub>Cardiovascular</sub> = (1.0138 - 1) x 1 / 1.0138 x 1 = 0.0136 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0141 AP <sub>Respiratory</sub> = (1.0141 - 1) x 1 / 1.0141 x 1 = 0.0139			Lower Value of RR RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0069 AP <sub>All</sub> = (1.0069 - 1) x 1 / 1.0069 x 1 = 0.0069 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0075 AP <sub>Cardiovascular</sub> = (1.0075 - 1) x 1 / 1.0075 x 1 = 0.0074 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0067 AP <sub>Respiratory</sub> = (1.0067 - 1) x 1 / 1.0067 x 1 = 0.0067			Upper Value of RR RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0137 AP <sub>All</sub> = (1.0137 - 1) x 1 / 1.0137 x 1 = 0.0135 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0201 AP <sub>Cardiovascular</sub> = (1.0197 - 1) x 1 / 1.0197 x 1 = 0.0197 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0215 AP <sub>Respiratory</sub> = (1.0215 - 1) x 1 / 1.0215 x 1 = 0.0210		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Mortality Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					NO <sub>2</sub>	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality
Tung Chung	TC-1	R	1966	0.344	4.0E-03	1.3E-03	1.3E-03	2.7E-03	7.3E-04	6.1E-04	5.4E-03	1.9E-03	1.9E-03
	TC-2	R	1966	0.360	4.2E-03	1.4E-03	1.3E-03	2.8E-03	7.6E-04	6.3E-04	5.6E-03	2.0E-03	2.0E-03
	TC-3	R	1966	0.338	4.0E-03	1.3E-03	1.2E-03	2.7E-03	7.1E-04	5.9E-04	5.3E-03	1.9E-03	1.9E-03
	TC-4	R	1966	0.317	3.7E-03	1.2E-03	1.2E-03	2.5E-03	6.7E-04	5.6E-04	5.0E-03	1.8E-03	1.8E-03
	TC-7	R	1966	0.318	3.7E-03	1.2E-03	1.2E-03	2.5E-03	6.7E-04	5.6E-04	5.0E-03	1.8E-03	1.8E-03
	TC-8	R	1966	0.384	4.5E-03	1.5E-03	1.4E-03	3.0E-03	8.1E-04	6.8E-04	6.0E-03	2.1E-03	2.1E-03
	TC-9	R	262	0.376	5.9E-04	1.9E-04	1.8E-04	4.0E-04	1.1E-04	8.8E-05	7.8E-04	2.8E-04	2.8E-04
	TC-10	R	262	0.296	4.6E-04	1.5E-04	1.5E-04	3.1E-04	8.3E-05	6.9E-05	6.2E-04	2.2E-04	2.2E-04
	TC-11	R	262	0.306	4.8E-04	1.6E-04	1.5E-04	3.2E-04	8.6E-05	7.2E-05	6.4E-04	2.3E-04	2.3E-04
	TC-12	R	262	0.309	4.9E-04	1.6E-04	1.5E-04	3.3E-04	8.7E-05	7.3E-05	6.4E-04	2.3E-04	2.3E-04
	TC-13	R	262	0.330	5.2E-04	1.7E-04	1.6E-04	3.5E-04	9.3E-05	7.7E-05	6.9E-04	2.5E-04	2.4E-04
	TC-14	R	262	0.341	5.3E-04	1.8E-04	1.7E-04	3.6E-04	9.6E-05	8.0E-05	7.1E-04	2.5E-04	2.5E-04
	TC-15	R	262	0.355	5.6E-04	1.8E-04	1.7E-04	3.7E-04	1.0E-04	8.3E-05	7.4E-04	2.6E-04	2.6E-04
	TC-29	R	2073	0.283	3.5E-03	1.2E-03	1.1E-03	2.4E-03	6.3E-04	5.3E-04	4.7E-03	1.7E-03	1.7E-03
	TC-30	R	2263	0.272	3.7E-03	1.2E-03	1.2E-03	2.5E-03	6.6E-04	5.5E-04	4.9E-03	1.7E-03	1.7E-03
	TC-31	R	1908	0.299	3.4E-03	1.1E-03	1.1E-03	2.3E-03	6.1E-04	5.1E-04	4.5E-03	1.6E-03	1.6E-03
	TC-32	R	2209	0.250	3.3E-03	1.1E-03	1.0E-03	2.2E-03	5.9E-04	5.0E-04	4.4E-03	1.6E-03	1.6E-03
	TC-33	R	1087	0.255	1.7E-03	5.4E-04	5.2E-04	1.1E-03	3.0E-04	2.5E-04	2.2E-03	7.9E-04	7.9E-04
	TC-34	R	1215	0.282	2.0E-03	6.7E-04	6.4E-04	1.4E-03	3.7E-04	3.1E-04	2.7E-03	9.7E-04	9.7E-04
	TC-35	R	1347	0.289	2.3E-03	7.6E-04	7.3E-04	1.6E-03	4.2E-04	3.5E-04	3.1E-03	1.1E-03	1.1E-03
	TC-36	R	1583	0.251	2.4E-03	7.8E-04	7.4E-04	1.6E-03	4.3E-04	3.6E-04	3.2E-03	1.1E-03	1.1E-03
	TC-37	R	1657	0.212	2.1E-03	6.9E-04	6.6E-04	1.4E-03	3.8E-04	3.1E-04	2.8E-03	1.0E-03	9.9E-04
	TC-38	R	1657	0.228	2.3E-03	7.4E-04	7.1E-04	1.5E-03	4.1E-04	3.4E-04	3.0E-03	1.1E-03	1.1E-03
	TC-39	R	2698	0.237	3.8E-03	1.3E-03	1.2E-03	2.6E-03	6.9E-04	5.7E-04	5.1E-03	1.8E-03	1.8E-03
	TC-40	R	3084	0.244	4.5E-03	1.5E-03	1.4E-03	3.0E-03	8.1E-04	6.7E-04	6.0E-03	2.1E-03	2.1E-03
	TC-41	R	1670	0.246	2.5E-03	8.1E-04	7.7E-04	1.7E-03	4.4E-04	3.7E-04	3.3E-03	1.2E-03	1.2E-03
	TC-42	R	1805	0.249	2.7E-03	8.8E-04	8.4E-04	1.8E-03	4.8E-04	4.0E-04	3.6E-03	1.3E-03	1.3E-03
	TC-43	R	1798	0.245	2.6E-03	8.7E-04	8.2E-04	1.8E-03	4.7E-04	3.9E-04	3.5E-03	1.3E-03	1.2E-03
	TC-44	R	1798	0.237	2.6E-03	8.4E-04	8.0E-04	1.7E-03	4.6E-04	3.8E-04	3.4E-03	1.2E-03	1.2E-03
	TC-45	R	365	0.207	4.5E-04	1.5E-04	1.4E-04	3.0E-04	8.1E-05	6.8E-05	6.0E-04	2.2E-04	2.1E-04
	TC-P5	R	8090	0.309	1.5E-02	4.9E-03	4.7E-03	1.0E-02	2.7E-03	2.2E-03	2.0E-02	7.1E-03	7.1E-03
TC-P6	R	8090	0.145	7.0E-03	2.3E-03	2.2E-03	4.7E-03	1.3E-03	1.1E-03	9.3E-03	3.3E-03	3.3E-03	
TC-P7	R	8090	0.197	9.6E-03	3.1E-03	3.0E-03	6.4E-03	1.7E-03	1.4E-03	1.3E-02	4.5E-03	4.5E-03	
TC-P8	R	29044	0.249	4.3E-02	1.4E-02	1.4E-02	2.9E-02	7.8E-03	6.5E-03	5.7E-02	2.1E-02	2.1E-02	
TC-P9	R	29044	0.314	5.5E-02	1.8E-02	1.7E-02	3.7E-02	9.8E-03	8.2E-03	7.2E-02	2.6E-02	2.6E-02	
TC-P10	R	29044	0.386	6.7E-02	2.2E-02	2.1E-02	4.5E-02	1.2E-02	1.0E-02	8.9E-02	3.2E-02	3.2E-02	
TC-P11	R	29044	0.378	6.6E-02	2.2E-02	2.1E-02	4.4E-02	1.2E-02	9.8E-03	8.7E-02	3.1E-02	3.1E-02	
TC-Others	R	80051	0.286	1.4E-01	4.5E-02	4.3E-02	9.2E-02	2.5E-02	2.1E-02	1.8E-01	6.5E-02	6.5E-02	
<b>Total</b>					<b>4.7E-01</b>	<b>1.6E-01</b>	<b>1.5E-01</b>	<b>3.2E-01</b>	<b>8.5E-02</b>	<b>7.1E-02</b>	<b>6.3E-01</b>	<b>2.2E-01</b>	<b>2.2E-01</b>
San Tau	ST-1	R	2	0.329	3.9E-06	1.3E-06	1.2E-06	2.6E-06	7.1E-07	5.9E-07	5.2E-06	1.9E-06	1.9E-06
	ST-2	R	2	0.277	3.3E-06	1.1E-06	1.0E-06	2.2E-06	5.9E-07	5.0E-07	4.4E-06	1.6E-06	1.6E-06
	ST-3	R	2	0.376	4.5E-06	1.5E-06	1.4E-06	3.0E-06	8.1E-07	6.7E-07	6.0E-06	2.1E-06	2.1E-06
	ST-Others	R	763	0.327	1.5E-03	4.9E-04	4.7E-04	1.0E-03	2.7E-04	2.2E-04	2.0E-03	7.1E-04	7.1E-04
<b>Total</b>					<b>1.5E-03</b>	<b>4.9E-04</b>	<b>4.7E-04</b>	<b>1.0E-03</b>	<b>2.7E-04</b>	<b>2.3E-04</b>	<b>2.0E-03</b>	<b>7.2E-04</b>	<b>7.1E-04</b>
Sha Lo Wan	SLW-1	R	2	-2.648	-3.2E-05	-1.0E-05	-9.9E-06	-2.1E-05	-5.7E-06	-4.7E-06	-4.2E-05	-1.5E-05	-1.5E-05
	SLW-2	R	2	-1.760	-2.1E-05	-6.9E-06	-6.6E-06	-1.4E-05	-3.8E-06	-3.2E-06	-2.8E-05	-1.0E-05	-1.0E-05
	SLW-3	R	5	-1.300	-3.9E-05	-1.3E-05	-1.2E-05	-2.6E-05	-7.0E-06	-5.8E-06	-5.2E-05	-1.8E-05	-1.8E-05
	SLW-Others	R	21	-2.204	-2.8E-04	-9.1E-05	-8.7E-05	-1.9E-04	-5.0E-05	-4.1E-05	-3.7E-04	-1.3E-04	-1.3E-04
<b>Total</b>					<b>-3.69E-04</b>	<b>-1.2E-04</b>	<b>-1.2E-04</b>	<b>-2.5E-04</b>	<b>-6.6E-05</b>	<b>-5.5E-05</b>	<b>-4.9E-04</b>	<b>-1.8E-04</b>	<b>-1.7E-04</b>
San Shek Wan	SSW-1	R	3	-0.260	-4.7E-06	-1.5E-06	-1.5E-06	-8.4E-07	-3.1E-07	-7.0E-07	-6.2E-06	-2.2E-06	-2.2E-06
	SSW-Others	R	410	-1.003	-2.5E-03	-8.1E-04	-7.7E-04	-1.7E-03	-4.4E-04	-3.7E-04	-3.3E-03	-1.2E-03	-1.2E-03
	<b>Total</b>					<b>-2.5E-03</b>	<b>-8.1E-04</b>	<b>-7.7E-04</b>	<b>-1.7E-03</b>	<b>-4.4E-04</b>	<b>-3.7E-04</b>	<b>-3.3E-03</b>	<b>-1.2E-03</b>
Sham Wat	SW-1	R	3	0.131	2.4E-06	7.7E-07	7.4E-07	1.6E-06	4.2E-07	3.5E-07	3.1E-06	1.1E-06	1.1E-06
	SW-1	R	3	0.131	2.4E-06	7.7E-07	7.4E-07	1.6E-06	4.2E-07	3.5E-07	3.1E-06	1.1E-06	1.1E-06
	SW-Others	R	163	0.194	1.9E-04	6.2E-05	5.9E-05	1.3E-04	3.4E-05	2.8E-05	2.5E-04	9.0E-05	9.0E-05

