

Appendix 3.13 Health Impact Assessment Criteria Pollutants Results

$$I_{KTCD A} = \frac{\Delta Conc}{10\mu g/m^3} \times AP \times Pop_{KTCD A} \times \frac{I_{HK}}{Pop_{HK}}$$

$$AP = \left(\frac{ER \times P}{RR \times P} \right)$$

$$I_e = I_{HK} \times AP$$

Table 3.11: Excess Risk (ER) of short-term mortality and morbidity attributable to an increase of 10 µg/m³ of air pollutant (95% confidence interval)

Air Pollutant	All causes mortality	Cardiovascular mortality	Respiratory mortality	Cardiovascular morbidity	Respiratory morbidity
PM ₁₀ ⁽¹⁾	0.0051	0.0063	0.0069	0.0058	0.0060
RR	1.0051	1.0063	1.0069	1.0058	1.0060
AP	0.0051	0.0063	0.0069	0.0058	0.0060
I _{HK} ⁽¹⁾	42,017	10,320	9,632	155,299	169,071
I _e ⁽²⁾	213	65	66	896	1,008
per 100,000 pop	587	144	135	2,171	2,363

- I_{KTCD A} = The absolute number of instances of mortality or morbidity cases attributed to air pollution emissions from carrying out of the Kennedy Town CDA
- ΔConc = Change in concentration of the criteria pollutant due to the carrying out of the project
- AP = Attributable proportion, that is, the number of hospital admissions or deaths that can be attributed to a concentration increase of 10 µg/m³ of the criteria pollutant
- Pop_{KTCD A} = Population of area affected by pollutant emissions due to project. In this case the 500 m study boundary
- I_{HK} = Total instances of hospital admissions or death from cardiopulmonary or respiratory causes for all of Hong Kong
- Pop_{HK} = Total population of Hong Kong
- I_e = Total instances of hospital admissions or death from cardiopulmonary or respiratory causes due to a change in the air pollution concentration of 10 µg/m³

