Running Emission Factor

Vehicel Class	Fuel Type	Running EmFactor (g/km·vehicle at 5 km/hr)					
		NOx	NO	NO_2	TSP	RSP	FSP
FBSD	DSL	7.105	6.692	0.413	0.227	0.227	0.208
FBDD	DSL	14.621	13.893	0.728	0.447	0.447	0.411
NFB6	DSL	2.771	1.995	0.776	0.096	0.096	0.089
NFB7	DSL	3.835	2.569	1.265	0.069	0.069	0.063
NFB8	DSL	8.736	7.318	1.418	0.297	0.297	0.274
NFB9	DSL	4.264	2.857	1.407	0.092	0.092	0.084
PLB	DSL	1.428	1.028	0.400	0.075	0.075	0.069
PLB	LPG	1.981	1.970	0.010	0.000	0.000	0.000
HGV7	DSL	4.158	2.890	1.268	0.140	0.140	0.128
HGV8	DSL	6.876	5.485	1.392	0.267	0.267	0.246
HGV9	DSL	8.217	6.716	1.501	0.317	0.317	0.292

[1] Running Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

Idling Emission Factors

FBSD

NO2/NOx Ratio [1] = 0.06 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor [13]	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2]	PM (g/hr) [4]	NOx (g/hr) [11]	PM (g/hr) [12]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro V	56.7	0.0474	0.10	11.71	0.10	1.20	1.30	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.92E-01	1.81E-01	1.12E-02	1.59E-03
Euro VI	43.3	0.0077	0.01	1.75	0.01										

FBDD

NO2/NOx Ratio [1] = 0.05 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor [13]	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2]	PM (g/hr) [4]	NOx (g/hr) [11]	PM (g/hr) [12]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro IV	0.2	0.1535	0.20	7.51	0.20	1.20	1.30	7.09E+00	6.73E+00	3.53E-01	1.97E-03	2.34E-01	2.23E-01	1.17E-02	1.97E-03
Euro V	72.8	0.1535	0.10	11.71	0.10										
Euro VI	27.0	0.0225	0.01	1.75	0.01										

NFB6

NO2/NOx Ratio [1] = 0.28 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor [13]	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2][14]	PM (g/hr) [4]	NOx (g/hr) [11]	PM (g/hr) [12]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro IV	0.0	0.0573	0.2000	7.51	0.20	0.90	1.30	8.14E-01	5.86E-01	2.28E-01	6.70E-04	8.67E-02	6.24E-02	2.43E-02	6.70E-04
Euro V	27.0	0.0474	0.1000	11.71	0.10										
Euro VI	72.9	0.0010	0.0100	1.75	0.01										

NFB7

NO2/NOx Ratio [1] = 0.33 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor [13]	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2][15]	PM (g/hr) [4]	NOx (g/hr) [11]	PM (g/hr) [12]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro IV	0.0	0.0573	0.2000	7.51	0.20	0.90	1.30	1.04E+00	6.98E-01	3.44E-01	6.23E-04	8.14E-02	5.45E-02	2.69E-02	6.23E-04
Euro V	24.3	0.0474	0.1000	11.71	0.10										
Euro VI	75.7	0.0077	0.0100	1.75	0.01										

NFB8

NO2/NOx Ratio [1] = 0.16 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor [13]	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2][16]	PM (g/hr) [4]	NOx (g/hr) [11]	PM (g/hr) [12]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro II	0.0	0.0113	1.43	40.58	1.43	1.0	1.3	1.15E+00	9.67E-01	1.87E-01	7.85E-04	1.01E-01	8.43E-02	1.63E-02	7.85E-04
Euro III	0.0	0.0117	1.29	42.08	1.29										
Euro IV	0.0	0.0573	0.20	7.51	0.20										
Euro V	29.0	0.0474	0.10	11.71	0.10										
Euro VI	70.9	0.0077	0.01	1.75	0.01										

NFB9

NO2/NOx Ratio [1] = 0.33 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor [13]	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2]	PM (g/hr) [4]	NOx (g/hr) [11]	PM (g/hr) [12]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro VI	100.0	0.0077	0.0100	1.75	0.01	1.0	1.3	4.62E-01	3.10E-01	1.52E-01	2.17E-04	3.79E-02	2.54E-02	1.25E-02	2.17E-04

PLB (Diesel)

NO2/NOx Ratio [1] = 0.28 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2][3]	PM (g/hr) [4]	NOx (g/hr) [5]	PM (g/hr) [6]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro V	20.6	0.0010	0.02	3.60	0.02	-	1.3	6.00E-02	4.32E-02	1.68E-02	4.33E-04	3.81E-02	2.74E-02	1.07E-02	4.33E-04
Euro VI	79.4	0.0010	0.02	1.28	0.02										

PLB (LPG)

NO2/NOx Ratio [1] = 0.01 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2]	PM (g/hr) [4]	NOx (g/hr) [9]	PM (g/hr) [10]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro III	5.9	0.0092	0.10	33.12	0.10	-	1.3	2.53E-01	2.51E-01	1.33E-03	6.82E-04	3.28E-01	3.27E-01	1.72E-03	6.82E-04
Euro IV	4.9	0.0039	0.16	14.04	0.16										
Euro V	89.3	0.0039	0.02	14.04	0.02										