**Short-term Mortality Effects of NO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600					Average Value of RR			Lower Value of RR			Upper Value of RR		
Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>[2]</sup> = 42017					RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0103			RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0069			RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0137		
Mortality <sub>Cardiovascular</sub> : nos. of deaths in 2012 <sup>[3]</sup> = 10320					AP <sub>All</sub> = (1.0103 - 1) x 1 / 1.0103 x 1 = 0.0102			AP <sub>All</sub> = (1.0069 - 1) x 1 / 1.0069 x 1 = 0.0069			AP <sub>All</sub> = (1.0137 - 1) x 1 / 1.0137 x 1 = 0.0135		
Mortality <sub>Respiratory</sub> : nos. of deaths in 2012 <sup>[4]</sup> = 9632					RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0138			RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0075			RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0201		
					AP <sub>Cardiovascular</sub> = (1.0138 - 1) x 1 / 1.0138 x 1 = 0.0136			AP <sub>Cardiovascular</sub> = (1.0075 - 1) x 1 / 1.0075 x 1 = 0.0074			AP <sub>Cardiovascular</sub> = (1.0197 - 1) x 1 / 1.0197 x 1 = 0.0197		
					RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0141			RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0067			RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0215		
					AP <sub>Respiratory</sub> = (1.0141 - 1) x 1 / 1.0141 x 1 = 0.0139			AP <sub>Respiratory</sub> = (1.0067 - 1) x 1 / 1.0067 x 1 = 0.0067			AP <sub>Respiratory</sub> = (1.0215 - 1) x 1 / 1.0215 x 1 = 0.0210		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Mortality Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality
<b>Total</b>					<b>1.9E-04</b>	<b>6.4E-05</b>	<b>6.1E-05</b>	<b>1.3E-04</b>	<b>3.5E-05</b>	<b>2.9E-05</b>	<b>2.6E-04</b>	<b>9.2E-05</b>	<b>9.2E-05</b>
Siu Ho Wan	SHW-1	R	2	0.240	2.9E-06	9.4E-07	9.0E-07	1.9E-06	5.2E-07	4.3E-07	3.8E-06	1.4E-06	1.4E-06
	SHW-2	R	2	0.238	2.8E-06	9.3E-07	8.9E-07	1.9E-06	5.1E-07	4.3E-07	3.8E-06	1.4E-06	1.3E-06
	SHW-3	R	2	0.252	3.0E-06	9.9E-07	9.4E-07	2.0E-06	5.4E-07	4.5E-07	4.0E-06	1.4E-06	1.4E-06
	SHW-Others	R	347	0.240	5.0E-04	1.6E-04	1.6E-04	3.4E-04	8.9E-05	7.5E-05	6.6E-04	2.4E-04	2.4E-04
	<b>Total</b>					<b>5.1E-04</b>	<b>1.7E-04</b>	<b>1.6E-04</b>	<b>3.4E-04</b>	<b>9.1E-05</b>	<b>7.6E-05</b>	<b>6.7E-04</b>	<b>2.4E-04</b>
Airport	AI-C1	R	2200	2.119	2.8E-02	9.2E-03	8.7E-03	1.9E-02	5.0E-03	4.2E-03	3.7E-02	1.3E-02	1.3E-02
	AI-C4	R	1200	0.863	6.2E-03	2.0E-03	1.9E-03	4.2E-03	1.1E-03	9.3E-04	8.2E-03	2.9E-03	2.9E-03
	<b>Total</b>					<b>3.4E-02</b>	<b>1.1E-02</b>	<b>1.1E-02</b>	<b>2.3E-02</b>	<b>6.1E-03</b>	<b>5.1E-03</b>	<b>4.5E-02</b>	<b>1.6E-02</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] Total nos. of deaths in hospital for all-causes in HK in 2012 = 43672; deaths from external causes of morbidity and mortality = 1655. Hence, total natural deaths = 43672 - 1655 = 42017.

(Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf))

[3] In HK in 2012, nos. of deaths in hospital from cardiovascular diseases of heart (ICD10: I00-I99) = 10320;

[4] In HK 2012, nos. of deaths in hospital from respiratory diseases (ICD10: J00-J99) = 9632.

[5] Wong C.M. et al, 2010.

**Short-term Mortality Effects of NO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of max. daily conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600					Average Value of RR			Lower Value of RR			Upper Value of RR		
Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>[2]</sup> = 42017					RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0103			RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0069			RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0137		
Mortality <sub>Cardiovascular</sub> : nos. of deaths in 2012 <sup>[3]</sup> = 10320					AP <sub>All</sub> = (1.0103 - 1) x 1 / 1.0103 x 1 = 0.0102			AP <sub>All</sub> = (1.0069 - 1) x 1 / 1.0069 x 1 = 0.0069			AP <sub>All</sub> = (1.0137 - 1) x 1 / 1.0137 x 1 = 0.0135		
Mortality <sub>Respiratory</sub> : nos. of deaths in 2012 <sup>[4]</sup> = 9632					RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0138			RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0075			RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0201		
					AP <sub>Cardiovascular</sub> = (1.0138 - 1) x 1 / 1.0138 x 1 = 0.0136			AP <sub>Cardiovascular</sub> = (1.0075 - 1) x 1 / 1.0075 x 1 = 0.0074			AP <sub>Cardiovascular</sub> = (1.0197 - 1) x 1 / 1.0197 x 1 = 0.0197		
					RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0141			RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0067			RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0215		
					AP <sub>Respiratory</sub> = (1.0141 - 1) x 1 / 1.0141 x 1 = 0.0139			AP <sub>Respiratory</sub> = (1.0067 - 1) x 1 / 1.0067 x 1 = 0.0067			AP <sub>Respiratory</sub> = (1.0215 - 1) x 1 / 1.0215 x 1 = 0.0210		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Max. 24hr Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Mortality Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					NO <sub>2</sub>	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality
Tung Chung	TC-1	R	1966	-0.100	-1.2E-03	-3.8E-04	-3.7E-04	-7.9E-04	-2.1E-04	-1.8E-04	-1.6E-03	-5.6E-04	-5.6E-04
	TC-2	R	1966	-0.079	-9.3E-04	-3.1E-04	-2.9E-04	-6.3E-04	-1.7E-04	-1.4E-04	-1.2E-03	-4.4E-04	-4.4E-04
	TC-3	R	1966	-0.052	-6.1E-04	-2.0E-04	-1.9E-04	-4.1E-04	-1.1E-04	-9.1E-05	-8.1E-04	-2.9E-04	-2.9E-04
	TC-4	R	1966	-0.047	-5.5E-04	-1.8E-04	-1.7E-04	-3.7E-04	-9.9E-05	-8.2E-05	-7.3E-04	-2.6E-04	-2.6E-04
	TC-7	R	1966	-0.031	-3.6E-04	-1.2E-04	-1.1E-04	-2.4E-04	-6.4E-05	-5.4E-05	-4.8E-04	-1.7E-04	-1.7E-04
	TC-8	R	1966	-0.050	-5.9E-04	-1.9E-04	-1.8E-04	-3.9E-04	-1.1E-04	-8.8E-05	-7.8E-04	-2.8E-04	-2.8E-04
	TC-9	R	262	-0.057	-8.9E-05	-2.9E-05	-2.8E-05	-6.0E-05	-1.6E-05	-1.3E-05	-1.2E-04	-4.2E-05	-4.2E-05
	TC-10	R	262	-0.237	-3.7E-04	-1.2E-04	-1.2E-04	-2.5E-04	-6.7E-05	-5.6E-05	-4.9E-04	-1.8E-04	-1.8E-04
	TC-11	R	262	-0.204	-3.2E-04	-1.1E-04	-1.0E-04	-2.2E-04	-5.8E-05	-4.8E-05	-4.3E-04	-1.5E-04	-1.5E-04
	TC-12	R	262	-0.184	-2.9E-04	-9.5E-05	-9.0E-05	-1.9E-04	-5.2E-05	-4.3E-05	-3.8E-04	-1.4E-04	-1.4E-04
	TC-13	R	262	-0.088	-1.4E-04	-4.6E-05	-4.3E-05	-9.3E-05	-2.5E-05	-2.1E-05	-1.8E-04	-6.6E-05	-6.6E-05
	TC-14	R	262	-0.114	-1.8E-04	-5.9E-05	-5.6E-05	-1.2E-04	-3.2E-05	-2.7E-05	-2.4E-04	-8.5E-05	-8.5E-05
	TC-15	R	262	-0.103	-1.6E-04	-5.3E-05	-5.0E-05	-1.1E-04	-2.9E-05	-2.4E-05	-2.1E-04	-7.6E-05	-7.6E-05
	TC-29	R	2073	1.159	1.4E-02	4.7E-03	4.5E-03	9.7E-03	2.6E-03	2.2E-03	1.9E-02	6.8E-03	6.8E-03
	TC-30	R	2263	1.144	1.6E-02	5.1E-03	4.8E-03	1.0E-02	2.8E-03	2.3E-03	2.1E-02	7.4E-03	7.3E-03
	TC-31	R	1908	0.879	1.0E-02	3.3E-03	3.1E-03	6.7E-03	1.8E-03	1.5E-03	1.3E-02	4.8E-03	4.8E-03
	TC-32	R	2209	0.355	4.7E-03	1.5E-03	1.5E-03	3.2E-03	8.4E-04	7.0E-04	6.2E-03	2.2E-03	2.2E-03
	TC-33	R	1087	0.048	3.1E-04	1.0E-04	9.7E-05	2.1E-04	5.6E-05	4.7E-05	4.1E-04	1.5E-04	1.5E-04
	TC-34	R	1215	0.372	2.7E-03	8.9E-04	8.5E-04	1.8E-03	4.9E-04	4.1E-04	3.6E-03	1.3E-03	1.3E-03
	TC-35	R	1347	0.443	1.2E-03	3.6E-03	1.1E-03	2.4E-03	6.4E-04	5.4E-04	4.7E-03	1.7E-03	1.7E-03
	TC-36	R	1583	0.352	3.3E-03	1.1E-03	1.0E-03	2.2E-03	6.0E-04	5.0E-04	4.4E-03	1.6E-03	1.6E-03
	TC-37	R	1657	-0.163	-1.6E-03	-5.3E-04	-5.0E-04	-1.1E-03	-2.9E-04	-2.4E-04	-2.1E-03	-7.7E-04	-7.6E-04
	TC-38	R	1657	0.651	6.5E-03	2.1E-03	2.0E-03	4.3E-03	1.2E-03	9.7E-04	8.6E-03	3.1E-03	3.1E-03
	TC-39	R	2698	0.743	1.2E-02	3.9E-03	3.8E-03	8.1E-03	2.2E-03	1.8E-03	1.6E-02	5.7E-03	5.7E-03
	TC-40	R	3084	0.801	1.5E-02	4.9E-03	4.6E-03	9.9E-03	2.7E-03	2.2E-03	2.0E-02	7.0E-03	7.0E-03
	TC-41	R	1670	0.753	7.5E-03	2.5E-03	2.4E-03	5.1E-03	1.3E-03	1.1E-03	1.0E-02	3.6E-03	3.6E-03
	TC-42	R	1805	0.777	8.4E-03	2.8E-03	2.6E-03	5.6E-03	1.5E-03	1.3E-03	1.1E-02	4.0E-03	4.0E-03
	TC-43	R	1798	0.726	7.8E-03	2.6E-03	2.4E-03	5.3E-03	1.4E-03	1.2E-03	1.0E-02	3.7E-03	3.7E-03
	TC-44	R	1798	0.633	6.8E-03	2.2E-03	2.1E-03	4.6E-03	1.2E-03	1.0E-03	9.0E-03	3.2E-03	3.2E-03
TC-45	R	365	0.551	1.2E-03	4.0E-04	3.8E-04	8.1E-04	2.2E-04	1.8E-04	1.6E-03	5.7E-04	5.7E-04	
TC-P5	R	8090	-0.122	-5.9E-03	-1.9E-03	-1.8E-03	-4.0E-03	-1.1E-03	-8.8E-04	-7.8E-03	-2.8E-03	-2.8E-03	
TC-P6	R	8090	0.246	1.2E-02	3.9E-03	3.7E-03	8.0E-03	2.1E-03	1.8E-03	1.6E-02	5.7E-03	5.6E-03	
TC-P7	R	8090	0.365	1.8E-02	5.8E-03	5.5E-03	1.2E-02	3.2E-03	2.6E-03	2.3E-02	8.4E-03	8.4E-03	
TC-P8	R	29044	-0.230	-4.0E-02	-1.3E-02	-1.2E-02	-2.7E-02	-7.2E-03	-6.0E-03	-5.3E-02	-1.9E-02	-1.9E-02	
TC-P9	R	29044	1.205	6.9E-01	2.1E-01	1.9E-01	6.6E-02	3.8E-02	3.1E-02	9.9E-01	9.9E-02	9.9E-02	
TC-P10	R	29044	1.486	2.6E-01	8.5E-02	8.1E-02	1.7E-01	4.6E-02	3.9E-02	3.4E-01	1.2E-01	1.2E-01	
TC-P11	R	29044	2.846	4.9E-01	1.6E-01	1.5E-01	3.3E-01	8.9E-02	7.4E-02	6.6E-01	2.3E-01	2.3E-01	
TC-Others	R	80051	0.649	3.1E-01	1.0E-01	9.7E-02	2.1E-01	5.6E-02	4.7E-02	4.1E-01	1.5E-01	1.5E-01	
<b>Total</b>					<b>1.4E+00</b>	<b>4.5E-01</b>	<b>4.3E-01</b>	<b>9.2E-01</b>	<b>2.5E-01</b>	<b>2.1E-01</b>	<b>1.8E+00</b>	<b>6.5E-01</b>	<b>6.5E-01</b>
San Tau	ST-1	R	2	-1.608	-1.9E-05	-6.3E-06	-6.0E-06	-1.3E-05	-3.5E-06	-2.9E-06	-2.6E-05	-9.1E-06	-9.1E-06
	ST-2	R	2	-1.363	-1.6E-05	-5.4E-06	-5.1E-06	-1.1E-05	-2.9E-06	-2.4E-06	-2.2E-05	-7.7E-06	-7.7E-06
	ST-3	R	2	-1.171	-1.4E-05	-4.6E-06	-4.4E-06	-9.4E-06	-2.5E-06	-2.1E-06	-1.9E-05	-6.6E-06	-6.6E-06
	ST-Others	R	763	-1.380	-6.3E-03	-2.1E-03	-2.0E-03	-4.2E-03	-1.1E-03	-9.4E-04	-8.4E-03	-3.0E-03	-3.0E-03
	<b>Total</b>					<b>-6.4E-03</b>	<b>-2.1E-03</b>	<b>-2.0E-03</b>	<b>-4.3E-03</b>	<b>-1.1E-03</b>	<b>-9.5E-04</b>	<b>-8.4E-03</b>	<b>-3.0E-03</b>
Sha Lo Wan	SLW-1	R	2	-12.079	-1.4E-04	-4.7E-05	-4.5E-05	-9.7E-05	-2.6E-05	-2.2E-05	-1.9E-04	-6.9E-05	-6.8E-05
	SLW-2	R	2	-11.632	-1.4E-04	-4.6E-05	-4.4E-05	-9.4E-05	-2.5E-05	-2.1E-05	-1.8E-04	-6.6E-05	-6.6E-05
	SLW-3	R	5	-2.585	-7.7E-05	-2.5E-05	-2.4E-05	-5.2E-05	-1.4E-05	-1.2E-05	-1.0E-04	-3.7E-05	-3.7E-05
	SLW-Others	R	21	-11.855	-1.5E-03	-4.9E-04	-4.7E-04	-1.0E-03	-2.7E-04	-2.2E-04	-2.0E-03	-7.1E-04	-7.1E-04
	<b>Total</b>					<b>-1.85E-03</b>	<b>-6.1E-04</b>	<b>-5.8E-04</b>	<b>-1.2E-03</b>	<b>-3.3E-04</b>	<b>-2.8E-04</b>	<b>-2.5E-03</b>	<b>-8.8E-04</b>
San Shek Wan	SSW-1	R	3	2.103	3.8E-05	1.2E-05	1.2E-05	2.5E-05	6.8E-06	5.7E-06	5.0E-05	1.8E-05	1.8E-05
	SSW-Others	R	410	-0.535	-1.3E-03	-4.3E-04	-4.1E-04	-8.8E-04	-2.4E-04	-2.0E-04	-1.7E-03	-6.2E-04	-6.2E-04
	<b>Total</b>					<b>-1.3E-03</b>	<b>-4.2E-04</b>	<b>-4.0E-04</b>	<b>-8.6E-04</b>	<b>-2.3E-04</b>	<b>-1.9E-04</b>	<b>-1.7E-03</b>	<b>-6.1E-04</b>
Sham Wat	SW-1	R	3	0.216	3.9E-06	1.3E-06	1.2E-06	2.6E-06	6.9E-07	5.8E-07	5.1E-06	1.8E-06	1.8E-06
	SW-1	R	3	0.216	3.9E-06	1.3E-06	1.2E-06	2.6E-06	6.9E-07	5.8E-07	5.1E-06	1.8E-06	1.8E-06
	SW-Others	R	163	0.804	7.9E-04	2.6E-04	2.5E-04	5.3E-04	1.4E-04	1.2E-04	1.0E-03	3.7E-04	3.7E-04