ASR number	ΔConc (max 24-hour)	From central and western districts A06-A08 Census 2012	Pop _{KTCD A}	I _{KTCD A}	for ΔConc (max 24-hour) (Tier 2)					for ΔConc (max 24-hour) (Tier 2)				
					All causes mortality	Cardiovascular mortality	Respiratory mortality	Cardiovascular morbidity	Respiratory morbidity	All causes mortality	Cardiovascular mortality	Respiratory mortality	Cardiovascular morbidity	Respiratory morbidity
	18.2 Max 4.6E-04 Min				2.5	0.8	0.8	10.4	11.8	5.4E+00	1.6E+00	1.7E+00	2.3E+01	2.6E+01
	2.8 Average	Total	45722	Average	6.2E-05	1.9E-05	1.9E-05	2.6E-04	3.0E-04	1.4E-04	4.1E-05	4.2E-05	5.7E-04	6.5E-04
		Max		Max	0.4	0.1	0.1	1.6	1.8	0.83	0.25	0.26	3.50	3.95
1	15.8	A06	16577		2.2	0.7	0.7	9.0	10.2	4.71E-05	1.43E-05	1.46E-05	1.98E-04	2.23E-04
2	10.8	A07	14202		1.5	0.4	0.5	6.2	6.9	3.21E-05	9.74E-06	9.95E-06	1.35E-04	1.52E-04
3	7.2	A08	14943		1.0	0.3	0.3	4.1	4.6	2.13E-05	6.46E-06	6.60E-06	8.95E-05	1.01E-04
4	4.9				0.7	0.2	0.2	2.8	3.1	1.45E-05	4.38E-06	4.48E-06	6.07E-05	6.84E-05
5	3.4				0.5	0.1	0.1	1.9	2.2	1.00E-05	3.04E-06	3.10E-06	4.21E-05	4.74E-05
6	1.6		Pop _{HK}		0.2	0.1	0.1	0.9	1.0	4.71E-06	1.43E-06	1.46E-06	1.98E-05	2.23E-05
7	0.9		7154600		0.1	0.0	0.0	0.5	0.6	2.63E-06	7.97E-07	8.14E-07	1.10E-05	1.24E-05
8	0.5				0.1	0.0	0.0	0.3	0.3	1.51E-06	4.58E-07	4.68E-07	6.34E-06	7.14E-06
9	0.3				0.0	0.0	0.0	0.2	0.2	9.12E-07	2.76E-07	2.82E-07	3.83E-06	4.31E-06
10	0.2				0.0	0.0	0.0	0.1	0.1	5.58E-07	1.69E-07	1.73E-07	2.34E-06	2.64E-06
11	0.1				0.0	0.0	0.0	0.1	0.1	3.59E-07	1.09E-07	1.11E-07	1.51E-06	1.70E-06
12	0.1				0.0	0.0	0.0	0.0	0.1	2.33E-07	7.07E-08	7.23E-08	9.80E-07	1.10E-06
13	0.1				0.0	0.0	0.0	0.0	0.0	1.55E-07	4.70E-08	4.80E-08	6.51E-07	7.33E-07
14	18.2				2.5	0.8	0.8	10.4	11.8	5.43E-05	1.65E-05	1.68E-05	2.28E-04	2.57E-04
15	12.9				1.8	0.5	0.5	7.4	8.3	3.85E-05	1.17E-05	1.19E-05	1.62E-04	1.82E-04
16	8.7				1.2	0.4	0.4	5.0	5.6	2.59E-05	7.84E-06	8.01E-06	1.09E-04	1.22E-04
17	5.9				0.8	0.2	0.2	3.4	3.8	1.75E-05	5.31E-06	5.42E-06	7.36E-05	8.28E-05
18	4.0				0.6	0.2	0.2	2.3	2.6	1.20E-05	3.65E-06	3.73E-06	5.05E-05	5.69E-05
19	1.9				0.3	0.1	0.1	1.1	1.2	5.55E-06	1.68E-06	1.72E-06	2.33E-05	2.63E-05
20	1.0				0.1	0.0	0.0	0.5	0.6	2.84E-06	8.60E-07	8.79E-07	1.19E-05	1.34E-05
21	0.5				0.1	0.0	0.0	0.3	0.4	1.64E-06	4.97E-07	5.07E-07	6.88E-06	7.75E-06
22	0.3				0.0	0.0	0.0	0.2	0.2	9.83E-07	2.98E-07	3.04E-07	4.13E-06	4.65E-06
23	0.2				0.0	0.0	0.0	0.1	0.1	5.90E-07	1.79E-07	1.83E-07	2.48E-06	2.79E-06
24	0.1				0.0	0.0	0.0	0.1	0.1	3.54E-07	1.07E-07	1.09E-07	1.49E-06	1.67E-06
25	0.1				0.0	0.0	0.0	0.0	0.0	2.11E-07	6.40E-08	6.54E-08	8.87E-07	9.99E-07
26	0.0				0.0	0.0	0.0	0.0	0.0	1.36E-07	4.12E-08	4.21E-08	5.71E-07	6.43E-07
27	0.0				0.0	0.0	0.0	0.0	0.0	1.02E-07	3.10E-08	3.17E-08	4.30E-07	4.84E-07
28	0.0				0.0	0.0	0.0	0.0	0.0	8.96E-08	2.72E-08	2.78E-08	3.77E-07	4.24E-07
29	0.0				0.0	0.0	0.0	0.0	0.0	8.74E-08	2.65E-08	2.71E-08	3.67E-07	4.13E-07