Remark:
[1] NO/NO2 ratio was calculated based on emission factors at running speed of 5kph from EMFAC-HK.
[2] NOx cold idling emission factors was referenced to "Calculation of Start Emissions in Air Quality Impact Assessment" published by EPD.
[3] Due to lack of information, NOx cold idling emission factor for Euro V PLB(Diesel) was referenced to the corresponding hot idling emission factor.
[4] Due to lack of information, RSP cold idling emission factor was referenced to the corresponding hot idling emission factor.
[5] Reference was made to Table 42 of VEADV.
[6] Reference was made to Table 43 of VEADV.
[7] Reference was made to the approved EIA Report (AEIAR-161/2011) for "Liantang / Heung Yuen Wai Boundary Control Point and Associated Works".
[8] As a conservative approach, Emission Factor of RSP and FSP were assumed to be equal to Emission Factor of PM.
[9] Due to lack of information, NOx hot idling emission factor was referenced to the corresponding cold idling emission factor from "Calculation of Start Emissions in Air Quality Impact Assessment" published by EPD.
[10] Due to lack of information, RSP hot idling emission factor for PLB(LPG) was referenced to hot idling emission factor for PLB(Diesel).
[11] Reference was made to Table 45 of VEADV.
[12] Reference was made to Table 46 of VEADV.
[13] Reference was made to Table 27 of VEADV.
[14] Due to lack of information, NOx cold idling emission factor for Euro IV NFB6 and Euro V NFB6 were referenced to the corresponding cold idling emission factor for Euro IV NFB7 and Euro V NFB8, respectively.
[15] Due to lack of information, NOx cold idling emission factor for Euro V NFB7 was referenced to the corresponding cold idling emission factor for Euro V NFB8.
[16] Due to lack of information, NOx cold idling emission factor for Euro II NFB8 and Euro III NFB8 were referenced to the corresponding hot idling emission factor.
[17] Due to lack of information, NOx cold idling emission factor for Euro IV HGV7 was referenced to the corresponding cold idling emission factor for Euro IV HGV9.
[18] Due to lack of information, NOx cold idling emission factor for Euro II HGV8 was referenced to the corresponding hot idling emission factor.

Site A3 Bus Terminus

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.35	0.63	0.84	1.19	1.47	1.96	2.87	3.57	5.24	6.85	7.69	9.09	10.00	10.49	10.77	11.05	11.19	11.19
NO	0.33	0.59	0.78	1.11	1.37	1.83	2.68	3.33	4.90	6.40	7.19	8.49	9.34	9.80	10.06	10.32	10.45	10.45
NO2	0.02	0.04	0.06	0.08	0.10	0.13	0.19	0.23	0.34	0.45	0.51	0.60	0.66	0.69	0.71	0.73	0.74	0.74
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of FBSD																		Total Start Emission of FBSD (g)					
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	NOx	NO	NO2	TSP	RSP	FSP
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				0	0	0
0800 - 0900	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0900 - 1000	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1000 - 1100	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1100 - 1200	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1200 - 1300	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1300 - 1400	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1400 - 1500	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1500 - 1600	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1600 - 1700	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1700 - 1800	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1800 - 1900	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1900 - 2000	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2000 - 2100	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2100 - 2200	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2300 - 2400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

FBSD – Cold Idling

Hour	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0900 - 1000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1000 - 1100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1100 - 1200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1200 - 1300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1300 - 1400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1400 - 1500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1500 - 1600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1600 - 1700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1700 - 1800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1800 - 1900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1900 - 2000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

FBSD – Hot Idling

Hour	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0900 - 1000	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1000 - 1100	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1100 - 1200	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1200 - 1300	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1300 - 1400	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1400 - 1500	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1500 - 1600	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1600 - 1700	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1700 - 1800	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1800 - 1900	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1900 - 2000	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	88	m
Average Spread Distance outside bus terminus =	612	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00

Hour	Adjusted Start Emission within PTI Area (g)						Adjusted Start Emission outside PTI Area (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00
												total