**Short-term Mortality Effects of NO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of max. daily conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>[2]</sup> = 42017 Mortality <sub>Cardiovascular</sub> : nos. of deaths in 2012 <sup>[3]</sup> = 10320 Mortality <sub>Respiratory</sub> : nos. of deaths in 2012 <sup>[4]</sup> = 9632					<b>Average Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0103 AP <sub>All</sub> = (1.0103 - 1) x 1 / 1.0103 x 1 = 0.0102 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0138 AP <sub>Cardiovascular</sub> = (1.0138 - 1) x 1 / 1.0138 x 1 = 0.0136 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0141 AP <sub>Respiratory</sub> = (1.0141 - 1) x 1 / 1.0141 x 1 = 0.0139			<b>Lower Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0069 AP <sub>All</sub> = (1.0069 - 1) x 1 / 1.0069 x 1 = 0.0069 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0075 AP <sub>Cardiovascular</sub> = (1.0075 - 1) x 1 / 1.0075 x 1 = 0.0074 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0067 AP <sub>Respiratory</sub> = (1.0067 - 1) x 1 / 1.0067 x 1 = 0.0067			<b>Upper Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0137 AP <sub>All</sub> = (1.0137 - 1) x 1 / 1.0137 x 1 = 0.0135 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0201 AP <sub>Cardiovascular</sub> = (1.0197 - 1) x 1 / 1.0197 x 1 = 0.0197 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0215 AP <sub>Respiratory</sub> = (1.0215 - 1) x 1 / 1.0215 x 1 = 0.0210		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Max. 24hr Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Mortality Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of NO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality
<b>Total</b>					<b>7.9E-04</b>	<b>2.6E-04</b>	<b>2.5E-04</b>	<b>5.3E-04</b>	<b>1.4E-04</b>	<b>1.2E-04</b>	<b>1.1E-03</b>	<b>3.8E-04</b>	<b>3.8E-04</b>
Siu Ho Wan	SHW-1	R	2	0.194	2.3E-06	7.6E-07	7.3E-07	1.6E-06	4.2E-07	3.5E-07	3.1E-06	1.1E-06	1.1E-06
	SHW-2	R	2	-0.269	-3.2E-06	-1.1E-06	-1.0E-06	-2.2E-06	-5.8E-07	-4.8E-07	-4.3E-06	-1.5E-06	-1.5E-06
	SHW-3	R	2	3.722	4.5E-05	1.5E-05	1.4E-05	3.0E-05	8.0E-06	6.7E-06	5.9E-05	2.1E-05	2.1E-05
	SHW-Others	R	347	0.194	4.0E-04	1.3E-04	1.3E-04	2.7E-04	7.2E-05	6.0E-05	5.4E-04	1.9E-04	1.9E-04
	<b>Total</b>					<b>4.5E-04</b>	<b>1.5E-04</b>	<b>1.4E-04</b>	<b>3.0E-04</b>	<b>8.0E-05</b>	<b>6.7E-05</b>	<b>5.9E-04</b>	<b>2.1E-04</b>
Airport	AI-C1	R	2200	16.389	2.2E-01	7.1E-02	6.7E-02	1.5E-01	3.9E-02	3.2E-02	2.9E-01	1.0E-01	1.0E-01
	AI-C4	R	1200	7.205	5.2E-02	1.7E-02	1.6E-02	3.5E-02	9.3E-03	7.7E-03	6.9E-02	2.5E-02	2.4E-02
	<b>Total</b>					<b>2.7E-01</b>	<b>8.8E-02</b>	<b>8.4E-02</b>	<b>1.8E-01</b>	<b>4.8E-02</b>	<b>4.0E-02</b>	<b>3.5E-01</b>	<b>1.3E-01</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] Total nos. of deaths in hospital for all-causes in HK in 2012 = 43672; deaths from external causes of morbidity and mortality = 1655. Hence, total natural deaths = 43672 - 1655 = 42017.

(Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf))

[3] In HK in 2012, nos. of deaths in hospital from cardiovascular diseases of heart (ICD10: I00-I99) = 10320;

[4] In HK 2012, nos. of deaths in hospital from respiratory diseases (ICD10: J00-J99) = 9632.

[5] Wong C.M. et al, 2010.