30	0.0				0.0	0.0	0.0	0.0	0.0	9.66E-08	2.93E-08	2.99E-08	4.06E-07	4.57E-07
31	0.0				0.0	0.0	0.0	0.0	0.0	1.25E-07	3.79E-08	3.87E-08	5.25E-07	5.91E-07
32	0.1				0.0	0.0	0.0	0.0	0.0	1.80E-07	5.44E-08	5.56E-08	7.54E-07	8.49E-07
33	0.1				0.0	0.0	0.0	0.1	0.1	3.15E-07	9.53E-08	9.74E-08	1.32E-06	1.49E-06
34	0.2				0.0	0.0	0.0	0.1	0.1	5.55E-07	1.68E-07	1.72E-07	2.33E-06	2.62E-06
35	8.5				1.2	0.4	0.4	4.9	5.5	2.53E-05	7.67E-06	7.84E-06	1.06E-04	1.20E-04
36	5.7				0.8	0.2	0.2	3.3	3.7	1.71E-05	5.18E-06	5.29E-06	7.18E-05	8.08E-05
37	4.5				0.6	0.2	0.2	2.6	2.9	1.34E-05	4.06E-06	4.15E-06	5.63E-05	6.33E-05
38	3.4				0.5	0.1	0.1	1.9	2.2	1.00E-05	3.03E-06	3.10E-06	4.21E-05	4.74E-05
39	2.6				0.4	0.1	0.1	1.5	1.7	7.86E-06	2.38E-06	2.43E-06	3.30E-05	3.72E-05
40	1.4				0.2	0.1	0.1	0.8	0.9	4.18E-06	1.27E-06	1.30E-06	1.76E-05	1.98E-05
41	0.8				0.1	0.0	0.0	0.5	0.5	2.40E-06	7.28E-07	7.43E-07	1.01E-05	1.14E-05
42	0.5				0.1	0.0	0.0	0.3	0.3	1.42E-06	4.29E-07	4.39E-07	5.95E-06	6.70E-06
43	0.3				0.0	0.0	0.0	0.2	0.2	8.17E-07	2.48E-07	2.53E-07	3.43E-06	3.86E-06
44	0.2				0.0	0.0	0.0	0.1	0.1	4.88E-07	1.48E-07	1.51E-07	2.05E-06	2.31E-06
45	0.1				0.0	0.0	0.0	0.1	0.1	3.19E-07	9.66E-08	9.87E-08	1.34E-06	1.51E-06
46	0.1				0.0	0.0	0.0	0.0	0.0	2.11E-07	6.39E-08	6.53E-08	8.86E-07	9.97E-07
47	0.0				0.0	0.0	0.0	0.0	0.0	1.44E-07	4.35E-08	4.44E-08	6.03E-07	6.79E-07
48	10.3				1.4	0.4	0.4	5.9	6.6	3.07E-05	9.31E-06	9.51E-06	1.29E-04	1.45E-04
49	6.9				0.9	0.3	0.3	4.0	4.5	2.06E-05	6.24E-06	6.37E-06	8.65E-05	9.74E-05
50	4.4				0.6	0.2	0.2	2.5	2.8	1.32E-05	3.99E-06	4.07E-06	5.53E-05	6.22E-05
51	3.1				0.4	0.1	0.1	1.8	2.0	9.12E-06	2.76E-06	2.82E-06	3.83E-05	4.31E-05
52	2.3				0.3	0.1	0.1	1.3	1.5	6.80E-06	2.06E-06	2.11E-06	2.86E-05	3.22E-05
53	1.1				0.1	0.0	0.0	0.6	0.7	3.16E-06	9.59E-07	9.80E-07	1.33E-05	1.50E-05
54	0.5				0.1	0.0	0.0	0.3	0.3	1.41E-06	4.29E-07	4.38E-07	5.94E-06	6.69E-06
55	0.2				0.0	0.0	0.0	0.1	0.2	7.08E-07	2.15E-07	2.19E-07	2.97E-06	3.35E-06
56	0.1				0.0	0.0	0.0	0.1	0.1	3.47E-07	1.05E-07	1.07E-07	1.46E-06	1.64E-06
57	0.1				0.0	0.0	0.0	0.0	0.0	1.89E-07	5.73E-08	5.85E-08	7.94E-07	8.94E-07
58	0.0				0.0	0.0	0.0	0.0	0.0	1.04E-07	3.16E-08	3.23E-08	4.38E-07	4.93E-07
59	0.0				0.0	0.0	0.0	0.0	0.0	5.85E-08	1.77E-08	1.81E-08	2.46E-07	2.77E-07
60	0.0				0.0	0.0	0.0	0.0	0.0	3.41E-08	1.03E-08	1.06E-08	1.43E-07	1.61E-07
61	0.0				0.0	0.0	0.0	0.0	0.0	2.20E-08	6.66E-09	6.80E-09	9.23E-08	1.04E-07
62	0.0				0.0	0.0	0.0	0.0	0.0	1.80E-08	5.46E-09	5.57E-09	7.56E-08	8.52E-08
63	14.4				2.0	0.6	0.6	8.3	9.3	4.30E-05	1.30E-05	1.33E-05	1.81E-04	2.03E-04
64	10.6				1.5	0.4	0.4	6.1	6.9	3.17E-05	9.61E-06	9.82E-06	1.33E-04	1.50E-04
65	7.2				1.0	0.3	0.3	4.1	4.6	2.14E-05	6.50E-06	6.64E-06	9.01E-05	1.01E-04
66	4.7				0.6	0.2	0.2	2.7	3.0	1.40E-05	4.24E-06	4.34E-06	5.88E-05	6.62E-05
67	3.1				0.4	0.1	0.1	1.8	2.0	9.22E-06	2.79E-06	2.85E-06	3.87E-05	4.36E-05
68	15.8				2.2	0.7								