Hour	Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	FBSD											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	1				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
0700 - 0800	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
0800 - 0900	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
0900 - 1000	1				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1000 - 1100	1				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1100 - 1200	1				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1200 - 1300	1				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1300 - 1400	1				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1400 - 1500	1				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1500 - 1600	1				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1600 - 1700	1				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1700 - 1800	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1800 - 1900	1				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1900 - 2000	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
2300 - 2400	1				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	176	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	Frequency	FBSD											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	1				0.2265	0.2265	0.2084				0.034	0.034	0.032
0100 - 0200	0				0.2265	0.2265	0.2084				0.020	0.020	0.018
0200 - 0300	0				0.2265	0.2265	0.2084				0.010	0.010	0.009
0300 - 0400	0				0.2265	0.2265	0.2084				0.008	0.008	0.007
0400 - 0500	0				0.2265	0.2265	0.2084				0.010	0.010	0.009
0500 - 0600	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
0600 - 0700	1				0.2265	0.2265	0.2084				0.050	0.050	0.046
0700 - 0800	3				0.2265	0.2265	0.2084				0.106	0.106	0.097
0800 - 0900	3				0.2265	0.2265	0.2084				0.108	0.108	0.099
0900 - 1000	2				0.2265	0.2265	0.2084				0.091	0.091	0.084
1000 - 1100	2				0.2265	0.2265	0.2084				0.083	0.083	0.076
1100 - 1200	2				0.2265	0.2265	0.2084				0.088	0.088	0.081
1200 - 1300	2				0.2265	0.2265	0.2084				0.092	0.092	0.085
1300 - 1400	2				0.2265	0.2265	0.2084				0.092	0.092	0.085
1400 - 1500	2				0.2265	0.2265	0.2084				0.091	0.091	0.084
1500 - 1600	2				0.2265	0.2265	0.2084				0.092	0.092	0.085
1600 - 1700	2				0.2265	0.2265	0.2084				0.099	0.099	0.091
1700 - 1800	3				0.2265	0.2265	0.2084				0.108	0.108	0.099
1800 - 1900	2				0.2265	0.2265	0.2084				0.097	0.097	0.089
1900 - 2000	2				0.2265	0.2265	0.2084				0.075	0.075	0.069
2000 - 2100	2				0.2265	0.2265	0.2084				0.065	0.065	0.060
2100 - 2200	2				0.2265	0.2265	0.2084				0.065	0.065	0.060
2200 - 2300	2				0.2265	0.2265	0.2084				0.062	0.062	0.057
2300 - 2400	1				0.2265	0.2265	0.2084				0.050	0.050	0.046

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.038	0.038	0.036				1.07E-05	1.07E-05	9.90E-06
0100 - 0200				0.022	0.022	0.020				6.07E-06	6.07E-06	5.64E-06
0200 - 0300				0.011	0.011	0.010				2.97E-06	2.97E-06	2.76E-06
0300 - 0400				0.009	0.009	0.008				2.48E-06	2.48E-06	2.30E-06
0400 - 0500				0.011	0.011	0.010				2.97E-06	2.97E-06	2.76E-06
0500 - 0600				0.025	0.025	0.024				7.07E-06	7.07E-06	6.56E-06
0600 - 0700				0.056	0.056	0.052				1.56E-05	1.56E-05	1.45E-05
0700 - 0800				0.118	0.118	0.110				3.28E-05	3.28E-05	3.05E-05
0800 - 0900				0.120	0.120	0.112				3.35E-05	3.35E-05	3.11E-05
0900 - 1000				0.102	0.102	0.094				2.83E-05	2.83E-05	2.62E-05
1000 - 1100				0.093	0.093	0.086				2.58E-05	2.58E-05	2.39E-05
1100 - 1200				0.098	0.098	0.091				2.73E-05	2.73E-05	2.53E-05
1200 - 1300				0.104	0.104	0.096				2.88E-05	2.88E-05	2.67E-05
1300 - 1400				0.104	0.104	0.096				2.88E-05	2.88E-05	2.67E-05
1400 - 1500				0.102	0.102	0.094				2.83E-05	2.83E-05	2.62E-05
1500 - 1600				0.104	0.104	0.096				2.88E-05	2.88E-05	2.67E-05
1600 - 1700				0.111	0.111	0.103				3.07E-05	3.07E-05	2.85E-05
1700 - 1800				0.120	0.120	0.112				3.35E-05	3.35E-05	3.11E-05
1800 - 1900				0.109	0.109	0.101				3.02E-05	3.02E-05	2.81E-05
1900 - 2000				0.083	0.083	0.077				2.32E-05	2.32E-05	2.15E-05
2000 - 2100				0.073	0.073	0.068				2.02E-05	2.02E-05	1.88E-05
2100 - 2200				0.073	0.073	0.068				2.02E-05	2.02E-05	1.88E-05
2200 - 2300				0.069	0.069	0.064				1.92E-05	1.92E-05	1.78E-05
2300 - 2400				0.056	0.056	0.052				1.56E-05	1.56E-05	1.45E-05
					total					5.03E-04	5.03E-04	4.67E-04

