

## **Appendix 3-1B**

### Background Contribution from the PATH Output File

**Appendix 3-1B Summary of Year 2015 Background Pollutants Concentrations (Extracted from Grid(20,40) in PATH system)**

			RSP		PM2.5 (for daily criteria)		PM2.5 (for annual criteria)	TSP	NO <sub>2</sub>	SO <sub>2</sub>		CO	
			ug/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>
			Hourly	Daily Average	Hourly	Daily Average	Hourly	Hourly	Hourly	Daily Avg.	Hourly	8-hr Avg.	
Statistical Analysis	Max. Hourly		164.4	-	123.3	-	-	164.4	185.3	131.7		1710.4	-
	8-Hour Average **		-	-	-	-	-	-	-	-	-	-	1362.1
	Max. Daily		-	122.4	-	91.8	-	-	-	-	45.7	-	-
	No. of Exceedance		-	3	-	3	-	-	-	-	-	-	-
	Annual Average		43.2	-	-	-	30.7	-	24.8	-	-	-	-
AQO Criteria			100 (daily) (No. of exceedance allowed = 9)		75 (daily) (No. of exceedance allowed = 9)		500 (hourly) *	200 (hourly) (no. of exceedance allowed = 18)	500 (10-min. avg.) (no. of exceedance allowed = 3)		30,000 (hourly)		
			50 (annual)		35 (annual)		-	40 (annual)	125 (daily)		10,000 (8-hr average)		

**Remark:**

PATH output data is not available between 0000 hours and 0700 hours on 01 January.

According to "Guidelines on the Estimation of PM2.5 for Air Quality Assessment in Hong Kong", background contribution of PM2.5 is deduced based on the following conservative formula:

- for Daily(µg/m<sup>3</sup>) : PM2.5 = 0.75 x RSP

- for Annual(µg/m<sup>3</sup>) : PM2.5 = 0.71 x RSP

For TSP background contribution, the RSP contribution in PATH's concentration output is adopted instead.

\* Hourly TSP limit of 500 µg/m<sup>3</sup> measured at 298K(25°C) and 101.325 kPa (one atmosphere) under Annex 4 in EIAO-TM.

\*\* 8-hour running average value.