Appendix 3.13 - Health Impact Assessment Criteria Pollutants Results

Short-term RSP

76	7.0	1.0	0.3	0.3	4.0	4.5	2.08E-05	6.31E-06	6.45E-06	8.75E-05	9.85E-05
77	6.2	0.8	0.3	0.3	3.5	4.0	1.84E-05	5.59E-06	5.71E-06	7.75E-05	8.72E-05
78	5.1	0.7	0.2	0.2	2.9	3.3	1.52E-05	4.61E-06	4.71E-06	6.39E-05	7.20E-05
79	4.0	0.5	0.2	0.2	2.3	2.6	1.18E-05	3.59E-06	3.66E-06	4.97E-05	5.60E-05
80	2.9	0.4	0.1	0.1	1.7	1.9	8.78E-06	2.66E-06	2.72E-06	3.69E-05	4.15E-05
81	1.6	0.2	0.1	0.1	0.9	1.0	4.72E-06	1.43E-06	1.46E-06	1.98E-05	2.23E-05
82	0.9	0.1	0.0	0.0	0.5	0.6	2.82E-06	8.54E-07	8.73E-07	1.18E-05	1.33E-05
83	0.6	0.1	0.0	0.0	0.3	0.4	1.66E-06	5.04E-07	5.15E-07	6.99E-06	7.87E-06
84	0.4	0.0	0.0	0.0	0.2	0.2	1.09E-06	3.30E-07	3.37E-07	4.58E-06	5.15E-06
85	0.2	0.0	0.0	0.0	0.1	0.2	7.09E-07	2.15E-07	2.20E-07	2.98E-06	3.36E-06
86	0.2	0.0	0.0	0.0	0.1	0.1	4.92E-07	1.49E-07	1.52E-07	2.06E-06	2.32E-06
87	0.1	0.0	0.0	0.0	0.1	0.1	3.49E-07	1.06E-07	1.08E-07	1.47E-06	1.65E-06
88	0.1	0.0	0.0	0.0	0.1	0.1	2.76E-07	8.37E-08	8.55E-08	1.16E-06	1.31E-06
89	16.3	2.2	0.7	0.7	9.3	10.5	4.84E-05	1.47E-05	1.50E-05	2.03E-04	2.29E-04
90	10.6	1.5	0.4	0.4	6.1	6.9	3.17E-05	9.61E-06	9.82E-06	1.33E-04	1.50E-04
91	8.6	1.2	0.4	0.4	4.9	5.6	2.57E-05	7.80E-06	7.97E-06	1.08E-04	1.22E-04
92	7.2	1.0	0.3	0.3	4.1	4.6	2.14E-05	6.48E-06	6.62E-06	8.98E-05	1.01E-04
93	5.6	0.8	0.2	0.2	3.2	3.6	1.66E-05	5.03E-06	5.14E-06	6.98E-05	7.86E-05
94	4.2	0.6	0.2	0.2	2.4	2.7	1.24E-05	3.77E-06	3.85E-06	5.22E-05	5.88E-05
95	3.1	0.4	0.1	0.1	1.7	2.0	9.11E-06	2.76E-06	2.82E-06	3.83E-05	4.31E-05
96	1.5	0.2	0.1	0.1	0.9	1.0	4.57E-06	1.38E-06	1.41E-06	1.92E-05	2.16E-05
97	1.0	0.1	0.0	0.0	0.6	0.6	2.90E-06	8.78E-07	8.97E-07	1.22E-05	1.37E-05
98	0.6	0.1	0.0	0.0	0.3	0.4	1.80E-06	5.46E-07	5.58E-07	7.57E-06	8.52E-06
99	0.4	0.1	0.0	0.0	0.2	0.2	1.10E-06	3.34E-07	3.42E-07	4.63E-06	5.22E-06
100	0.2	0.0	0.0	0.0	0.1	0.1	6.67E-07	2.02E-07	2.06E-07	2.80E-06	3.15E-06
101	0.1	0.0	0.0	0.0	0.1	0.1	4.13E-07	1.25E-07	1.28E-07	1.73E-06	1.95E-06
102	0.1	0.0	0.0	0.0	0.1	0.1	2.81E-07	8.52E-08	8.70E-08	1.18E-06	1.33E-06
103	0.1	0.0	0.0	0.0	0.0	0.0	2.06E-07	6.23E-08	6.37E-08	8.64E-07	9.72E-07
104	0.1	0.0	0.0	0.0	0.0	0.0	1.59E-07	4.83E-08	4.93E-08	6.69E-07	7.53E-07
105	0.0	0.0	0.0	0.0	0.0	0.0	1.35E-07	4.08E-08	4.17E-08	5.66E-07	6.37E-07
106	16.1	2.2	0.7	0.7	9.2	10.3	4.78E-05	1.45E-05	1.48E-05	2.01E-04	2.26E-04
107	8.2	1.1	0.3	0.3	4.7	5.3	2.44E-05	7.39E-06	7.55E-06	1.02E-04	1.15E-04
108	4.5	0.6	0.2	0.2	2.6	2.9	1.34E-05	4.05E-06	4.14E-06	5.61E-05	6.32E-05
109	3.0	0.4	0.1	0.1	1.7	1.9	8.85E-06	2.68E-06	2.74E-06	3.72E-05	4.18E-05
110	2.0	0.3	0.1	0.1	1.2	1.3	6.07E-06	1.84E-06	1.88E-06	2.55E-05	2.87E-05
111	0.8	0.1	0.0	0.0	0.5	0.5	2.42E-06	7.35E-07	7.51E-07	1.02E-05	1.15E-05