**Short-term Mortality Effects of RSP - Detailed Breakdown (3RS - 2RS) (based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>(1)</sup> = 7154600					Average Value of RR			Lower Value of RR			Upper Value of RR		
Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>(2)</sup> = 42017					RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0051			RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0023			RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0080		
Mortality <sub>Cardiovascular</sub> : nos. of deaths in 2012 <sup>(3)</sup> = 10320					AP <sub>All</sub> = (1.0051 - 1) x 1 / 1.0051 x 1 = 0.0051			AP <sub>All</sub> = (1.0023 - 1) x 1 / 1.0040 x 1 = 0.0023			AP <sub>All</sub> = (1.0080 - 1) x 1 / 1.0080 x 1 = 0.0079		
Mortality <sub>Respiratory</sub> : nos. of deaths in 2012 <sup>(4)</sup> = 9632					RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0063			RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0011			RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0116		
					AP <sub>Cardiovascular</sub> = (1.0063 - 1) x 1 / 1.0063 x 1 = 0.0063			AP <sub>Cardiovascular</sub> = (1.0011 - 1) x 1 / 1.0011 x 1 = 0.0011			AP <sub>Cardiovascular</sub> = (1.0016 - 1) x 1 / 1.0016 x 1 = 0.0115		
					RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0069			RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0008			RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0131		
					AP <sub>Respiratory</sub> = (1.0069 - 1) x 1 / 1.0069 x 1 = 0.0069			AP <sub>Respiratory</sub> = (1.0008 - 1) x 1 / 1.0008 x 1 = 0.0008			AP <sub>Respiratory</sub> = (1.0131 - 1) x 1 / 1.0131 x 1 = 0.0129		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Mortality Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					RSP	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality
Tung Chung	TC-1	R	1966	0.035	2.1E-04	6.2E-05	6.3E-05	9.3E-05	1.1E-05	7.4E-06	3.2E-04	1.1E-04	1.2E-04
	TC-2	R	1966	0.037	2.2E-04	6.6E-05	6.7E-05	9.8E-05	1.2E-05	7.8E-06	3.4E-04	1.2E-04	1.3E-04
	TC-3	R	1966	0.041	2.4E-04	7.3E-05	7.4E-05	1.1E-04	1.3E-05	8.7E-06	3.8E-04	1.3E-04	1.4E-04
	TC-4	R	1966	0.042	2.5E-04	7.5E-05	7.6E-05	1.1E-04	1.3E-05	8.9E-06	3.8E-04	1.4E-04	1.4E-04
	TC-7	R	1966	0.043	2.5E-04	7.6E-05	7.8E-05	1.1E-04	1.3E-05	9.1E-06	3.9E-04	1.4E-04	1.5E-04
	TC-8	R	1966	0.045	2.6E-04	8.0E-05	8.2E-05	1.2E-04	1.4E-05	9.5E-06	4.1E-04	1.5E-04	1.5E-04
	TC-9	R	262	0.045	3.5E-05	1.1E-05	1.1E-05	1.6E-05	1.9E-06	1.3E-06	5.5E-05	2.0E-05	2.1E-05
	TC-10	R	262	0.042	3.3E-05	9.9E-06	1.0E-05	1.5E-05	1.7E-06	1.2E-06	5.1E-05	1.8E-05	1.9E-05
	TC-11	R	262	0.044	3.4E-05	1.0E-05	1.1E-05	1.6E-05	1.8E-06	1.2E-06	5.4E-05	1.9E-05	2.0E-05
	TC-12	R	262	0.043	3.4E-05	1.0E-05	1.0E-05	1.5E-05	1.8E-06	1.2E-06	5.3E-05	1.9E-05	2.0E-05
	TC-13	R	262	0.049	3.8E-05	1.2E-05	1.2E-05	1.7E-05	2.0E-06	1.4E-06	6.0E-05	2.1E-05	2.2E-05
	TC-14	R	262	0.047	3.7E-05	1.1E-05	1.1E-05	1.7E-05	2.0E-06	1.3E-06	5.7E-05	2.0E-05	2.1E-05
	TC-15	R	262	0.047	3.7E-05	1.1E-05	1.1E-05	1.7E-05	2.0E-06	1.3E-06	5.7E-05	2.0E-05	2.1E-05
	TC-29	R	2073	0.023	1.4E-04	4.3E-05	4.4E-05	6.4E-05	7.6E-06	5.1E-06	2.2E-04	7.9E-05	8.3E-05
	TC-30	R	2263	0.021	1.4E-04	4.3E-05	4.4E-05	6.4E-05	7.5E-06	5.1E-06	2.2E-04	7.9E-05	8.3E-05
	TC-31	R	1908	0.026	1.5E-04	4.5E-05	4.6E-05	6.7E-05	7.9E-06	5.3E-06	2.3E-04	8.2E-05	8.6E-05
	TC-32	R	2209	0.020	1.3E-04	4.0E-05	4.1E-05	6.0E-05	7.0E-06	4.8E-06	2.1E-04	7.3E-05	7.7E-05
	TC-33	R	1087	0.020	6.5E-05	2.0E-05	2.0E-05	2.9E-05	3.4E-06	2.3E-06	1.0E-04	3.6E-05	3.8E-05
	TC-34	R	1215	0.024	8.7E-05	2.6E-05	2.7E-05	3.9E-05	4.6E-06	3.1E-06	1.4E-04	4.8E-05	5.1E-05
	TC-35	R	1347	0.026	1.0E-04	3.2E-05	3.2E-05	4.7E-05	5.6E-06	3.8E-06	1.6E-04	5.8E-05	6.1E-05
	TC-36	R	1583	0.022	1.0E-04	3.1E-05	3.2E-05	4.7E-05	5.5E-06	3.7E-06	1.6E-04	5.8E-05	6.1E-05
	TC-37	R	1657	0.011	5.4E-05	1.6E-05	1.7E-05	2.5E-05	2.9E-06	2.0E-06	8.5E-05	3.0E-05	3.2E-05
	TC-38	R	1657	-0.001	-4.9E-06	-1.5E-06	-1.5E-06	-2.2E-06	-2.6E-07	-1.8E-07	-7.7E-06	-2.7E-06	-2.9E-06
	TC-39	R	2698	0.002	1.6E-05	4.9E-06	5.0E-06	7.3E-06	8.6E-07	5.8E-07	2.5E-05	8.9E-06	9.4E-06
	TC-40	R	3084	0.004	3.7E-05	1.1E-05	1.1E-05	1.7E-05	2.0E-06	1.3E-06	5.7E-05	2.0E-05	2.1E-05
	TC-41	R	1670	0.005	2.5E-05	7.5E-06	7.7E-06	1.1E-05	1.3E-06	9.0E-07	3.9E-05	1.4E-05	1.5E-05
	TC-42	R	1805	0.003	1.6E-05	4.9E-06	5.0E-06	7.3E-06	8.6E-07	5.8E-07	2.5E-05	9.0E-06	9.4E-06
	TC-43	R	1798	0.001	5.4E-06	1.6E-06	1.7E-06	2.4E-06	2.8E-07	1.9E-07	8.4E-06	3.0E-06	3.1E-06
	TC-44	R	1798	0.000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	TC-45	R	365	-0.012	-1.3E-05	-4.0E-06	-4.0E-06	-5.9E-06	-6.9E-07	-4.7E-07	-2.0E-05	-7.2E-06	-7.6E-06
	TC-P5	R	8090	0.010	2.4E-04	7.3E-05	7.5E-05	1.1E-04	1.3E-05	8.7E-06	3.8E-04	1.3E-04	1.4E-04
	TC-P6	R	8090	-0.045	-1.1E-03	-3.3E-04	-3.4E-04	-4.9E-04	-5.8E-05	-3.9E-05	-1.7E-03	-6.0E-04	-6.3E-04
	TC-P7	R	8090	0.022	5.3E-04	1.6E-04	1.6E-04	2.4E-04	2.8E-05	1.9E-05	8.3E-04	2.9E-04	3.1E-04
	TC-P8	R	29044	0.028	2.4E-03	7.3E-04	7.5E-04	1.1E-03	1.3E-04	8.8E-05	3.8E-03	1.3E-03	1.4E-03
	TC-P9	R	29044	0.006	5.2E-04	1.6E-04	1.6E-04	2.3E-04	2.8E-05	1.9E-05	8.1E-04	2.9E-04	3.0E-04
TC-P10	R	29044	0.024	2.1E-03	6.3E-04	6.4E-04	9.4E-04	1.1E-04	7.5E-05	3.2E-03	1.2E-03	1.2E-03	
TC-P11	R	29044	0.036	3.1E-03	9.4E-04	9.6E-04	1.4E-03	1.7E-04	1.1E-04	4.9E-03	1.7E-03	1.8E-03	
TC-Others	R	80051	0.019	4.5E-03	1.4E-03	1.4E-03	2.0E-03	2.4E-04	1.6E-04	7.0E-03	2.5E-03	2.6E-03	
<b>Total</b>					<b>1.5E-02</b>	<b>4.6E-03</b>	<b>4.7E-03</b>	<b>6.8E-03</b>	<b>8.0E-04</b>	<b>5.4E-04</b>	<b>2.4E-02</b>	<b>8.4E-03</b>	<b>8.8E-03</b>
San Tau	ST-1	R	2	0.093	5.5E-07	1.7E-07	1.7E-07	2.5E-07	2.9E-08	2.0E-08	8.7E-07	3.1E-07	3.2E-07
	ST-2	R	2	0.080	4.8E-07	1.4E-07	1.5E-07	2.2E-07	2.5E-08	1.7E-08	7.5E-07	2.6E-07	2.8E-07
	ST-3	R	2	0.082	4.9E-07	1.5E-07	1.5E-07	2.2E-07	2.6E-08	1.8E-08	7.6E-07	2.7E-07	2.9E-07
	ST-Others	R	763	0.085	1.9E-04	5.9E-05	6.0E-05	8.7E-05	1.0E-05	7.0E-06	3.0E-04	1.1E-04	1.1E-04
	<b>Total</b>					<b>1.9E-04</b>	<b>5.9E-05</b>	<b>6.0E-05</b>	<b>8.8E-05</b>	<b>1.0E-05</b>	<b>7.0E-06</b>	<b>3.0E-04</b>	<b>1.1E-04</b>
Sha Lo Wan	SLW-1	R	2	0.216	1.3E-06	3.9E-07	4.0E-07	5.8E-07	6.8E-08	4.6E-08	2.0E-06	7.1E-07	7.5E-07
	SLW-2	R	2	0.168	1.0E-06	3.0E-07	3.1E-07	4.5E-07	5.3E-08	3.6E-08	1.6E-06	5.6E-07	5.8E-07
	SLW-3	R	5	0.087	1.3E-06	3.9E-07	4.0E-07	5.9E-07	6.9E-08	4.7E-08	2.0E-06	7.2E-07	7.6E-07
	SLW-Others	R	21	0.192	1.2E-05	3.6E-06	3.7E-06	5.4E-06	6.4E-07	4.3E-07	1.9E-05	6.7E-06	7.0E-06
<b>Total</b>					<b>1.56E-05</b>	<b>4.7E-06</b>	<b>4.8E-06</b>	<b>7.1E-06</b>	<b>8.3E-07</b>	<b>5.6E-07</b>	<b>2.4E-05</b>	<b>8.7E-06</b>	<b>9.1E-06</b>
San Shek Wan	SSW-1	R	3	0.047	4.2E-07	1.3E-07	1.3E-07	1.9E-07	2.2E-08	1.5E-08	6.6E-07	2.3E-07	2.5E-07
	SSW-Others	R	410	0.077	9.4E-05	2.9E-05	2.9E-05	4.3E-05	5.0E-06	3.4E-06	1.5E-04	5.2E-05	5.5E-05
	<b>Total</b>					<b>9.4E-05</b>	<b>2.9E-05</b>	<b>2.9E-05</b>	<b>4.3E-05</b>	<b>5.0E-06</b>	<b>3.4E-06</b>	<b>1.5E-04</b>	<b>5.2E-05</b>
Sham Wat	SW-1	R	3	0.028	2.5E-07	7.6E-08	7.7E-08	1.1E-07	1.3E-08	9.0E-09	3.9E-07	1.4E-07	1.5E-07
	SW-1	R	3	0.028	2.5E-07	7.6E-08	7.7E-08	1.1E-07	1.3E-08	9.0E-09	3.9E-07	1.4E-07	1.5E-07
	SW-Others	R	163	0.103	5.0E-05	1.5E-05	1.5E-05	2.3E-05	2.6E-06	1.8E-06	7.8E-05	2.8E-05	2.9E-05

**Short-term Mortality Effects of RSP - Detailed Breakdown (3RS - 2RS) (based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>[2]</sup> = 42017 Mortality <sub>Cardiovascular</sub> : nos. of deaths in 2012 <sup>[3]</sup> = 10320 Mortality <sub>Respiratory</sub> : nos. of deaths in 2012 <sup>[4]</sup> = 9632					<b>Average Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0051 AP <sub>All</sub> = (1.0051 - 1) x 1 / 1.0051 x 1 = 0.0051 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0063 AP <sub>Cardiovascular</sub> = (1.0063 - 1) x 1 / 1.0063 x 1 = 0.0063 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0069 AP <sub>Respiratory</sub> = (1.0069 - 1) x 1 / 1.0069 x 1 = 0.0069			<b>Lower Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0023 AP <sub>All</sub> = (1.0023 - 1) x 1 / 1.0040 x 1 = 0.0023 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0011 AP <sub>Cardiovascular</sub> = (1.0011 - 1) x 1 / 1.0011 x 1 = 0.0011 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0008 AP <sub>Respiratory</sub> = (1.0008 - 1) x 1 / 1.0008 x 1 = 0.0008			<b>Upper Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0080 AP <sub>All</sub> = (1.0080 - 1) x 1 / 1.0080 x 1 = 0.0079 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0116 AP <sub>Cardiovascular</sub> = (1.0116 - 1) x 1 / 1.0116 x 1 = 0.0115 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0131 AP <sub>Respiratory</sub> = (1.0131 - 1) x 1 / 1.0131 x 1 = 0.0129		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Mortality Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality
<b>Total</b>					<b>5.0E-05</b>	<b>1.5E-05</b>	<b>1.6E-05</b>	<b>2.3E-05</b>	<b>2.7E-06</b>	<b>1.8E-06</b>	<b>7.9E-05</b>	<b>2.8E-05</b>	<b>2.9E-05</b>
Siu Ho Wan	SHW-1	R	2	0.011	6.6E-08	2.0E-08	2.0E-08	3.0E-08	3.5E-09	2.4E-09	1.0E-07	3.6E-08	3.8E-08
	SHW-2	R	2	0.017	1.0E-07	3.1E-08	3.1E-08	4.6E-08	5.4E-09	3.7E-09	1.6E-07	5.6E-08	5.9E-08
	SHW-3	R	2	0.027	1.6E-07	4.9E-08	5.0E-08	7.3E-08	8.6E-09	5.8E-09	2.5E-07	8.9E-08	9.4E-08
	SHW-Others	R	347	0.011	1.1E-05	3.4E-06	3.5E-06	5.1E-06	6.0E-07	4.1E-07	1.8E-05	6.3E-06	6.6E-06
	<b>Total</b>					<b>1.2E-05</b>	<b>3.5E-06</b>	<b>3.6E-06</b>	<b>5.3E-06</b>	<b>6.2E-07</b>	<b>4.2E-07</b>	<b>1.8E-05</b>	<b>6.5E-06</b>
Airport	AI-C1	R	2200	-0.480	-3.1E-03	-9.5E-04	-9.7E-04	-1.4E-03	-1.7E-04	-1.1E-04	-4.9E-03	-1.7E-03	-1.8E-03
	AI-C4	R	1200	-0.084	-3.0E-04	-9.1E-05	-9.3E-05	-1.4E-04	-1.6E-05	-1.1E-05	-4.7E-04	-1.7E-04	-1.8E-04
	<b>Total</b>					<b>-3.4E-03</b>	<b>-1.0E-03</b>	<b>-1.1E-03</b>	<b>-1.6E-03</b>	<b>-1.8E-04</b>	<b>-1.2E-04</b>	<b>-5.4E-03</b>	<b>-1.9E-03</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] Total nos. of deaths in hospital for all-causes in HK in 2012 = 43672; deaths from external causes of morbidity and mortality = 1655. Hence, total natural deaths = 43672 - 1655 = 42017.

(Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf))

[3] In HK in 2012, nos. of deaths in hospital from cardiovascular diseases of heart (ICD10: I00-I99) = 10320;

[4] In HK 2012, nos. of deaths in hospital from respiratory diseases (ICD10: J00-J99) = 9632.

[5] Wong C.M. et al, 2010.