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

Site A3 Bus Terminus

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.77	1.39	1.85	2.62	3.23	4.31	6.32	7.86	11.55	15.09	16.94	20.02	22.03	23.10	23.72	24.34	24.64	24.64
NO	0.72	1.30	1.74	2.46	3.04	4.06	5.94	7.39	10.87	14.21	15.95	18.85	20.73	21.75	22.33	22.91	23.20	23.20
NO2	0.05	0.08	0.11	0.15	0.19	0.25	0.37	0.46	0.68	0.89	1.00	1.18	1.29	1.36	1.39	1.43	1.45	1.45
TSP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RSP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FSP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Soaking Time (min) / Hour	No. of Trips of FBDD																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0600 - 0700	0	0	0	11	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0700 - 0800	0	0	0	25	0	0	0	0	0	0	0	0	0	0	3	0	0	0
0800 - 0900	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBDD (g)						
NOx	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBDD												FBDD											
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	9				1.97E-03	1.97E-03	1.97E-03				0.05	0.05	0.05
0100 - 0200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	5				1.97E-03	1.97E-03	1.97E-03				0.03	0.03	0.03
0200 - 0300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0400 - 0500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0500 - 0600	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	5				1.97E-03	1.97E-03	1.97E-03				0.03	0.03	0.03
0600 - 0700	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	11				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
0700 - 0800	3				1.97E-03	1.97E-03	1.97E-03				0.018	0.018	0.018	25				1.97E-03	1.97E-03	1.97E-03				0.15	0.15	0.15
0800 - 0900	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	26				1.97E-03	1.97E-03	1.97E-03				0.15	0.15	0.15
0900 - 1000	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	23				1.97E-03	1.97E-03	1.97E-03				0.14	0.14	0.14
1000 - 1100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	17				1.97E-03	1.97E-03	1.97E-03				0.10	0.10	0.10
1100 - 1200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	19				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
1200 - 1300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	19				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
1300 - 1400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	20				1.97E-03	1.97E-03	1.97E-03				0.12	0.12	0.12
1400 - 1500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	19				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
1500 - 1600	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	20				1.97E-03	1.97E-03	1.97E-03				0.12	0.12	0.12
1600 - 1700	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	26				1.97E-03	1.97E-03	1.97E-03				0.15	0.15	0.15
1700 - 1800	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	28				1.97E-03	1.97E-03	1.97E-03				0.17	0.17	0.17
1800 - 1900	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	24				1.97E-03	1.97E-03	1.97E-03				0.14	0.14	0.14
1900 - 2000	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	18				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
2000 - 2100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	14				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
2100 - 2200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	14				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
2200 - 2300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	13				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
2300 - 2400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	9				1.97E-03	1.97E-03	1.97E-03				0.05	0.05	0.05

Average Distance from Starting Place to Egress =	88	m
Average Spread Distance outside bus terminus =	612	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.05	0.05	0.05				0.02	0.02	0.02
0100 - 0200				0.03	0.03	0.03				0.01	0.01	0.01
0200 - 0300				0.02	0.02	0.02				0.01	0.01	0.01
0300 - 0400				0.01	0.01	0.01				0.00	0.00	0.00
0400 - 0500				0.02	0.02	0.02				0.01	0.01	0.01
0500 - 0600				0.04	0.04	0.04				0.01	0.01	0.01
0600 - 0700				0.07	0.07	0.07				0.02	0.02	0.02
0700 - 0800				0.17	0.17	0.17				0.06	0.06	0.06
0800 - 0900				0.15	0.15	0.15				0.05	0.05	0.05
0900 - 1000				0.14	0.14	0.14				0.05	0.05	0.05
1000 - 1100				0.10	0.10	0.10				0.03	0.03	0.03
1100 - 1200				0.11	0.11	0.11				0.04	0.04	0.04
1200 - 1300				0.11	0.11	0.11				0.04	0.04	0.04
1300 - 1400				0.12	0.12	0.12				0.04	0.04	0.04
1400 - 1500				0.11	0.11	0.11				0.04	0.04	0.04
1500 - 1600				0.12	0.12	0.12				0.04	0.04	0.04
1600 - 1700				0.15	0.15	0.15				0.05	0.05	0.05
1700 - 1800				0.17	0.17	0.17				0.06	0.06	0.06
1800 - 1900				0.14	0.14	0.14				0.05	0.05	0.05
1900 - 2000				0.11	0.11	0.11				0.04	0.04	0.04
2000 - 2100				0.08	0.08	0.08				0.03	0.03	0.03
2100 - 2200				0.08	0.08	0.08				0.03	0.03	0.03
2200 - 2300				0.08	0.08	0.08				0.03	0.03	0.03
2300 - 2400				0.05	0.05	0.05				0.02	0.02	0.02