112	0.3	0.0	0.0	0.0	0.2	0.2	9.65E-07	2.92E-07	2.99E-07	4.05E-06	4.56E-06
113	0.2	0.0	0.0	0.0	0.1	0.1	4.61E-07	1.40E-07	1.43E-07	1.94E-06	2.18E-06
114	0.1	0.0	0.0	0.0	0.0	0.0	2.19E-07	6.63E-08	6.77E-08	9.19E-07	1.03E-06
115	0.0	0.0	0.0	0.0	0.0	0.0	1.02E-07	3.10E-08	3.17E-08	4.30E-07	4.84E-07
116	0.0	0.0	0.0	0.0	0.0	0.0	4.72E-08	1.43E-08	1.46E-08	1.98E-07	2.23E-07
117	0.0	0.0	0.0	0.0	0.0	0.0	2.14E-08	6.47E-09	6.61E-09	8.97E-08	1.01E-07
118	0.0	0.0	0.0	0.0	0.0	0.0	9.68E-09	2.93E-09	3.00E-09	4.07E-08	4.58E-08
119	0.0	0.0	0.0	0.0	0.0	0.0	4.59E-09	1.39E-09	1.42E-09	1.93E-08	2.17E-08
120	0.0	0.0	0.0	0.0	0.0	0.0	2.98E-09	9.03E-10	9.23E-10	1.25E-08	1.41E-08
121	0.0	0.0	0.0	0.0	0.0	0.0	3.60E-09	1.09E-09	1.11E-09	1.51E-08	1.70E-08
122	0.0	0.0	0.0	0.0	0.0	0.0	6.46E-09	1.96E-09	2.00E-09	2.71E-08	3.05E-08
123	0.0	0.0	0.0	0.0	0.0	0.0	1.28E-08	3.88E-09	3.96E-09	5.37E-08	6.05E-08
124	0.0	0.0	0.0	0.0	0.0	0.0	2.57E-08	7.79E-09	7.96E-09	1.08E-07	1.22E-07
125	0.0	0.0	0.0	0.0	0.0	0.0	5.10E-08	1.55E-08	1.58E-08	2.14E-07	2.41E-07
126	0.0	0.0	0.0	0.0	0.0	0.0	9.95E-08	3.01E-08	3.08E-08	4.18E-07	4.70E-07
127	15.1	2.1	0.6	0.6	8.7	9.8	4.51E-05	1.37E-05	1.40E-05	1.89E-04	2.13E-04
128	7.5	1.0	0.3	0.3	4.3	4.9	2.25E-05	6.81E-06	6.96E-06	9.44E-05	1.06E-04
129	4.0	0.5	0.2	0.2	2.3	2.6	1.18E-05	3.59E-06	3.67E-06	4.98E-05	5.60E-05
130	2.5	0.3	0.1	0.1	1.4	1.6	7.40E-06	2.24E-06	2.29E-06	3.11E-05	3.50E-05
131	1.6	0.2	0.1	0.1	0.9	1.0	4.75E-06	1.44E-06	1.47E-06	2.00E-05	2.25E-05
132	0.6	0.1	0.0	0.0	0.3	0.4	1.76E-06	5.32E-07	5.44E-07	7.38E-06	8.31E-06
133	0.2	0.0	0.0	0.0	0.1	0.2	7.44E-07	2.26E-07	2.30E-07	3.13E-06	3.52E-06
134	0.1	0.0	0.0	0.0	0.1	0.1	3.29E-07	9.97E-08	1.02E-07	1.38E-06	1.56E-06
135	0.0	0.0	0.0	0.0	0.0	0.0	1.48E-07	4.50E-08	4.59E-08	6.23E-07	7.02E-07
136	0.0	0.0	0.0	0.0	0.0	0.0	6.68E-08	2.02E-08	2.07E-08	2.81E-07	3.16E-07
137	0.0	0.0	0.0	0.0	0.0	0.0	2.97E-08	8.99E-09	9.19E-09	1.25E-07	1.40E-07
138	0.0	0.0	0.0	0.0	0.0	0.0	1.25E-08	3.80E-09	3.88E-09	5.27E-08	5.93E-08
139	0.0	0.0	0.0	0.0	0.0	0.0	5.21E-09	1.58E-09	1.61E-09	2.19E-08	2.47E-08
140	0.0	0.0	0.0	0.0	0.0	0.0	2.23E-09	6.77E-10	6.92E-10	9.39E-09	1.06E-08
141	0.0	0.0	0.0	0.0	0.0	0.0	1.37E-09	4.14E-10	4.23E-10	5.74E-09	6.46E-09
142	0.0	0.0	0.0	0.0	0.0	0.0	1.86E-09	5.64E-10	5.77E-10	7.82E-09	8.81E-09
143	0.0	0.0	0.0	0.0	0.0	0.0	4.10E-09	1.24E-09	1.27E-09	1.72E-08	1.94E-08
144	0.0	0.0	0.0	0.0	0.0	0.0	9.68E-09	2.93E-09	3.00E-09	4.07E-08	4.58E-08
145	0.0	0.0	0.0	0.0	0.0	0.0	2.16E-08	6.55E-09	6.69E-09	9.07E-08	1.02E-07
146	0.0	0.0	0.0	0.0	0.0	0.0	4.69E-08	1.42E-08	1.45E-08	1.97E-07	2.22E-07
147	0.0	0.0	0.0	0.0	0.0	0.0	9.63E-08	2.92E-08	2.98E-08	4.05E-07	4.56E-07