**Short-term Mortality Effects of RSP - Detailed Breakdown (3RS - 2RS) (based on incremental change of max. daily conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>(1)</sup> = 7154600 Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>(2)</sup> = 42017 Mortality <sub>Cardiovascular</sub> : nos. of deaths in 2012 <sup>(3)</sup> = 10320 Mortality <sub>Respiratory</sub> : nos. of deaths in 2012 <sup>(4)</sup> = 9632					Average Value of RR RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0051 AP <sub>All</sub> = (1.0051 - 1) x 1 / 1.0051 x 1 = 0.0051 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0063 AP <sub>Cardiovascular</sub> = (1.0063 - 1) x 1 / 1.0063 x 1 = 0.0063 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0069 AP <sub>Respiratory</sub> = (1.0069 - 1) x 1 / 1.0069 x 1 = 0.0069			Lower Value of RR RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0023 AP <sub>All</sub> = (1.0023 - 1) x 1 / 1.0040 x 1 = 0.0023 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0011 AP <sub>Cardiovascular</sub> = (1.0011 - 1) x 1 / 1.0011 x 1 = 0.0011 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0008 AP <sub>Respiratory</sub> = (1.0008 - 1) x 1 / 1.0008 x 1 = 0.0008			Upper Value of RR RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0080 AP <sub>All</sub> = (1.0080 - 1) x 1 / 1.0080 x 1 = 0.0079 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0116 AP <sub>Cardiovascular</sub> = (1.0116 - 1) x 1 / 1.0116 x 1 = 0.0115 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>(5)</sup> = 1.0131 AP <sub>Respiratory</sub> = (1.0131 - 1) x 1 / 1.0131 x 1 = 0.0129		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Max. 24hr Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Mortality Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					RSP	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality
Tung Chung	TC-1	R	1966	-0.123	-7.2E-04	-2.2E-04	-2.2E-04	-3.3E-04	-3.8E-05	-2.6E-05	-1.1E-03	-4.0E-04	-4.2E-04
	TC-2	R	1966	-0.166	-9.7E-04	-2.9E-04	-3.0E-04	-4.4E-04	-5.2E-05	-3.5E-05	-1.5E-03	-5.4E-04	-5.7E-04
	TC-3	R	1966	-0.216	-1.3E-03	-3.8E-04	-3.9E-04	-5.7E-04	-6.7E-05	-4.6E-05	-2.0E-03	-7.0E-04	-7.4E-04
	TC-4	R	1966	-0.230	-1.3E-03	-4.1E-04	-4.2E-04	-6.1E-04	-7.2E-05	-4.9E-05	-2.1E-03	-7.5E-04	-7.9E-04
	TC-7	R	1966	-0.223	-1.3E-03	-4.0E-04	-4.0E-04	-5.9E-04	-6.9E-05	-4.7E-05	-2.0E-03	-7.3E-04	-7.6E-04
	TC-8	R	1966	0.225	1.3E-03	4.0E-04	4.1E-04	6.0E-04	7.0E-05	4.8E-05	2.1E-03	7.3E-04	7.7E-04
	TC-9	R	262	0.274	2.1E-04	6.5E-05	6.6E-05	9.7E-05	1.1E-05	7.7E-06	3.3E-04	1.2E-04	1.2E-04
	TC-10	R	262	0.313	2.4E-04	7.4E-05	7.6E-05	1.1E-04	1.3E-05	8.8E-06	3.8E-04	1.4E-04	1.4E-04
	TC-11	R	262	0.255	2.0E-04	6.0E-05	6.2E-05	9.0E-05	1.1E-05	7.2E-06	3.1E-04	1.1E-04	1.2E-04
	TC-12	R	262	0.175	1.4E-04	4.1E-05	4.2E-05	6.2E-05	7.3E-06	4.9E-06	2.1E-04	7.6E-05	8.0E-05
	TC-13	R	262	0.438	3.4E-04	1.0E-04	1.1E-04	1.5E-04	1.8E-05	1.2E-05	5.3E-04	1.9E-04	2.0E-04
	TC-14	R	262	0.392	3.1E-04	9.3E-05	9.5E-05	1.4E-04	1.6E-05	1.1E-05	4.8E-04	1.7E-04	1.8E-04
	TC-15	R	262	0.341	2.7E-04	8.1E-05	8.2E-05	1.2E-04	1.4E-05	9.6E-06	4.2E-04	1.5E-04	1.6E-04
	TC-29	R	2073	-0.071	-4.4E-04	-1.3E-04	-1.4E-04	-2.0E-04	-2.3E-05	-1.6E-05	-6.9E-04	-2.4E-04	-2.6E-04
	TC-30	R	2263	-0.025	-1.7E-04	-5.1E-05	-5.2E-05	-7.6E-05	-9.0E-06	-6.1E-06	-2.6E-04	-9.4E-05	-9.8E-05
	TC-31	R	1908	-0.150	-8.5E-04	-2.6E-04	-2.6E-04	-3.9E-04	-4.5E-05	-3.1E-05	-1.3E-03	-4.7E-04	-5.0E-04
	TC-32	R	2209	-0.023	-1.5E-04	-4.6E-05	-4.7E-05	-6.8E-05	-8.1E-06	-5.5E-06	-2.4E-04	-8.4E-05	-8.8E-05
	TC-33	R	1087	-0.027	-8.7E-05	-2.7E-05	-2.7E-05	-4.0E-05	-4.7E-06	-3.2E-06	-1.4E-04	-4.9E-05	-5.1E-05
	TC-34	R	1215	-0.142	-5.1E-04	-1.6E-04	-1.6E-04	-2.3E-04	-2.7E-05	-1.9E-05	-8.0E-04	-2.9E-04	-3.0E-04
	TC-35	R	1347	-0.228	-9.2E-04	-2.8E-04	-2.8E-04	-4.1E-04	-4.9E-05	-3.3E-05	-1.4E-03	-5.1E-04	-5.3E-04
	TC-36	R	1583	-0.175	-8.3E-04	-2.5E-04	-2.6E-04	-3.7E-04	-4.4E-05	-3.0E-05	-1.3E-03	-4.6E-04	-4.8E-04
	TC-37	R	1657	-0.022	-1.1E-04	-3.3E-05	-3.4E-05	-4.9E-05	-5.8E-06	-3.9E-06	-1.7E-04	-6.0E-05	-6.3E-05
	TC-38	R	1657	0.005	2.5E-05	7.5E-06	7.6E-06	1.1E-05	1.3E-06	8.9E-07	3.9E-05	1.4E-05	1.4E-05
	TC-39	R	2698	0.013	1.0E-04	3.2E-05	3.2E-05	4.7E-05	5.6E-06	3.8E-06	1.6E-04	5.8E-05	6.1E-05
TC-40	R	3084	0.010	9.2E-05	2.8E-05	2.8E-05	4.2E-05	4.9E-06	3.3E-06	1.4E-04	5.1E-05	5.4E-05	
TC-41	R	1670	-0.023	-1.1E-04	-3.5E-05	-3.5E-05	-5.2E-05	-6.1E-06	-4.1E-06	-1.8E-04	-6.4E-05	-6.7E-05	
TC-42	R	1805	-0.053	-2.9E-04	-8.6E-05	-8.8E-05	-1.5E-04	-1.5E-05	-1.0E-05	-4.5E-04	-1.6E-04	-1.7E-04	
TC-43	R	1798	-0.067	-3.6E-04	-1.1E-04	-1.1E-04	-1.6E-04	-1.9E-05	-1.3E-05	-5.6E-04	-2.0E-04	-2.1E-04	
TC-44	R	1798	-0.078	-4.2E-04	-1.3E-04	-1.3E-04	-1.9E-04	-2.2E-05	-1.5E-05	-6.5E-04	-2.3E-04	-2.4E-04	
TC-45	R	365	-0.041	-4.5E-05	-1.4E-05	-1.4E-05	-2.0E-05	-2.4E-06	-1.6E-06	-7.0E-05	-2.5E-05	-2.6E-05	
TC-P5	R	8090	-0.066	-1.6E-03	-4.8E-04	-4.9E-04	-7.2E-04	-8.5E-05	-5.7E-05	-2.5E-03	-8.8E-04	-9.3E-04	
TC-P6	R	8090	-0.017	-4.1E-04	-1.2E-04	-1.3E-04	-1.9E-04	-2.2E-05	-1.5E-05	-6.4E-04	-2.3E-04	-2.4E-04	
TC-P7	R	8090	0.327	7.9E-03	2.4E-03	2.4E-03	3.6E-03	4.2E-04	2.8E-04	1.2E-02	4.4E-03	4.6E-03	
TC-P8	R	29044	-0.238	-2.1E-02	-6.2E-03	-6.4E-03	-9.3E-03	-1.1E-03	-7.4E-04	-3.2E-02	-1.1E-02	-1.2E-02	
TC-P9	R	29044	0.090	2.4E-03	7.8E-03	2.4E-03	3.5E-03	4.1E-04	2.8E-04	1.2E-02	4.3E-03	4.6E-03	
TC-P10	R	29044	0.371	3.2E-02	9.7E-03	9.9E-03	1.5E-02	1.7E-03	1.2E-03	5.0E-02	1.8E-02	1.9E-02	
TC-P11	R	29044	0.317	2.7E-02	8.3E-03	8.5E-03	1.2E-02	1.5E-03	9.9E-04	4.3E-02	1.5E-02	1.6E-02	
TC-Others	R	80051	-0.098	-2.3E-02	-7.1E-03	-7.2E-03	-1.1E-02	-1.2E-03	-8.4E-04	-3.7E-02	-1.3E-02	-1.4E-02	
			<b>Total</b>		<b>2.2E-02</b>	<b>6.6E-03</b>	<b>6.7E-03</b>	<b>9.8E-03</b>	<b>1.1E-03</b>	<b>7.8E-04</b>	<b>3.4E-02</b>	<b>1.2E-02</b>	<b>1.3E-02</b>
San Tau	ST-1	R	2	0.029	1.7E-07	5.2E-08	5.4E-08	7.8E-08	9.2E-09	6.2E-09	2.7E-07	9.6E-08	1.0E-07
	ST-2	R	2	0.026	1.5E-07	4.7E-08	4.8E-08	7.0E-08	8.2E-09	5.6E-09	2.4E-07	8.6E-08	9.1E-08
	ST-3	R	2	0.017	1.0E-07	3.1E-08	3.1E-08	4.6E-08	5.4E-09	3.7E-09	1.6E-07	5.6E-08	5.9E-08
	ST-Others	R	763	0.024	5.5E-05	1.7E-05	1.7E-05	2.5E-05	2.9E-06	2.0E-06	8.5E-05	3.0E-05	3.2E-05
				<b>Total</b>		<b>5.5E-05</b>	<b>1.7E-05</b>	<b>1.7E-05</b>	<b>2.5E-05</b>	<b>2.9E-06</b>	<b>2.0E-06</b>	<b>8.6E-05</b>	<b>3.1E-05</b>
Sha Lo Wan	SLW-1	R	2	-0.115	-6.9E-07	-2.1E-07	-2.1E-07	-3.1E-07	-3.6E-08	-2.5E-08	-1.1E-06	-3.8E-07	-4.0E-07
	SLW-2	R	2	0.013	7.7E-08	2.3E-08	2.4E-08	3.5E-08	4.1E-09	2.8E-09	1.2E-07	4.3E-08	4.5E-08
	SLW-3	R	5	-0.343	-5.1E-06	-1.5E-06	-1.6E-06	-2.3E-06	-2.7E-07	-1.8E-07	-8.0E-06	-2.8E-06	-3.0E-06
	SLW-Others	R	21	-0.051	-3.2E-06	-9.7E-07	-9.9E-07	-1.4E-06	-1.7E-07	-1.2E-07	-5.0E-06	-1.8E-06	-1.9E-06
			<b>Total</b>		<b>-8.91E-06</b>	<b>-2.7E-06</b>	<b>-2.8E-06</b>	<b>-4.0E-06</b>	<b>-4.7E-07</b>	<b>-3.2E-07</b>	<b>-1.4E-05</b>	<b>-4.9E-06</b>	<b>-5.2E-06</b>
San Shek Wan	SSW-1	R	3	-0.172	-1.5E-06	-4.7E-07	-4.8E-07	-7.0E-07	-8.2E-08	-5.6E-08	-2.4E-06	-8.5E-07	-9.0E-07
	SSW-Others	R	410	-0.310	-3.8E-04	-1.1E-04	-1.2E-04	-1.7E-04	-2.0E-05	-1.4E-05	-5.9E-04	-2.1E-04	-2.2E-04
			<b>Total</b>		<b>-3.8E-04</b>	<b>-1.2E-04</b>	<b>-1.2E-04</b>	<b>-1.7E-04</b>	<b>-2.0E-05</b>	<b>-1.4E-05</b>	<b>-5.9E-04</b>	<b>-2.1E-04</b>	<b>-2.2E-04</b>
Sham Wat	SW-1	R	3	0.002	1.8E-08	5.4E-09	5.5E-09	8.1E-09	9.5E-10	6.5E-10	2.8E-08	9.9E-09	1.0E-08
	SW-1	R	3	0.002	1.8E-08	5.4E-09	5.5E-09	8.1E-09	9.5E-10	6.5E-10	2.8E-08	9.9E-09	1.0E-08
	SW-Others	R	163	0.006	2.8E-06	8.5E-07	8.7E-07	1.3E-06	1.5E-07	1.0E-07	4.4E-06	1.6E-06	1.6E-06

