

Appendix 3-1B

Background Contribution from the PATH Output File

Appendix 3-1B Summary of Year 2015 and Year 2020 Background Pollutants Concentrations (Extracted from the PATH Output Concentrations)

Pollutants	Averagin Periods Statistics	Concentration ($\mu\text{g}/\text{m}^3$) ⁽¹⁾ Averaging Periods																		
		10 min ⁽²⁾				1 Hour				Daily 8 Hour moving average				24 Hour				1 Year		
		AQO	4th	Max	No. of Ex	AQO	19th	Max	No. of Ex	AQO	10th	Max ⁽⁴⁾	No. of Ex	AQO	4th	10th	Max	No. of Ex	AQO	Mean ⁽⁵⁾
Sulphur Dioxide, SO ₂																				
PATH in Year 2015 (20 40)	500 ⁽⁶⁾	174	192	0	-	-	-	-	-	-	-	-	-	125 ⁽⁶⁾	26	-	47	0	-	7
PATH in Year 2020 (20 40)	175	191	0	-	-	-	-	-	-	-	-	-	-	26	-	47	0	-	7	
Respirable Suspended Particulates, RSP																				
PATH in Year 2015 (20 40)	-	-	-	-	-	-	-	-	-	-	-	-	-	100 ⁽⁷⁾	-	85	122	2	50	43
PATH in Year 2020 (20 40)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85	120	2	50	43	
Fine Suspended Particulates, FSP ⁽³⁾																				
PATH in Year 2015 (20 40)	-	-	-	-	-	-	-	-	-	-	-	-	-	75 ⁽⁷⁾	-	64	92	2	35	31
PATH in Year 2020 (20 40)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64	90	2	35	31	
Nitrogen Dioxide, NO ₂																				
PATH in Year 2015 (20 40)	-	-	-	-	-	200 ⁽⁸⁾	132	188	0	-	-	-	-	-	-	-	-	-	40	25
PATH in Year 2020 (20 40)	-	-	-	-	-	-	121	187	0	-	-	-	-	-	-	-	-	-	22	
Carbon Monoxide, CO																				
PATH in Year 2015 (20 40)	-	-	-	-	-	30,000	-	1740	-	10,000	-	1385	0	-	-	-	-	-	-	
PATH in Year 2020 (20 40)	-	-	-	-	-	-	1735	-	-	1375	-	1375	0	-	-	-	-	-	-	

Notes: The above data are calculated based on the PATH output concentrations for year 2015 and year 2020 at grid (20,40) (see Figure A).

(1) Measured at 293 K and 101.325 kPa (one atmosphere)

(2) 10-min average SO₂ levels were calculated based on stability classes in the corresponding PATH grid(s).

(3) According to "Guidelines on the Estimation of PM2.5 for Air Quality Assessment in Hong Kong", background contribution of FSP (PM2.5) is deduced based on the RSP values.

The daily FSP = 0.75 x daily RSP, and the annual FSP = 0.71 x annual RSP.

(4) Max. daily 8h moving average.

(5) Arithmetic mean

(6) Not to be exceeded more than 3 times per year

(7) Not to be exceeded more than 9 times per year

(8) Not to be exceeded more than 18 times per year

No. of Ex - denotes no. of exceedance

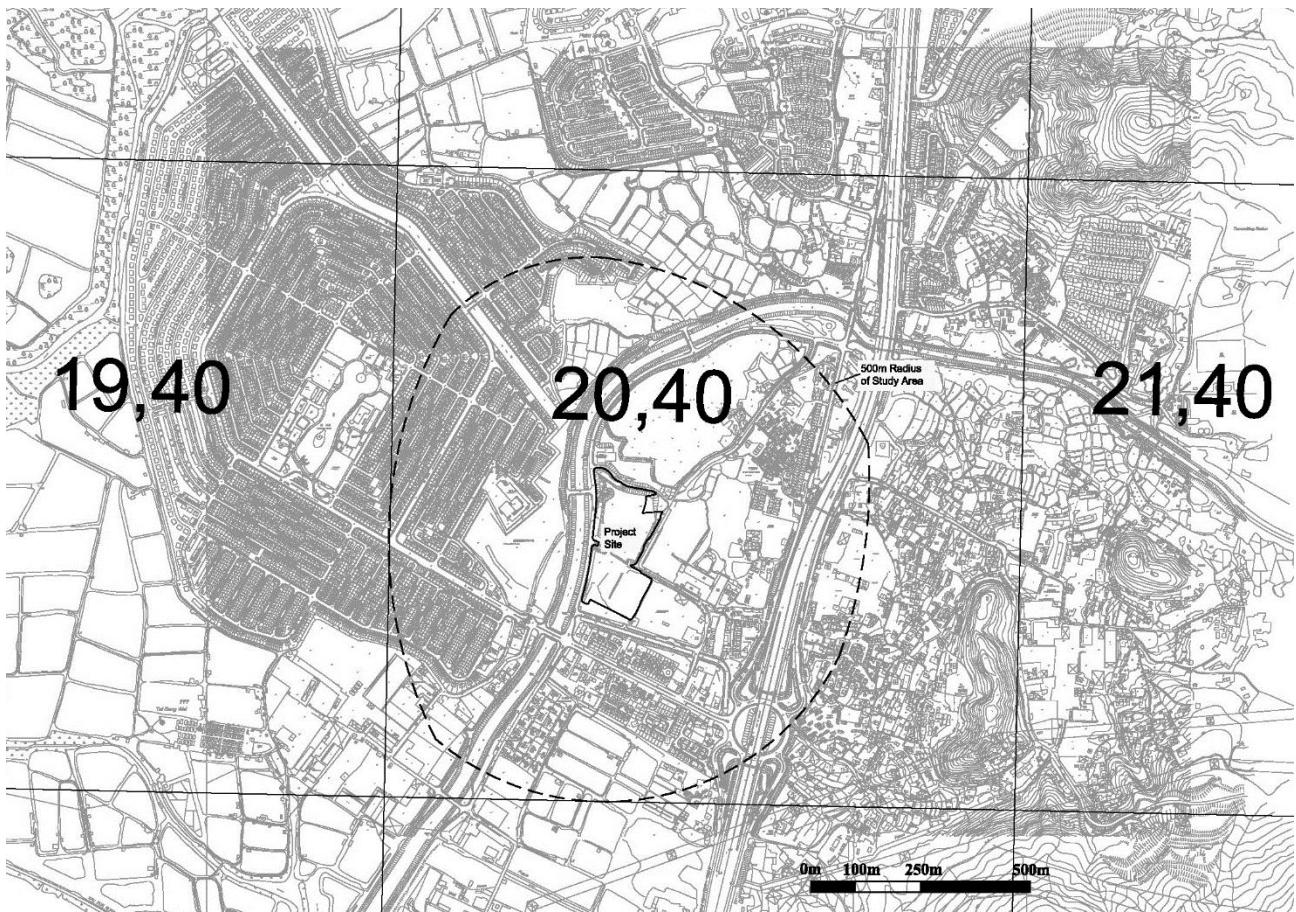


Figure A – Locations of Grids in the PATH System Within 500m Radius of Project Study Area