$$I_{KTCD A} = \frac{\Delta Conc}{10\mu g/m^3} \times AP \times Pop_{KTCD A} \times \frac{I_{HK}}{Pop_{HK}}$$

$$AP = \left(\frac{ER \times P}{RR \times P} \right)$$

$$I_e = I_{HK} \times AP$$

Table 3.12: Excess Risk (ER) of long-term mortality attributable to an increase of 10 µg/m3 of air pollutant (95% confidence interval)

Air Pollutant	All causes mortality	Cardiopulmonary mortality	Lung Cancer mortality
PM _{2.5} ⁽³⁾	0.0400	0.0600	0.0800
RR	1.0400	1.0600	1.0800
AP	0.0385	0.0566	0.0741
I _{HK} ⁽¹⁾	42,017	10,320	9,632
I _e ⁽²⁾	1,616	584	713
per 100,000 pop	587	144	135

- I_{KTCD A} = The absolute number of instances of mortality or morbidity cases attributed to air pollution emissions from carrying out of the Kennedy Town CDA
- ΔConc = Change in concentration of the criteria pollutant due to the carrying out of the project
- AP = Attributable proportion, that is, the number of hospital admissions or deaths that can be attributed to a concentration increase of 10 µg/m³ of the criteria pollutant
- Pop_{KTCD A} = Population of area affected by pollutant emissions due to project. In this case the 500 m study boundary
- I_{HK} = Total instances of hospital admissions or death from cardiopulmonary or respiratory causes for all of Hong Kong
- Pop_{HK} = Total population of Hong Kong
- I_e = Total instances of hospital admissions or death from cardiopulmonary or respiratory causes due to a change in the air pollution concentration of 10 µg/m³