**Short-term Mortality Effects of RSP - Detailed Breakdown (3RS - 2RS) (based on incremental change of max. daily conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>[2]</sup> = 42017 Mortality <sub>Cardiovascular</sub> : nos. of deaths in 2012 <sup>[3]</sup> = 10320 Mortality <sub>Respiratory</sub> : nos. of deaths in 2012 <sup>[4]</sup> = 9632					<b>Average Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0051 AP <sub>All</sub> = (1.0051 - 1) x 1 / 1.0051 x 1 = 0.0051 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0063 AP <sub>Cardiovascular</sub> = (1.0063 - 1) x 1 / 1.0063 x 1 = 0.0063 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0069 AP <sub>Respiratory</sub> = (1.0069 - 1) x 1 / 1.0069 x 1 = 0.0069			<b>Lower Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0023 AP <sub>All</sub> = (1.0023 - 1) x 1 / 1.0040 x 1 = 0.0023 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0011 AP <sub>Cardiovascular</sub> = (1.0011 - 1) x 1 / 1.0011 x 1 = 0.0011 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0008 AP <sub>Respiratory</sub> = (1.0008 - 1) x 1 / 1.0008 x 1 = 0.0008			<b>Upper Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0080 AP <sub>All</sub> = (1.0080 - 1) x 1 / 1.0080 x 1 = 0.0079 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0116 AP <sub>Cardiovascular</sub> = (1.0116 - 1) x 1 / 1.0116 x 1 = 0.0115 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0131 AP <sub>Respiratory</sub> = (1.0131 - 1) x 1 / 1.0131 x 1 = 0.0129		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Max. 24hr Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Mortality Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of RSP = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					RSP	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality
<b>Total</b>					<b>2.9E-06</b>	<b>8.7E-07</b>	<b>8.8E-07</b>	<b>1.3E-06</b>	<b>1.5E-07</b>	<b>1.0E-07</b>	<b>4.5E-06</b>	<b>1.6E-06</b>	<b>1.7E-06</b>
Siu Ho Wan	SHW-1	R	2	0.223	1.3E-06	4.0E-07	4.1E-07	6.0E-07	7.1E-08	4.8E-08	2.1E-06	7.4E-07	7.8E-07
	SHW-2	R	2	-0.035	-2.1E-07	-6.3E-08	-6.5E-08	-9.4E-08	-1.1E-08	-7.5E-09	-3.3E-07	-1.2E-07	-1.2E-07
	SHW-3	R	2	0.115	6.9E-07	2.1E-07	2.1E-07	3.1E-07	3.6E-08	2.5E-08	1.1E-06	3.8E-07	4.0E-07
	SHW-Others	R	347	0.223	2.3E-04	7.0E-05	7.1E-05	1.0E-04	1.2E-05	8.3E-06	3.6E-04	1.3E-04	1.3E-04
<b>Total</b>					<b>2.3E-04</b>	<b>7.0E-05</b>	<b>7.2E-05</b>	<b>1.1E-04</b>	<b>1.2E-05</b>	<b>8.4E-06</b>	<b>3.6E-04</b>	<b>1.3E-04</b>	<b>1.4E-04</b>
Airport	AI-C1	R	2200	-2.548	-1.7E-02	-5.1E-03	-5.2E-03	-7.6E-03	-8.9E-04	-6.0E-04	-2.6E-02	-9.3E-03	-9.8E-03
	AI-C4	R	1200	-0.322	-1.2E-03	-3.5E-04	-3.6E-04	-5.2E-04	-6.1E-05	-4.2E-05	-1.8E-03	-6.4E-04	-6.7E-04
	<b>Total</b>					<b>-1.8E-02</b>	<b>-5.4E-03</b>	<b>-5.5E-03</b>	<b>-8.1E-03</b>	<b>-9.5E-04</b>	<b>-6.4E-04</b>	<b>-2.8E-02</b>	<b>-9.9E-03</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] Total nos. of deaths in hospital for all-causes in HK in 2012 = 43672; deaths from external causes of morbidity and mortality = 1655. Hence, total natural deaths = 43672 - 1655 = 42017.

(Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf))

[3] In HK in 2012, nos. of deaths in hospital from cardiovascular diseases of heart (ICD10: I00-I99) = 10320;

[4] In HK 2012, nos. of deaths in hospital from respiratory diseases (ICD10: J00-J99) = 9632.

[5] Wong C.M. et al, 2010.

**Short-term Mortality Effects of SO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600					Average Value of RR			Lower Value of RR			Upper Value of RR		
Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>[2]</sup> = 42017					RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0091			RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.004			RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0142		
Mortality <sub>Cardiovascular</sub> : nos. of deaths in 2012 <sup>[3]</sup> = 10320					AP <sub>All</sub> = (1.0091 - 1) x 1 / 1.0091 x 1 = 0.0090			AP <sub>All</sub> = (1.0040 - 1) x 1 / 1.0040 x 1 = 0.0040			AP <sub>All</sub> = (1.0142 - 1) x 1 / 1.0142 x 1 = 0.0140		
Mortality <sub>Respiratory</sub> : nos. of deaths in 2012 <sup>[4]</sup> = 9632					RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0123			RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0027			RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0221		
					AP <sub>Cardiovascular</sub> = (1.0123 - 1) x 1 / 1.0123 x 1 = 0.0063			AP <sub>Cardiovascular</sub> = (1.0027 - 1) x 1 / 1.0027 x 1 = 0.0027			AP <sub>Cardiovascular</sub> = (1.0216 - 1) x 1 / 1.0216 x 1 = 0.0216		
					RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0131			RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0021			RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0243		
					AP <sub>Respiratory</sub> = (1.0129 - 1) x 1 / 1.0129 x 1 = 0.0129			AP <sub>Respiratory</sub> = (1.0021 - 1) x 1 / 1.0021 x 1 = 0.0021			AP <sub>Respiratory</sub> = (1.0237 - 1) x 1 / 1.0237 x 1 = 0.0237		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Mortality Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					SO <sub>2</sub>	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality
Tung Chung	TC-1	R	1966	0.065	6.8E-04	1.2E-04	2.2E-04	3.0E-04	5.0E-05	3.6E-05	1.1E-03	4.0E-04	4.1E-04
	TC-2	R	1966	0.064	6.7E-04	1.1E-04	2.2E-04	2.9E-04	4.9E-05	3.6E-05	1.0E-03	3.9E-04	4.0E-04
	TC-3	R	1966	0.066	6.9E-04	1.2E-04	2.3E-04	3.0E-04	5.0E-05	3.7E-05	1.1E-03	4.1E-04	4.2E-04
	TC-4	R	1966	0.066	6.9E-04	1.2E-04	2.3E-04	3.0E-04	5.0E-05	3.7E-05	1.1E-03	4.1E-04	4.2E-04
	TC-7	R	1966	0.067	7.0E-04	1.2E-04	2.3E-04	3.1E-04	5.1E-05	3.7E-05	1.1E-03	4.1E-04	4.2E-04
	TC-8	R	1966	0.081	8.5E-04	1.4E-04	2.8E-04	3.7E-04	6.2E-05	4.5E-05	1.3E-03	5.0E-04	5.1E-04
	TC-9	R	262	0.081	1.1E-04	1.9E-05	3.7E-05	5.0E-05	8.3E-06	6.0E-06	1.8E-04	6.6E-05	6.8E-05
	TC-10	R	262	0.083	1.2E-04	2.0E-05	3.8E-05	5.1E-05	8.5E-06	6.2E-06	1.8E-04	6.8E-05	7.0E-05
	TC-11	R	262	0.084	1.2E-04	2.0E-05	3.9E-05	5.2E-05	8.6E-06	6.2E-06	1.8E-04	6.9E-05	7.1E-05
	TC-12	R	262	0.085	1.2E-04	2.0E-05	3.9E-05	5.2E-05	8.7E-06	6.3E-06	1.8E-04	7.0E-05	7.1E-05
	TC-13	R	262	0.086	1.2E-04	2.0E-05	3.9E-05	5.3E-05	8.8E-06	6.4E-06	1.9E-04	7.1E-05	7.2E-05
	TC-14	R	262	0.084	1.2E-04	2.0E-05	3.9E-05	5.2E-05	8.6E-06	6.2E-06	1.8E-04	6.9E-05	7.1E-05
	TC-15	R	262	0.083	1.2E-04	2.0E-05	3.8E-05	5.1E-05	8.5E-06	6.2E-06	1.8E-04	6.8E-05	7.0E-05
	TC-29	R	2073	0.050	5.5E-04	9.3E-05	1.8E-04	2.4E-04	4.0E-05	2.9E-05	8.5E-04	3.2E-04	3.3E-04
	TC-30	R	2263	0.049	5.9E-04	1.0E-04	1.9E-04	2.6E-04	4.3E-05	3.1E-05	9.1E-04	3.4E-04	3.5E-04
	TC-31	R	1908	0.053	5.3E-04	9.1E-05	1.8E-04	2.4E-04	3.9E-05	2.8E-05	8.3E-04	3.1E-04	3.2E-04
	TC-32	R	2209	0.050	5.8E-04	9.9E-05	1.9E-04	2.6E-04	4.3E-05	3.1E-05	9.1E-04	3.4E-04	3.5E-04
	TC-33	R	1087	0.051	2.9E-04	5.0E-05	9.6E-05	1.3E-04	2.1E-05	1.6E-05	4.5E-04	1.7E-04	1.8E-04
	TC-34	R	1215	0.053	3.4E-04	5.8E-05	1.1E-04	1.5E-04	2.5E-05	1.8E-05	5.3E-04	2.0E-04	2.1E-04
	TC-35	R	1347	0.055	3.9E-04	6.7E-05	1.3E-04	1.7E-04	2.9E-05	2.1E-05	6.1E-04	2.3E-04	2.4E-04
	TC-36	R	1583	0.054	4.5E-04	7.7E-05	1.5E-04	2.0E-04	3.3E-05	2.4E-05	7.0E-04	2.7E-04	2.7E-04
	TC-37	R	1657	0.052	4.6E-04	7.8E-05	1.5E-04	2.0E-04	3.3E-05	2.4E-05	7.1E-04	2.7E-04	2.7E-04
	TC-38	R	1657	0.048	4.2E-04	7.2E-05	1.4E-04	1.9E-04	3.1E-05	2.2E-05	6.5E-04	2.5E-04	2.5E-04
	TC-39	R	2698	0.045	6.4E-04	1.1E-04	2.1E-04	2.8E-04	4.7E-05	3.4E-05	9.9E-04	3.8E-04	3.9E-04
	TC-40	R	3084	0.045	7.3E-04	1.2E-04	2.4E-04	3.2E-04	5.4E-05	3.9E-05	1.1E-03	4.3E-04	4.4E-04
	TC-41	R	1670	0.045	4.0E-04	6.7E-05	1.3E-04	1.7E-04	2.9E-05	2.1E-05	6.1E-04	2.3E-04	2.4E-04
	TC-42	R	1805	0.046	4.4E-04	7.5E-05	1.4E-04	1.9E-04	3.2E-05	2.3E-05	6.8E-04	2.6E-04	2.6E-04
	TC-43	R	1798	0.047	4.5E-04	7.6E-05	1.5E-04	2.0E-04	3.3E-05	2.4E-05	6.9E-04	2.6E-04	2.7E-04
	TC-44	R	1798	0.049	4.6E-04	7.9E-05	1.5E-04	2.1E-04	3.4E-05	2.5E-05	7.2E-04	2.7E-04	2.8E-04
	TC-45	R	365	0.050	9.6E-05	1.6E-05	3.2E-05	4.3E-05	7.1E-06	5.1E-06	1.5E-04	5.7E-05	5.8E-05
TC-P5	R	8090	0.078	3.4E-03	5.7E-04	1.1E-03	1.5E-03	2.5E-04	1.8E-04	5.2E-03	2.0E-03	2.0E-03	
TC-P6	R	8090	0.048	2.0E-03	3.5E-04	6.7E-04	9.0E-04	1.5E-04	1.1E-04	3.2E-03	1.2E-03	1.2E-03	
TC-P7	R	8090	0.076	3.3E-03	5.6E-04	1.1E-03	1.4E-03	2.4E-04	1.7E-04	5.1E-03	1.9E-03	2.0E-03	
TC-P8	R	29044	0.071	1.1E-02	1.9E-03	3.6E-03	4.8E-03	8.0E-04	5.8E-04	1.7E-02	6.4E-03	6.6E-03	
TC-P9	R	29044	0.079	1.2E-02	2.1E-03	4.0E-03	5.4E-03	8.9E-04	6.5E-04	1.9E-02	7.2E-03	7.4E-03	
TC-P10	R	29044	0.112	1.7E-02	2.9E-03	5.7E-03	7.6E-03	1.3E-03	9.2E-04	2.7E-02	1.0E-02	1.0E-02	
TC-P11	R	29044	0.115	1.8E-02	3.0E-03	5.8E-03	7.8E-03	1.3E-03	9.4E-04	2.7E-02	1.0E-02	1.1E-02	
TC-Others	R	80051	0.053	2.2E-02	3.8E-03	7.3E-03	9.8E-03	1.6E-03	1.2E-03	3.5E-02	1.3E-02	1.3E-02	
<b>Total</b>					<b>1.0E-01</b>	<b>1.7E-02</b>	<b>3.3E-02</b>	<b>4.5E-02</b>	<b>7.5E-03</b>	<b>5.4E-03</b>	<b>1.6E-01</b>	<b>6.0E-02</b>	<b>6.1E-02</b>
San Tau	ST-1	R	2	0.165	1.7E-06	3.0E-07	5.7E-07	7.7E-07	1.3E-07	9.3E-08	2.7E-06	1.0E-06	1.1E-06
	ST-2	R	2	0.171	1.8E-06	3.1E-07	5.9E-07	8.0E-07	1.3E-07	9.6E-08	2.8E-06	1.1E-06	1.1E-06
	ST-3	R	2	0.150	1.6E-06	2.7E-07	5.2E-07	7.0E-07	1.2E-07	8.4E-08	2.5E-06	9.3E-07	9.6E-07
	ST-Others	R	763	0.162	6.5E-04	1.1E-04	2.1E-04	2.9E-04	4.8E-05	3.5E-05	1.0E-03	3.8E-04	3.9E-04
	<b>Total</b>					<b>6.6E-04</b>	<b>1.1E-04</b>	<b>2.2E-04</b>	<b>2.9E-04</b>	<b>4.8E-05</b>	<b>3.5E-05</b>	<b>1.0E-03</b>	<b>3.9E-04</b>
Sha Lo Wan	SLW-1	R	2	-0.045	-4.7E-07	-8.1E-08	-1.6E-07	-2.1E-07	-3.5E-08	-2.5E-08	-7.4E-07	-2.8E-07	-2.9E-07
	SLW-2	R	2	0.043	4.5E-07	7.7E-08	1.5E-07	2.0E-07	3.3E-08	2.4E-08	7.0E-07	2.7E-07	2.7E-07
	SLW-3	R	5	0.062	1.6E-06	2.8E-07	5.4E-07	7.3E-07	1.2E-07	8.8E-08	2.6E-06	9.7E-07	9.9E-07
	SLW-Others	R	21	-0.001	-1.1E-07	-1.9E-08	-3.7E-08	-5.0E-08	-8.3E-09	-6.0E-09	-1.8E-07	-6.7E-08	-6.8E-08
	<b>Total</b>					<b>1.51E-06</b>	<b>2.6E-07</b>	<b>5.0E-07</b>	<b>6.7E-07</b>	<b>1.1E-07</b>	<b>8.0E-08</b>	<b>2.3E-06</b>	<b>8.9E-07</b>
San Shek Wan	SSW-1	R	3	0.157	2.5E-06	4.2E-07	8.2E-07	1.1E-06	1.8E-07	3.9E-06	1.5E-06	1.5E-06	1.5E-06
	SSW-Others	R	410	0.088	1.9E-04	3.3E-05	6.3E-05	8.5E-05	1.4E-05	1.0E-05	3.0E-04	1.1E-04	1.2E-04
	<b>Total</b>					<b>1.9E-04</b>	<b>3.3E-05</b>	<b>6.4E-05</b>	<b>8.6E-05</b>	<b>1.4E-05</b>	<b>1.0E-05</b>	<b>3.0E-04</b>	<b>1.1E-04</b>
Sham Wat	SW-1	R	3	0.108	1.7E-06	2.9E-07	5.6E-07	7.6E-07	1.3E-07	9.1E-08	2.7E-06	1.0E-06	1.0E-06
	SW-1	R	3	0.108	1.7E-06	2.9E-07	5.6E-07	7.6E-07	1.3E-07	9.1E-08	2.7E-06	1.0E-06	1.0E-06
	SW-Others	R	163	0.105	9.1E-05	1.6E-05	3.0E-05	4.0E-05	6.7E-06	4.9E-06	1.4E-04	5.4E-05	5.5E-05