	Adjusted Start Emission within PTI Area (g)						Adjusted Start Emission outside PTI Area (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
											total					0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	9				1.97E-03	1.97E-03	1.97E-03				0.05	0.05	0.05
0100 - 0200	5				1.97E-03	1.97E-03	1.97E-03				0.03	0.03	0.03
0200 - 0300	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0300 - 0400	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0400 - 0500	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0500 - 0600	6				1.97E-03	1.97E-03	1.97E-03				0.04	0.04	0.04
0600 - 0700	15				1.97E-03	1.97E-03	1.97E-03				0.09	0.09	0.09
0700 - 0800	28				1.97E-03	1.97E-03	1.97E-03				0.17	0.17	0.17
0800 - 0900	31				1.97E-03	1.97E-03	1.97E-03				0.19	0.19	0.19
0900 - 1000	25				1.97E-03	1.97E-03	1.97E-03				0.15	0.15	0.15
1000 - 1100	27				1.97E-03	1.97E-03	1.97E-03				0.16	0.16	0.16
1100 - 1200	28				1.97E-03	1.97E-03	1.97E-03				0.16	0.16	0.16
1200 - 1300	30				1.97E-03	1.97E-03	1.97E-03				0.18	0.18	0.18
1300 - 1400	29				1.97E-03	1.97E-03	1.97E-03				0.17	0.17	0.17
1400 - 1500	29				1.97E-03	1.97E-03	1.97E-03				0.17	0.17	0.17
1500 - 1600	29				1.97E-03	1.97E-03	1.97E-03				0.17	0.17	0.17
1600 - 1700	27				1.97E-03	1.97E-03	1.97E-03				0.16	0.16	0.16
1700 - 1800	29				1.97E-03	1.97E-03	1.97E-03				0.17	0.17	0.17
1800 - 1900	28				1.97E-03	1.97E-03	1.97E-03				0.17	0.17	0.17
1900 - 2000	22				1.97E-03	1.97E-03	1.97E-03				0.13	0.13	0.13
2000 - 2100	21				1.97E-03	1.97E-03	1.97E-03				0.12	0.12	0.12
2100 - 2200	21				1.97E-03	1.97E-03	1.97E-03				0.12	0.12	0.12
2200 - 2300	20				1.97E-03	1.97E-03	1.97E-03				0.12	0.12	0.12
2300 - 2400	18				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	176	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	FBDD												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	18				0.4467	0.4467	0.4109				1.429	1.429	1.314
0100 - 0200	10				0.4467	0.4467	0.4109				0.816	0.816	0.751
0200 - 0300	5				0.4467	0.4467	0.4109				0.408	0.408	0.375
0300 - 0400	4				0.4467	0.4467	0.4109				0.340	0.340	0.313
0400 - 0500	5				0.4467	0.4467	0.4109				0.408	0.408	0.375
0500 - 0600	12				0.4467	0.4467	0.4109				0.952	0.952	0.876
0600 - 0700	27				0.4467	0.4467	0.4109				2.109	2.109	1.940
0700 - 0800	56				0.4467	0.4467	0.4109				4.422	4.422	4.067
0800 - 0900	57				0.4467	0.4467	0.4109				4.505	4.505	4.144
0900 - 1000	48				0.4467	0.4467	0.4109				3.810	3.810	3.505
1000 - 1100	44				0.4467	0.4467	0.4109				3.469	3.469	3.191
1100 - 1200	47				0.4467	0.4467	0.4109				3.674	3.674	3.379
1200 - 1300	49				0.4467	0.4467	0.4109				3.877	3.877	3.567
1300 - 1400	49				0.4467	0.4467	0.4109				3.877	3.877	3.567
1400 - 1500	48				0.4467	0.4467	0.4109				3.810	3.810	3.505
1500 - 1600	49				0.4467	0.4467	0.4109				3.877	3.877	3.567
1600 - 1700	53				0.4467	0.4467	0.4109				4.150	4.150	3.817
1700 - 1800	57				0.4467	0.4467	0.4109				4.505	4.505	4.144
1800 - 1900	52				0.4467	0.4467	0.4109				4.082	4.082	3.755
1900 - 2000	40				0.4467	0.4467	0.4109				3.129	3.129	2.878
2000 - 2100	35				0.4467	0.4467	0.4109				2.721	2.721	2.503
2100 - 2200	35				0.4467	0.4467	0.4109				2.721	2.721	2.503
2200 - 2300	33				0.4467	0.4467	0.4109				2.585	2.585	2.378
2300 - 2400	27				0.4467	0.4467	0.4109				2.109	2.109	1.940

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				1.536	1.536	1.422				4.27E-04	4.27E-04	3.95E-04
0100 - 0200				0.878	0.878	0.812				2.44E-04	2.44E-04	2.26E-04
0200 - 0300				0.439	0.439	0.406				1.22E-04	1.22E-04	1.13E-04
0300 - 0400				0.366	0.366	0.339				1.02E-04	1.02E-04	9.41E-05
0400 - 0500				0.439	0.439	0.406				1.22E-04	1.22E-04	1.13E-04
0500 - 0600				1.024	1.024	0.947				2.84E-04	2.84E-04	2.63E-04
0600 - 0700				2.267	2.267	2.098				6.30E-04	6.30E-04	5.83E-04
0700 - 0800				4.754	4.754	4.400				1.32E-03	1.32E-03	1.22E-03
0800 - 0900				4.844	4.844	4.483				1.35E-03	1.35E-03	1.25E-03
0900 - 1000				4.097	4.097	3.791				1.14E-03	1.14E-03	1.05E-03
1000 - 1100				3.731	3.731	3.453				1.04E-03	1.04E-03	9.59E-04
1100 - 1200				3.951	3.951	3.656				1.10E-03	1.10E-03	1.02E-03
1200 - 1300				4.169	4.169	3.859				1.16E-03	1.16E-03	1.07E-03
1300 - 1400				4.169	4.169	3.859				1.16E-03	1.16E-03	1.07E-03
1400 - 1500				4.097	4.097	3.791				1.14E-03	1.14E-03	1.05E-03
1500 - 1600				4.169	4.169	3.859				1.16E-03	1.16E-03	1.07E-03
1600 - 1700				4.462	4.462	4.129				1.24E-03	1.24E-03	1.15E-03
1700 - 1800				4.844	4.844	4.483				1.35E-03	1.35E-03	1.25E-03
1800 - 1900				4.389	4.389	4.062				1.22E-03	1.22E-03	1.13E-03
1900 - 2000				3.365	3.365	3.114				9.35E-04	9.35E-04	8.65E-04
2000 - 2100				2.926	2.926	2.708				8.13E-04	8.13E-04	7.52E-04
2100 - 2200				2.926	2.926	2.708				8.13E-04	8.13E-04	7.52E-04
2200 - 2300				2.780	2.780	2.572				7.72E-04	7.72E-04	7.15E-04
2300 - 2400				2.267	2.267	2.098				6.30E-04	6.30E-04	5.83E-04
					total					2.02E-02	2.02E-02	1.87E-02