ASR number	ΔConc (annual)	Pop _{KTCD A}		I _{KTCD A} for ΔConc (annual)			relative increase I _{KTCD A} / for ΔConc (annual)			
		From central and western districts A06-A08 Census 2012		All causes mortality	Cardiopulmonary mortality	Lung Cancer mortality	All causes mortality	Cardiopulmonary mortality	Lung Cancer mortality	
	0.68 Max				0.7	0.3	0.3	1.5	0.6	0.7
	3.4E-07 Min				3.5E-07	1.3E-07	1.6E-07	7.8E-07	2.8E-07	3.4E-07
	4.7E-02 Average	Total	45722	Average	4.8E-02	1.7E-02	2.1E-02	1.1E-01	3.8E-02	4.7E-02
1	0.2	A06	16577		0.2	0.1	0.1	4.46E-06	1.61E-06	1.97E-06
2	0.1	A07	14202		0.1	0.1	0.1	3.23E-06	1.17E-06	1.42E-06
3	0.1	A08	14943		0.1	0.0	0.0	2.26E-06	8.18E-07	9.99E-07
4	0.1				0.1	0.0	0.0	1.61E-06	5.82E-07	7.11E-07
5	0.1				0.1	0.0	0.0	1.17E-06	4.23E-07	5.16E-07
6	0.0	Pop _{HK}			0.0	0.0	0.0	5.68E-07	2.05E-07	2.51E-07
7	0.0	7154600			0.0	0.0	0.0	2.97E-07	1.07E-07	1.31E-07
8	0.0				0.0	0.0	0.0	1.61E-07	5.84E-08	7.13E-08
9	0.0				0.0	0.0	0.0	9.02E-08	3.26E-08	3.98E-08
10	0.0				0.0	0.0	0.0	5.11E-08	1.85E-08	2.25E-08
11	0.0				0.0	0.0	0.0	2.92E-08	1.06E-08	1.29E-08
12	0.0				0.0	0.0	0.0	1.69E-08	6.10E-09	7.45E-09
13	0.0				0.0	0.0	0.0	9.94E-09	3.59E-09	4.39E-09
14	0.2				0.2	0.1	0.1	5.00E-06	1.81E-06	2.21E-06
15	0.2				0.2	0.1	0.1	3.78E-06	1.37E-06	1.67E-06
16	0.1				0.1	0.0	0.1	2.73E-06	9.86E-07	1.20E-06
17	0.1				0.1	0.0	0.0	1.97E-06	7.11E-07	8.69E-07
18	0.1				0.1	0.0	0.0	1.44E-06	5.20E-07	6.35E-07
19	0.0				0.0	0.0	0.0	6.97E-07	2.52E-07	3.08E-07
20	0.0				0.0	0.0	0.0	3.61E-07	1.31E-07	1.60E-07
21	0.0				0.0	0.0	0.0	1.96E-07	7.09E-08	8.66E-08
22	0.0				0.0	0.0	0.0	1.10E-07	3.96E-08	4.84E-08
23	0.0				0.0	0.0	0.0	6.25E-08	2.26E-08	2.76E-08
24	0.0				0.0	0.0	0.0	3.60E-08	1.30E-08	1.59E-08
25	0.0				0.0	0.0	0.0	2.10E-08	7.60E-09	9.28E-09
26	0.0				0.0	0.0	0.0	1.24E-08	4.48E-09	5.48E-09
27	0.0				0.0	0.0	0.0	7.70E-09	2.78E-09	3.40E-09
28	0.0				0.0	0.0	0.0	5.00E-09	1.81E-09	2.21E-09
29	0.0				0.0	0.0	0.0	4.02E-09	1.45E-09	1.78E-09
30	0.0				0.0	0.0	0.0	4.21E-09	1.52E-09	1.86E-09
31	0.0				0.0	0.0	0.0	5.80E-09	2.10E-09	2.56E-09
32	0.0				0.0	0.0	0.0	8.91E-09	3.22E-09	3.93E-09
33	0.0				0.0	0.0	0.0	1.54E-08	5.55E-09	6.78E-09
34	0.0				0.0	0.0	0.0	2.72E-08	9.84E-09	1.20E-08
35	0.1				0.1	0.0	0.0	1.69E-06	6.11E-07	7.47E-07
36	0.1				0.1	0.0	0.0	1.33E-06	4.79E-07	5.85E-07
37	0.0				0.0	0.0	0.0	1.00E-06	3.63E-07	4.43E-07
38	0.0				0.0	0.0	0.0	7.58E-07	2.74E-07	3.35E-07
39	0.0				0.0	0.0	0.0	5.75E-07	2.08E-07	2.54E-07
40	0.0				0.0	0.0	0.0	2.94E-07	1.06E-07	1.30E-07
41	0.0				0.0	0.0	0.0	1.54E-07	5.58E-08	6.81E-08
42	0.0				0.0	0.0	0.0	8.21E-08	2.97E-08	3.63E-08
43	0.0				0.0	0.0	0.0	4.41E-08	1.59E-08	1.95E-08
44	0.0				0.0	0.0	0.0	2.37E-08	8.57E-09	1.05E-08
45	0.0				0.0	0.0	0.0	1.28E-08	4.63E-09	5.66E-09
46	0.0				0.0	0.0	0.0	6.96E-09	2.52E-09	3.07E-09
47	0.0				0.0	0.0	0.0	3.87E-09	1.40E-09	1.71E-09
48	0.1				0.1	0.0	0.1	2.99E-06	1.08E-06	1.32E-06
49	0.1				0.1	0.0	0.0	2.27E-06	8.19E-07	1.00E-06
50	0.1				0.1	0.0	0.0	1.59E-06	5.76E-07	7.04E-07
51	0.0				0.0	0.0	0.0	1.09E-06	3.92E-07	4.79E-07
52	0.0				0.0	0.0	0.0	7.28E-07	2.63E-07	3.21E-07
53	0.0				0.0	0.0	0.0	2.66E-07	9.62E-08	1.17E-07
54	0.0				0.0	0.0	0.0	1.01E-07	3.66E-08	4.46E-08
55	0.0				0.0	0.0	0.0	3.98E-08	1.44E-08	1.76E-08
56	0.0				0.0	0.0	0.0	1.59E-08	5.74E-09	7.01E-09
57	0.0				0.0	0.0	0.0	6.43E-09	2.32E-09	2.84E-09
58	0.0				0.0	0.0	0.0	2.63E-09	9.52E-10	1.16E-09
59	0.0				0.0	0.0	0.0	1.05E-09	3.79E-10	4.62E-10