**Short-term Mortality Effects of SO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of annual-avg. conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>[2]</sup> = 42017 Mortality <sub>Cardiovascular</sub> : nos. of deaths in 2012 <sup>[3]</sup> = 10320 Mortality <sub>Respiratory</sub> : nos. of deaths in 2012 <sup>[4]</sup> = 9632					<b>Average Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0091 AP <sub>All</sub> = (1.0091 - 1) x 1 / 1.0091 x 1 = 0.0090 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0123 AP <sub>Cardiovascular</sub> = (1.0123 - 1) x 1 / 1.0123 x 1 = 0.0063 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0131 AP <sub>Respiratory</sub> = (1.0129 - 1) x 1 / 1.0129 x 1 = 0.0129			<b>Lower Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.004 AP <sub>All</sub> = (1.0040 - 1) x 1 / 1.0040 x 1 = 0.0040 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0027 AP <sub>Cardiovascular</sub> = (1.0027 - 1) x 1 / 1.0027 x 1 = 0.0027 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0021 AP <sub>Respiratory</sub> = (1.0021 - 1) x 1 / 1.0021 x 1 = 0.0021			<b>Upper Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0142 AP <sub>All</sub> = (1.0142 - 1) x 1 / 1.0142 x 1 = 0.0140 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0221 AP <sub>Cardiovascular</sub> = (1.0216 - 1) x 1 / 1.0216 x 1 = 0.0216 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0243 AP <sub>Respiratory</sub> = (1.0237 - 1) x 1 / 1.0237 x 1 = 0.0237		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in Annual avg. Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Mortality Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality
<b>Total</b>					<b>9.4E-05</b>	<b>1.6E-05</b>	<b>3.1E-05</b>	<b>4.2E-05</b>	<b>6.9E-06</b>	<b>5.0E-06</b>	<b>1.5E-04</b>	<b>5.6E-05</b>	<b>5.7E-05</b>
Siu Ho Wan	SHW-1	R	2	0.048	5.1E-07	8.6E-08	1.7E-07	2.2E-07	3.7E-08	2.7E-08	7.9E-07	3.0E-07	3.1E-07
	SHW-2	R	2	0.057	6.0E-07	1.0E-07	2.0E-07	2.7E-07	4.4E-08	3.2E-08	9.4E-07	3.6E-07	3.6E-07
	SHW-3	R	2	0.104	1.1E-06	1.9E-07	3.6E-07	4.9E-07	8.1E-08	5.9E-08	1.7E-06	6.5E-07	6.6E-07
	SHW-Others	R	347	0.048	8.8E-05	1.5E-05	2.9E-05	3.9E-05	6.4E-06	4.7E-06	1.4E-04	5.2E-05	5.3E-05
	<b>Total</b>					<b>9.0E-05</b>	<b>1.5E-05</b>	<b>3.0E-05</b>	<b>4.0E-05</b>	<b>6.6E-06</b>	<b>4.8E-06</b>	<b>1.4E-04</b>	<b>5.3E-05</b>
Airport	AI-C1	R	2200	0.854	1.0E-02	1.7E-03	3.3E-03	4.4E-03	7.3E-04	5.3E-04	1.5E-02	5.9E-03	6.0E-03
	AI-C4	R	1200	0.416	2.6E-03	4.5E-04	8.7E-04	1.2E-03	1.9E-04	1.4E-04	4.1E-03	1.6E-03	1.6E-03
	<b>Total</b>					<b>1.3E-02</b>	<b>2.1E-03</b>	<b>4.1E-03</b>	<b>5.6E-03</b>	<b>9.2E-04</b>	<b>6.7E-04</b>	<b>2.0E-02</b>	<b>7.4E-03</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] Total nos. of deaths in hospital for all-causes in HK in 2012 = 43672; deaths from external causes of morbidity and mortality = 1655. Hence, total natural deaths = 43672 - 1655 = 42017.

(Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf))

[3] In HK in 2012, nos. of deaths in hospital from cardiovascular diseases of heart (ICD10: I00-I99) = 10320;

[4] In HK 2012, nos. of deaths in hospital from respiratory diseases (ICD10: J00-J99) = 9632.

[5] Wong C.M. et al, 2010.