Daily Emission Distribution (FBSD + FBDD)

Hour	TSP	RSP	FSP
00 - 01	2%	2%	2%
01 - 02	1%	1%	1%
02 - 03	1%	1%	1%
03 - 04	1%	1%	1%
04 - 05	1%	1%	1%
05 - 06	1%	1%	1%
06 - 07	3%	3%	3%
07 - 08	7%	7%	7%
08 - 09	7%	7%	7%
09 - 10	6%	6%	6%
10 - 11	5%	5%	5%
11 - 12	5%	5%	5%
12 - 13	6%	6%	6%
13 - 14	6%	6%	6%
14 - 15	6%	6%	6%
15 - 16	6%	6%	6%
16 - 17	6%	6%	6%
17 - 18	7%	7%	7%
18 - 19	6%	6%	6%
19 - 20	5%	5%	5%
20 - 21	4%	4%	4%
21 - 22	4%	4%	4%
22 - 23	4%	4%	4%
23 - 24	3%	3%	3%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

Site A3 Bus Terminus

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Non-franchised Buses 15-24t (NFB8) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.22	0.40	0.54	0.76	0.94	1.25	1.83	2.28	3.36	4.38	4.92	5.82	6.40	6.71	6.89	7.07	7.16	7.16
NO	0.19	0.34	0.46	0.65	0.80	1.07	1.56	1.94	2.86	3.74	4.19	4.96	5.45	5.72	5.87	6.02	6.10	6.10
NO2	0.03	0.06	0.08	0.11	0.14	0.19	0.27	0.34	0.50	0.65	0.73	0.86	0.95	0.99	1.02	1.05	1.06	1.06
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of NFB8																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBSD & FBDD (g)					
NOx	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	NFB8												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
0100 - 0200	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
0200 - 0300	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
0300 - 0400	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
0400 - 0500	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
0500 - 0600	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
0600 - 0700	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
0700 - 0800	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
0800 - 0900	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
0900 - 1000	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
1000 - 1100	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
1100 - 1200	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
1200 - 1300	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
1300 - 1400	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
1400 - 1500	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
1500 - 1600	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
1600 - 1700	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
1700 - 1800	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
1800 - 1900	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
1900 - 2000	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
2000 - 2100	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
2100 - 2200	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
2200 - 2300	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000
2300 - 2400	0				7.85E-04	7.85E-04	7.85E-04				0.000	0.000	0.000

Hour	NFB8												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	19				7.85E-04	7.85E-04	7.85E-04				0.04	0.04	0.04
0100 - 0200	11				7.85E-04	7.85E-04	7.85E-04				0.03	0.03	0.03
0200 - 0300	5				7.85E-04	7.85E-04	7.85E-04				0.01	0.01	0.01
0300 - 0400	5				7.85E-04	7.85E-04	7.85E-04				0.01	0.01	0.01
0400 - 0500	5				7.85E-04	7.85E-04	7.85E-04				0.01	0.01	0.01
0500 - 0600	13				7.85E-04	7.85E-04	7.85E-04				0.03	0.03	0.03
0600 - 0700	28				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
0700 - 0800	59				7.85E-04	7.85E-04	7.85E-04				0.14	0.14	0.14
0800 - 0900	60				7.85E-04	7.85E-04	7.85E-04				0.14	0.14	0.14
0900 - 1000	51				7.85E-04	7.85E-04	7.85E-04				0.12	0.12	0.12
1000 - 1100	46				7.85E-04	7.85E-04	7.85E-04				0.11	0.11	0.11
1100 - 1200	49				7.85E-04	7.85E-04	7.85E-04				0.12	0.12	0.12
1200 - 1300	52				7.85E-04	7.85E-04	7.85E-04				0.12	0.12	0.12
1300 - 1400	52				7.85E-04	7.85E-04	7.85E-04				0.12	0.12	0.12
1400 - 1500	51				7.85E-04	7.85E-04	7.85E-04				0.12	0.12	0.12
1500 - 1600	52				7.85E-04	7.85E-04	7.85E-04				0.12	0.12	0.12
1600 - 1700	55				7.85E-04	7.85E-04	7.85E-04				0.13	0.13	0.13
1700 - 1800	60				7.85E-04	7.85E-04	7.85E-04				0.14	0.14	0.14
1800 - 1900	54				7.85E-04	7.85E-04	7.85E-04				0.13	0.13	0.13
1900 - 2000	42				7.85E-04	7.85E-04	7.85E-04				0.10	0.10	0.10
2000 - 2100	36				7.85E-04	7.85E-04	7.85E-04				0.09	0.09	0.09
2100 - 2200	36				7.85E-04	7.85E-04	7.85E-04				0.09	0.09	0.09
2200 - 2300	34				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
2300 - 2400	28				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07