Appendix 3.13 - Health Impact Assessment Criteria Pollutants Results

Long-term FSP

60	0.0	0.0	0.0	0.0	4.52E-10	1.64E-10	2.00E-10
61	0.0	0.0	0.0	0.0	2.09E-10	7.57E-11	9.25E-11
62	0.0	0.0	0.0	0.0	1.06E-10	3.83E-11	4.68E-11
63	0.2	0.2	0.1	0.1	3.91E-06	1.41E-06	1.73E-06
64	0.1	0.1	0.1	0.1	3.10E-06	1.12E-06	1.37E-06
65	0.1	0.1	0.0	0.0	2.32E-06	8.37E-07	1.02E-06
66	0.1	0.1	0.0	0.0	1.70E-06	6.14E-07	7.49E-07
67	0.1	0.1	0.0	0.0	1.24E-06	4.47E-07	5.46E-07
68	0.2	0.2	0.1	0.1	5.43E-06	1.96E-06	2.40E-06
69	0.2	0.2	0.1	0.1	3.61E-06	1.31E-06	1.60E-06
70	0.1	0.1	0.0	0.0	2.36E-06	8.53E-07	1.04E-06
71	0.1	0.1	0.0	0.0	2.40E-06	8.67E-07	1.06E-06
72	0.1	0.1	0.0	0.0	1.93E-06	6.98E-07	8.52E-07
73	0.1	0.1	0.0	0.0	1.44E-06	5.22E-07	6.37E-07
74	0.0	0.0	0.0	0.0	1.04E-06	3.75E-07	4.58E-07
75	0.0	0.0	0.0	0.0	7.29E-07	2.64E-07	3.22E-07
76	0.2	0.2	0.1	0.1	3.48E-06	1.26E-06	1.54E-06
77	0.1	0.1	0.1	0.1	3.08E-06	1.12E-06	1.36E-06
78	0.1	0.1	0.0	0.1	2.58E-06	9.34E-07	1.14E-06
79	0.1	0.1	0.0	0.0	2.08E-06	7.54E-07	9.20E-07
80	0.1	0.1	0.0	0.0	1.64E-06	5.94E-07	7.25E-07
81	0.0	0.0	0.0	0.0	8.66E-07	3.13E-07	3.82E-07
82	0.0	0.0	0.0	0.0	4.55E-07	1.64E-07	2.01E-07
83	0.0	0.0	0.0	0.0	2.44E-07	8.82E-08	1.08E-07
84	0.0	0.0	0.0	0.0	1.35E-07	4.89E-08	5.98E-08
85	0.0	0.0	0.0	0.0	7.71E-08	2.79E-08	3.41E-08
86	0.0	0.0	0.0	0.0	4.58E-08	1.66E-08	2.02E-08
87	0.0	0.0	0.0	0.0	2.77E-08	1.00E-08	1.22E-08
88	0.0	0.0	0.0	0.0	1.72E-08	6.23E-09	7.61E-09
89	0.2	0.2	0.1	0.1	5.09E-06	1.84E-06	2.25E-06
90	0.2	0.2	0.1	0.1	3.56E-06	1.29E-06	1.57E-06
91	0.1	0.1	0.0	0.0	1.51E-06	5.46E-07	6.67E-07
92	0.1	0.1	0.0	0.0	1.28E-06	4.63E-07	5.65E-07
93	0.0	0.0	0.0	0.0	1.04E-06	3.77E-07	4.60E-07
94	0.0	0.0	0.0	0.0	8.33E-07	3.01E-07	3.68E-07
95	0.0	0.0	0.0	0.0	6.62E-07	2.39E-07	2.92E-07
96	0.0	0.0	0.0	0.0	3.73E-07	1.35E-07	1.65E-07
97	0.0	0.0	0.0	0.0	2.12E-07	7.68E-08	9.37E-08
98	0.0	0.0	0.0	0.0	1.23E-07	4.43E-08	5.41E-08
99	0.0	0.0	0.0	0.0	7.15E-08	2.58E-08	3.15E-08
100	0.0	0.0	0.0	0.0	4.19E-08	1.51E-08	1.85E-08
101	0.0	0.0	0.0	0.0	2.47E-08	8.94E-09	1.09E-08
102	0.0	0.0	0.0	0.0	1.47E-08	5.32E-09	6.49E-09
103	0.0	0.0	0.0	0.0	8.92E-09	3.22E-09	3.94E-09
104	0.0	0.0	0.0	0.0	5.67E-09	2.05E-09	2.50E-09
105	0.0	0.0	0.0	0.0	3.96E-09	1.43E-09	1.75E-09
106	0.3	0.4	0.1	0.2	7.87E-06	2.84E-06	3.47E-06
107	0.2	0.2	0.1	0.1	4.35E-06	1.57E-06	1.92E-06
108	0.1	0.1	0.0	0.1	2.57E-06	9.29E-07	1.13E-06
109	0.1	0.1	0.0	0.0	1.55E-06	5.60E-07	6.84E-07
110	0.0	0.0	0.0	0.0	9.47E-07	3.42E-07	4.18E-07
111	0.0	0.0	0.0	0.0	2.95E-07	1.06E-07	1.30E-07
112	0.0	0.0	0.0	0.0	9.88E-08	3.57E-08	4.36E-08
113	0.0	0.0	0.0	0.0	3.44E-08	1.24E-08	1.52E-08
114	0.0	0.0	0.0	0.0	1.20E-08	4.33E-09	5.29E-09
115	0.0	0.0	0.0	0.0	4.13E-09	1.49E-09	1.82E-09
116	0.0	0.0	0.0	0.0	1.43E-09	5.16E-10	6.30E-10
117	0.0	0.0	0.0	0.0	5.12E-10	1.85E-10	2.26E-10
118	0.0	0.0	0.0	0.0	1.40E-10	5.05E-11	6.16E-11
119	0.0	0.0	0.0	0.0	6.21E-11	2.24E-11	2.74E-11
120	0.0	0.0	0.0	0.0	3.36E-11	1.21E-11	1.48E-11
121	0.0	0.0	0.0	0.0	3.88E-11	1.40E-11	1.71E-11
122	0.0	0.0	0.0	0.0	7.76E-11	2.80E-11	3.42E-11
123	0.0	0.0	0.0	0.0	1.84E-10	6.64E-11	8.10E-11
124	0.0	0.0	0.0	0.0	4.76E-10	1.72E-10	2.10E-10
125	0.0	0.0	0.0	0.0	1.15E-09	4.15E-10	5.07E-10
126	0.0	0.0	0.0	0.0	2.78E-09	1.00E-09	1.23E-09
127	0.7	0.7	0.3	0.3	1.53E-05	5.52E-06	6.75E-06
128	0.3	0.3	0.1	0.2	7.46E-06	2.70E-06	3.29E-06
129	0.2	0.2	0.1	0.1	4.01E-06	1.45E-06	1.77E-06
130	0.1	0.1	0.0	0.0	2.24E-06	8.11E-07	9.91E-07
131	0.1	0.1	0.0	0.0	1.29E-06	4.67E-07	5.71E-07
132	0.0	0.0	0.0	0.0	3.62E-07	1.31E-07	1.60E-07
133	0.0	0.0	0.0	0.0	1.11E-07	4.03E-08	4.92E-08
134	0.0	0.0	0.0	0.0	3.57E-08	1.29E-08	1.57E-08
135	0.0	0.0	0.0	0.0	1.13E-08	4.08E-09	4.99E-09
136	0.0	0.0	0.0	0.0	3.52E-09	1.27E-09	1.55E-09
137	0.0	0.0	0.0	0.0	1.07E-09	3.86E-10	4.71E-10
138	0.0	0.0	0.0	0.0	2.02E-10	7.29E-11	8.90E-11
139	0.0	0.0	0.0	0.0	7.76E-11	2.80E-11	3.42E-11
140	0.0	0.0	0.0	0.0	1.29E-11	4.67E-12	5.71E-12
141	0.0	0.0	0.0	0.0	7.76E-12	2.80E-12	3.42E-12
142	0.0	0.0	0.0	0.0	1.29E-11	4.67E-12	5.71E-12
143	0.0	0.0	0.0	0.0	4.14E-11	1.50E-11	1.83E-11
144	0.0	0.0	0.0	0.0	9.31E-11	3.36E-11	4.11E-11
145	0.0	0.0	0.0	0.0	2.90E-10	1.05E-10	1.28E-10
146	0.0	0.0	0.0	0.0	7.94E-10	2.87E-10	3.50E-10
147	0.0	0.0	0.0	0.0	2.05E-09	7.41E-10	9.05E-10