**Short-term Mortality Effects of SO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of max. daily conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600					Average Value of RR			Lower Value of RR			Upper Value of RR			
Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>[2]</sup> = 42017					RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0091			RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.004			RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0142			
Mortality <sub>Cardiovascular</sub> : nos. of deaths in 2012 <sup>[3]</sup> = 10320					AP <sub>All</sub> = (1.0091 - 1) x 1 / 1.0091 x 1 = 0.0090			AP <sub>All</sub> = (1.0040 - 1) x 1 / 1.0040 x 1 = 0.0040			AP <sub>All</sub> = (1.0142 - 1) x 1 / 1.0142 x 1 = 0.0140			
Mortality <sub>Respiratory</sub> : nos. of deaths in 2012 <sup>[4]</sup> = 9632					RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0123			RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0027			RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0221			
					AP <sub>Cardiovascular</sub> = (1.0123 - 1) x 1 / 1.0123 x 1 = 0.0063			AP <sub>Cardiovascular</sub> = (1.0027 - 1) x 1 / 1.0027 x 1 = 0.0027			AP <sub>Cardiovascular</sub> = (1.0216 - 1) x 1 / 1.0216 x 1 = 0.0216			
					RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0131			RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0021			RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0243			
					AP <sub>Respiratory</sub> = (1.0129 - 1) x 1 / 1.0129 x 1 = 0.0129			AP <sub>Respiratory</sub> = (1.0021 - 1) x 1 / 1.0021 x 1 = 0.0021			AP <sub>Respiratory</sub> = (1.0237 - 1) x 1 / 1.0237 x 1 = 0.0237			
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in MAX. 24hr Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Mortality Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			
					SO <sub>2</sub>	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality
Tung Chung	TC-1	R	1966	0.203	2.1E-03	3.6E-04	7.0E-04	9.4E-04	1.6E-04	1.1E-04	3.3E-03	1.2E-03	1.3E-03	
	TC-2	R	1966	0.193	2.0E-03	3.4E-04	6.6E-04	8.9E-04	1.5E-04	1.1E-04	3.1E-03	1.2E-03	1.2E-03	
	TC-3	R	1966	0.186	1.9E-03	3.3E-04	6.4E-04	8.6E-04	1.4E-04	1.0E-04	3.0E-03	1.1E-03	1.2E-03	
	TC-4	R	1966	0.186	1.9E-03	3.3E-04	6.4E-04	8.6E-04	1.4E-04	1.0E-04	3.0E-03	1.1E-03	1.2E-03	
	TC-7	R	1966	0.187	1.9E-03	3.3E-04	6.4E-04	8.6E-04	1.4E-04	1.0E-04	3.0E-03	1.1E-03	1.2E-03	
	TC-8	R	1966	0.005	5.3E-05	9.0E-06	1.7E-05	2.3E-05	3.9E-06	8.2E-06	2.8E-06	8.2E-05	3.1E-05	3.2E-05
	TC-9	R	262	0.004	5.6E-06	9.6E-07	1.9E-06	2.5E-06	4.1E-07	3.0E-07	8.8E-06	3.3E-06	3.4E-06	
	TC-10	R	262	0.011	1.6E-05	2.6E-06	5.1E-06	6.9E-06	1.1E-06	8.3E-07	2.4E-05	9.1E-06	9.4E-06	
	TC-11	R	262	0.011	1.6E-05	2.6E-06	5.1E-06	6.9E-06	1.1E-06	8.3E-07	2.4E-05	9.1E-06	9.4E-06	
	TC-12	R	262	0.011	1.6E-05	2.6E-06	5.1E-06	6.9E-06	1.1E-06	8.3E-07	2.4E-05	9.1E-06	9.4E-06	
	TC-13	R	262	0.011	1.6E-05	2.6E-06	5.1E-06	6.9E-06	1.1E-06	8.3E-07	2.4E-05	9.1E-06	9.4E-06	
	TC-14	R	262	0.009	1.3E-05	2.2E-06	4.2E-06	5.6E-06	9.3E-07	6.8E-07	2.0E-05	7.5E-06	7.7E-06	
	TC-15	R	262	0.005	7.1E-06	1.2E-06	2.3E-06	3.1E-06	5.2E-07	3.8E-07	1.1E-05	4.2E-06	4.3E-06	
	TC-29	R	2073	0.238	2.6E-03	4.5E-04	8.6E-04	1.2E-03	1.9E-04	1.4E-04	4.1E-03	1.5E-03	1.6E-03	
	TC-30	R	2263	0.237	2.8E-03	4.8E-04	9.3E-04	1.3E-03	2.1E-04	1.5E-04	4.4E-03	1.7E-03	1.7E-03	
	TC-31	R	1908	0.250	2.5E-03	4.3E-04	8.3E-04	1.1E-03	1.9E-04	1.3E-04	3.9E-03	1.5E-03	1.5E-03	
	TC-32	R	2209	0.248	2.9E-03	5.0E-04	9.5E-04	1.3E-03	2.1E-04	1.5E-04	4.5E-03	1.7E-03	1.8E-03	
	TC-33	R	1087	0.251	1.4E-03	2.5E-04	4.8E-04	6.4E-04	1.1E-04	7.7E-05	2.2E-03	8.5E-04	8.7E-04	
	TC-34	R	1215	0.255	1.6E-03	2.8E-04	5.4E-04	7.3E-04	1.2E-04	8.8E-05	2.6E-03	9.7E-04	9.9E-04	
	TC-35	R	1347	0.260	1.9E-03	3.2E-04	6.1E-04	8.2E-04	1.4E-04	9.9E-05	2.9E-03	1.1E-03	1.1E-03	
	TC-36	R	1583	0.261	2.2E-03	3.7E-04	7.2E-04	9.7E-04	1.6E-04	1.2E-04	3.4E-03	1.3E-03	1.3E-03	
	TC-37	R	1657	0.259	2.3E-03	3.9E-04	7.5E-04	1.0E-03	1.7E-04	1.2E-04	3.5E-03	1.3E-03	1.4E-03	
	TC-38	R	1657	0.266	2.3E-03	4.0E-04	7.7E-04	1.0E-03	1.7E-04	1.2E-04	3.6E-03	1.4E-03	1.4E-03	
	TC-39	R	2698	0.252	3.6E-03	6.1E-04	1.2E-03	1.6E-03	2.6E-04	1.9E-04	5.6E-03	2.1E-03	2.2E-03	
	TC-40	R	3084	0.249	4.1E-03	6.9E-04	1.3E-03	1.8E-03	3.0E-04	2.2E-04	6.3E-03	2.4E-03	2.5E-03	
	TC-41	R	1670	0.254	2.2E-03	3.8E-04	7.4E-04	9.9E-04	1.6E-04	1.2E-04	3.5E-03	1.3E-03	1.4E-03	
	TC-42	R	1805	0.259	2.5E-03	4.2E-04	8.1E-04	1.1E-03	1.8E-04	1.3E-04	3.8E-03	1.5E-03	1.5E-03	
	TC-43	R	1798	0.263	2.5E-03	4.3E-04	8.2E-04	1.1E-03	1.8E-04	1.3E-04	3.9E-03	1.5E-03	1.5E-03	
	TC-44	R	1798	0.272	2.6E-03	4.4E-04	8.5E-04	1.1E-03	1.9E-04	1.4E-04	4.0E-03	1.5E-03	1.6E-03	
	TC-45	R	365	0.284	5.5E-04	9.4E-05	1.8E-04	2.4E-04	4.0E-05	2.9E-05	8.5E-04	3.2E-04	3.3E-04	
	TC-P5	R	8090	0.096	4.1E-03	7.0E-04	1.3E-03	1.8E-03	3.0E-04	2.2E-04	6.4E-03	2.4E-03	2.5E-03	
TC-P6	R	8090	0.303	1.3E-02	2.2E-03	4.3E-03	5.7E-03	9.5E-04	6.9E-04	2.0E-02	7.6E-03	7.8E-03		
TC-P7	R	8090	0.005	2.2E-04	3.7E-05	7.2E-05	9.6E-05	1.6E-05	1.2E-05	3.4E-04	1.3E-04	1.3E-04		
TC-P8	R	29044	0.233	3.6E-02	6.1E-03	1.2E-02	1.6E-02	2.6E-03	1.9E-03	5.6E-02	2.1E-02	2.2E-02		
TC-P9	R	29044	0.267	4.1E-02	7.0E-03	1.4E-02	1.8E-02	3.0E-03	2.2E-03	6.4E-02	2.4E-02	2.5E-02		
TC-P10	R	29044	1.542	2.4E-01	4.0E-02	7.8E-02	1.0E-01	1.7E-02	1.3E-02	3.7E-01	1.4E-01	1.4E-01		
TC-P11	R	29044	1.309	2.0E-01	3.4E-02	6.6E-02	8.9E-02	1.5E-02	1.1E-02	3.1E-01	1.2E-01	1.2E-01		
TC-Others	R	80051	0.241	1.0E-01	1.7E-02	3.4E-02	4.5E-02	7.5E-03	5.4E-03	1.6E-01	6.0E-02	6.2E-02		
<b>Total</b>					<b>6.9E-01</b>	<b>1.2E-01</b>	<b>2.3E-01</b>	<b>3.0E-01</b>	<b>5.0E-02</b>	<b>3.7E-02</b>	<b>1.1E+00</b>	<b>4.0E-01</b>	<b>4.1E-01</b>	
San Tau	ST-1	R	2	0.022	2.4E-07	4.0E-08	7.8E-08	1.0E-07	1.7E-08	1.3E-08	3.7E-07	1.4E-07	1.4E-07	
	ST-2	R	2	0.019	2.0E-07	3.5E-08	6.7E-08	9.0E-08	1.5E-08	1.1E-08	3.2E-07	1.2E-07	1.2E-07	
	ST-3	R	2	0.031	3.2E-07	5.5E-08	1.1E-07	1.4E-07	2.4E-08	1.7E-08	5.0E-07	1.9E-07	1.9E-07	
	ST-Others	R	763	0.024	9.7E-05	1.7E-05	3.2E-05	4.3E-05	7.1E-06	5.2E-06	1.5E-04	5.7E-05	5.9E-05	
	<b>Total</b>					<b>9.8E-05</b>	<b>1.7E-05</b>	<b>3.2E-05</b>	<b>4.3E-05</b>	<b>7.2E-06</b>	<b>5.2E-06</b>	<b>1.5E-04</b>	<b>5.8E-05</b>	<b>5.9E-05</b>
Sha Lo Wan	SLW-1	R	2	1.070	1.1E-05	1.9E-06	3.7E-06	5.0E-06	8.3E-07	6.0E-07	1.8E-05	6.7E-06	6.8E-06	
	SLW-2	R	2	0.645	6.8E-06	1.2E-06	2.2E-06	3.0E-06	5.0E-07	3.6E-07	1.1E-05	4.0E-06	4.1E-06	
	SLW-3	R	5	0.185	4.9E-06	8.4E-07	1.6E-06	2.2E-06	3.6E-07	2.6E-07	7.6E-06	2.9E-06	3.0E-06	
	SLW-Others	R	21	0.857	9.5E-05	1.6E-05	3.1E-05	4.2E-05	7.0E-06	5.1E-06	1.5E-04	5.6E-05	5.8E-05	
	<b>Total</b>					<b>1.18E-04</b>	<b>2.0E-05</b>	<b>3.9E-05</b>	<b>5.2E-05</b>	<b>8.7E-06</b>	<b>6.3E-06</b>	<b>1.8E-04</b>	<b>7.0E-05</b>	<b>7.1E-05</b>
San Shek Wan	SSW-1	R	3	0.085	1.4E-06	2.3E-07	4.5E-07	6.0E-07	1.0E-07	7.2E-08	2.1E-06	8.0E-07	8.2E-07	
	SSW-Others	R	410	0.148	3.2E-04	5.5E-05	1.1E-04	1.4E-04	2.4E-05	1.7E-05	5.0E-04	1.9E-04	1.9E-04	
	<b>Total</b>					<b>3.2E-04</b>	<b>5.5E-05</b>	<b>1.1E-04</b>	<b>1.4E-04</b>	<b>2.4E-05</b>	<b>1.7E-05</b>	<b>5.0E-04</b>	<b>1.9E-04</b>	<b>1.9E-04</b>
Sham Wat	SW-1	R	3	0.039	6.1E-07	1.0E-07	2.0E-07	2.7E-07	4.5E-08	3.3E-08	9.5E-07	3.6E-07	3.7E-07	
	SW-1	R	3	0.039	6.1E-07	1.0E-07	2.0E-07	2.7E-07	4.5E-08	3.3E-08	9.5E-07	3.6E-07	3.7E-07	
	SW-Others	R	163	0.720	6.2E-04	1.1E-04	2.0E-04	2.7E-04	4.6E-05	3.3E-05	9.7E-04	3.7E-04	3.7E-04	

**Short-term Mortality Effects of SO<sub>2</sub> - Detailed Breakdown (3RS - 2RS) (based on incremental change of max. daily conc.)**

Population <sub>HK</sub> : Usual Resident Nos. in HK in mid-2012 <sup>[1]</sup> = 7154600 Mortality <sub>All</sub> : nos. of deaths in 2012 <sup>[2]</sup> = 42017 Mortality <sub>Cardiovascular</sub> : nos. of deaths in 2012 <sup>[3]</sup> = 10320 Mortality <sub>Respiratory</sub> : nos. of deaths in 2012 <sup>[4]</sup> = 9632					<b>Average Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0091 AP <sub>All</sub> = (1.0091 - 1) x 1 / 1.0091 x 1 = 0.0090 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0123 AP <sub>Cardiovascular</sub> = (1.0123 - 1) x 1 / 1.0123 x 1 = 0.0063 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0131 AP <sub>Respiratory</sub> = (1.0129 - 1) x 1 / 1.0129 x 1 = 0.0129			<b>Lower Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.004 AP <sub>All</sub> = (1.0040 - 1) x 1 / 1.0040 x 1 = 0.0040 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0027 AP <sub>Cardiovascular</sub> = (1.0027 - 1) x 1 / 1.0027 x 1 = 0.0027 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0021 AP <sub>Respiratory</sub> = (1.0021 - 1) x 1 / 1.0021 x 1 = 0.0021			<b>Upper Value of RR</b> RR <sub>All</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0142 AP <sub>All</sub> = (1.0142 - 1) x 1 / 1.0142 x 1 = 0.0140 RR <sub>Cardiovascular</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0221 AP <sub>Cardiovascular</sub> = (1.0216 - 1) x 1 / 1.0216 x 1 = 0.0216 RR <sub>Respiratory</sub> : (per 10µg/m <sup>3</sup> ) <sup>[5]</sup> = 1.0243 AP <sub>Respiratory</sub> = (1.0237 - 1) x 1 / 1.0237 x 1 = 0.0237		
Area	Human Receptor	Use	Resident Population (Predicted as of Mid-2031)	Incremental Change in MAX. 24hr Conc. (µg/m <sup>3</sup> ) (3RS - 2RS) (ΔConc.)	Short-term Mortality Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )			Short-term Mortality Effects of SO <sub>2</sub> = (ΔConc. / 10µg) x AP x Population x (Nos. of Mortality / Population <sub>HK</sub> )		
					All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality	All Mortality	Cardiopulmonary Mortality	Lung Cancer Mortality
<b>Total</b>					<b>6.2E-04</b>	<b>1.1E-04</b>	<b>2.0E-04</b>	<b>2.8E-04</b>	<b>4.6E-05</b>	<b>3.3E-05</b>	<b>9.7E-04</b>	<b>3.7E-04</b>	<b>3.8E-04</b>
Siu Ho Wan	SHW-1	R	2	0.000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
	SHW-2	R	2	-0.195	-2.1E-06	-3.5E-07	-6.8E-07	-9.1E-07	-1.5E-07	-1.1E-07	-3.2E-06	-1.2E-06	-1.2E-06
	SHW-3	R	2	2.762	2.9E-05	5.0E-06	9.6E-06	1.3E-05	2.1E-06	1.6E-06	4.5E-05	1.7E-05	1.8E-05
	SHW-Others	R	347	0.000	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
<b>Total</b>					<b>2.7E-05</b>	<b>4.6E-06</b>	<b>8.9E-06</b>	<b>1.2E-05</b>	<b>2.0E-06</b>	<b>1.4E-06</b>	<b>4.2E-05</b>	<b>1.6E-05</b>	<b>1.6E-05</b>
Airport	AI-C1	R	2200	11.125	1.3E-01	2.2E-02	4.3E-02	5.7E-02	9.5E-03	6.9E-03	2.0E-01	7.6E-02	7.8E-02
	AI-C4	R	1200	5.309	3.4E-02	5.8E-03	1.1E-02	1.5E-02	2.5E-03	1.8E-03	5.2E-02	2.0E-02	2.0E-02
	<b>Total</b>					<b>1.6E-01</b>	<b>2.8E-02</b>	<b>5.4E-02</b>	<b>7.2E-02</b>	<b>1.2E-02</b>	<b>8.7E-03</b>	<b>2.5E-01</b>	<b>9.6E-02</b>

Notes:

[1] Usual resident nos. in HK in mid-2012 = 7,154,600 (Census and Statistics Department)

[2] Total nos. of deaths in hospital for all-causes in HK in 2012 = 43672; deaths from external causes of morbidity and mortality = 1655. Hence, total natural deaths = 43672 - 1655 = 42017.

(Department of Health: [http://www.dh.gov.hk/english/pub\\_rec/pub\\_rec\\_ar/pdf/1213/supplementary\\_table2012.pdf](http://www.dh.gov.hk/english/pub_rec/pub_rec_ar/pdf/1213/supplementary_table2012.pdf))

[3] In HK in 2012, nos. of deaths in hospital from cardiovascular diseases of heart (ICD10: I00-I99) = 10320;

[4] In HK 2012, nos. of deaths in hospital from respiratory diseases (ICD10: J00-J99) = 9632.

[5] Wong C.M. et al, 2010.