Average Distance from Starting Place to Egress =	66	m
Average Spread Distance outside bus terminus =	634	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.04	0.04	0.04				0.01	0.01	0.01
0100 - 0200				0.03	0.03	0.03				0.01	0.01	0.01
0200 - 0300				0.01	0.01	0.01				0.00	0.00	0.00
0300 - 0400				0.01	0.01	0.01				0.00	0.00	0.00
0400 - 0500				0.01	0.01	0.01				0.00	0.00	0.00
0500 - 0600				0.03	0.03	0.03				0.01	0.01	0.01
0600 - 0700				0.07	0.07	0.07				0.02	0.02	0.02
0700 - 0800				0.14	0.14	0.14				0.05	0.05	0.05
0800 - 0900				0.14	0.14	0.14				0.05	0.05	0.05
0900 - 1000				0.12	0.12	0.12				0.04	0.04	0.04
1000 - 1100				0.11	0.11	0.11				0.04	0.04	0.04
1100 - 1200				0.12	0.12	0.12				0.04	0.04	0.04
1200 - 1300				0.12	0.12	0.12				0.04	0.04	0.04
1300 - 1400				0.12	0.12	0.12				0.04	0.04	0.04
1400 - 1500				0.12	0.12	0.12				0.04	0.04	0.04
1500 - 1600				0.12	0.12	0.12				0.04	0.04	0.04
1600 - 1700				0.13	0.13	0.13				0.04	0.04	0.04
1700 - 1800				0.14	0.14	0.14				0.05	0.05	0.05
1800 - 1900				0.13	0.13	0.13				0.04	0.04	0.04
1900 - 2000				0.10	0.10	0.10				0.03	0.03	0.03
2000 - 2100				0.09	0.09	0.09				0.03	0.03	0.03
2100 - 2200				0.09	0.09	0.09				0.03	0.03	0.03
2200 - 2300				0.08	0.08	0.08				0.03	0.03	0.03
2300 - 2400				0.07	0.07	0.07				0.02	0.02	0.02

Hour	Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
												total				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	NFB8												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0100 - 0200	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0200 - 0300	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0300 - 0400	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0400 - 0500	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0500 - 0600	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0600 - 0700	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0700 - 0800	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0800 - 0900	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0900 - 1000	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1000 - 1100	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1100 - 1200	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1200 - 1300	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1300 - 1400	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1400 - 1500	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1500 - 1600	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1600 - 1700	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1700 - 1800	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1800 - 1900	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1900 - 2000	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2000 - 2100	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2100 - 2200	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2200 - 2300	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2300 - 2400	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	131	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	NFB8												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	19				0.2972	0.2972	0.2735				0.741	0.741	0.681
0100 - 0200	11				0.2972	0.2972	0.2735				0.423	0.423	0.389
0200 - 0300	5				0.2972	0.2972	0.2735				0.211	0.211	0.195
0300 - 0400	5				0.2972	0.2972	0.2735				0.176	0.176	0.162
0400 - 0500	5				0.2972	0.2972	0.2735				0.211	0.211	0.195
0500 - 0600	13				0.2972	0.2972	0.2735				0.493	0.493	0.454
0600 - 0700	28				0.2972	0.2972	0.2735				1.093	1.093	1.006
0700 - 0800	59				0.2972	0.2972	0.2735				2.292	2.292	2.110
0800 - 0900	60				0.2972	0.2972	0.2735				2.336	2.336	2.149
0900 - 1000	51				0.2972	0.2972	0.2735				1.975	1.975	1.818
1000 - 1100	46				0.2972	0.2972	0.2735				1.798	1.798	1.655
1100 - 1200	49				0.2972	0.2972	0.2735				1.905	1.905	1.753
1200 - 1300	52				0.2972	0.2972	0.2735				2.010	2.010	1.850
1300 - 1400	52				0.2972	0.2972	0.2735				2.010	2.010	1.850
1400 - 1500	51				0.2972	0.2972	0.2735				1.975	1.975	1.818
1500 - 1600	52				0.2972	0.2972	0.2735				2.010	2.010	1.850
1600 - 1700	55				0.2972	0.2972	0.2735				2.151	2.151	1.980
1700 - 1800	60				0.2972	0.2972	0.2735				2.336	2.336	2.149
1800 - 1900	54				0.2972	0.2972	0.2735				2.116	2.116	1.947
1900 - 2000	42				0.2972	0.2972	0.2735				1.622	1.622	1.493
2000 - 2100	36				0.2972	0.2972	0.2735				1.410	1.410	1.298
2100 - 2200	36				0.2972	0.2972	0.2735				1.410	1.410	1.298
2200 - 2300	34				0.2972	0.2972	0.2735				1.340	1.340	1.233
2300 - 2400	28				0.2972	0.2972	0.2735				1.093	1.093	1.006

