Environmental Protection Department

Agreement No. CE57/2006 (EP) Review of the Air Quality Objectives and Development of a Long Term Air Quality Strategy for Hong Kong - Feasibility Study

Appendix E

Hypothetical Scenario

ARUP

E1 Hypothetical Scenario

Table E.1 presents predicted number of exceedences of a hypothetical scenario with all emissions from man-made sources of Hong Kong and PRD removed. The modelling results show that the predicted concentrations of some air pollutants such as PM_{10} , $PM_{2.5}$ and ozone would still exceed the respective WHO AQG. It appears that air pollution coming from sources outside the PRD regions would also affect the air quality of Hong Kong significantly. To achieve the ultimate WHO AQG, there might also be a need to explore joint efforts and cooperation with regions farther away from Hong Kong.

Air Pollutant	Averaging time	Concentration (ug/m ³)	Predicted No. of Exceedences (with all emissions of Hong Kong and PRD removed)
SO₂	10-min	AQG: 500	0
	24-hour	IT-1:125	0
		IT-2: 50	0
		AQG: 20	1
RSP	24-hour	IT-1: 150	0
		IT-2: 100	0
		IT-3: 75	10
		AQG: 50	145
	Annual	AQO: 55	~
		IT-2: 50	✓
		IT-3: 30	*
		AQG: 20	*
FSP	24-hour	IT-1: 75	0
		IT-2: 50	16
		IT-3: 37.5	129
		AQG: 25	196
	Annual	IT-1: 35	✓
		IT-2: 25	*
		IT-3: 15	*
		AQG: 10	*
NO	1-hour	AQG: 200	0
NU ₂	Annual	AQG: 40	✓
0	0.1	IT-1: 160	0
Ozone	ö-Nr	AQG: 100	9

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