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.785	0.785	0.726				2.18E-04	2.18E-04	2.02E-04
0100 - 0200				0.449	0.449	0.415				1.25E-04	1.25E-04	1.15E-04
0200 - 0300				0.224	0.224	0.207				6.23E-05	6.23E-05	5.76E-05
0300 - 0400				0.187	0.187	0.173				5.20E-05	5.20E-05	4.80E-05
0400 - 0500				0.224	0.224	0.207				6.23E-05	6.23E-05	5.76E-05
0500 - 0600				0.523	0.523	0.484				1.45E-04	1.45E-04	1.34E-04
0600 - 0700				1.159	1.159	1.072				3.22E-04	3.22E-04	2.98E-04
0700 - 0800				2.431	2.431	2.248				6.75E-04	6.75E-04	6.25E-04
0800 - 0900				2.477	2.477	2.291				6.88E-04	6.88E-04	6.36E-04
0900 - 1000				2.095	2.095	1.937				5.82E-04	5.82E-04	5.38E-04
1000 - 1100				1.907	1.907	1.764				5.30E-04	5.30E-04	4.90E-04
1100 - 1200				2.020	2.020	1.868				5.61E-04	5.61E-04	5.19E-04
1200 - 1300				2.132	2.132	1.971				5.92E-04	5.92E-04	5.48E-04
1300 - 1400				2.132	2.132	1.971				5.92E-04	5.92E-04	5.48E-04
1400 - 1500				2.095	2.095	1.937				5.82E-04	5.82E-04	5.38E-04
1500 - 1600				2.132	2.132	1.971				5.92E-04	5.92E-04	5.48E-04
1600 - 1700				2.282	2.282	2.110				6.34E-04	6.34E-04	5.86E-04
1700 - 1800				2.477	2.477	2.291				6.88E-04	6.88E-04	6.36E-04
1800 - 1900				2.244	2.244	2.075				6.23E-04	6.23E-04	5.76E-04
1900 - 2000				1.721	1.721	1.591				4.78E-04	4.78E-04	4.42E-04
2000 - 2100				1.495	1.495	1.383				4.15E-04	4.15E-04	3.84E-04
2100 - 2200				1.495	1.495	1.383				4.15E-04	4.15E-04	3.84E-04
2200 - 2300				1.421	1.421	1.314				3.95E-04	3.95E-04	3.65E-04
2300 - 2400				1.159	1.159	1.072				3.22E-04	3.22E-04	2.98E-04
					total					1.04E-02	1.04E-02	9.57E-03

Daily Emission Distribution

Hour	TSP	RSP	FSP
00 - 01	2%	2%	2%
01 - 02	1%	1%	1%
02 - 03	1%	1%	1%
03 - 04	1%	1%	1%
04 - 05	1%	1%	1%
05 - 06	1%	1%	1%
06 - 07	3%	3%	3%
07 - 08	7%	7%	7%
08 - 09	7%	7%	7%
09 - 10	6%	6%	6%
10 - 11	5%	5%	5%
11 - 12	5%	5%	5%
12 - 13	6%	6%	6%
13 - 14	6%	6%	6%
14 - 15	6%	6%	6%
15 - 16	6%	6%	6%
16 - 17	6%	6%	6%
17 - 18	7%	7%	7%
18 - 19	6%	6%	6%
19 - 20	5%	5%	5%
20 - 21	4%	4%	4%
21 - 22	4%	4%	4%
22 - 23	4%	4%	4%
23 - 24	3%	3%	3%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

Airport (Ground Transportation Centre) Bus Terminus - PTI GTC01

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.77	1.39	1.85	2.62	3.23	4.31	6.32	7.86	11.55	15.09	16.94	20.02	22.03	23.10	23.72	24.34	24.64	24.64
NO	0.72	1.30	1.74	2.46	3.04	4.06	5.94	7.39	10.87	14.21	15.95	18.85	20.73	21.75	22.33	22.91	23.20	23.20
NO2	0.05	0.08	0.11	0.15	0.19	0.25	0.37	0.46	0.68	0.89	1.00	1.18	1.29	1.36	1.39	1.43	1.45	1.45
TSP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RSP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FSP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	No. of Trips of FBDD																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0600 - 0700	0	0	13	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0700 - 0800	0	0	24	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
0800 - 0900	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBDD (g)					
NOx	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBDD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0100 - 0200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0200 - 0300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0400 - 0500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0500 - 0600	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
0600 - 0700	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
0700 - 0800	3				1.97E-03	1.97E-03	1.97E-03				0.018	0.018	0.018
0800 - 0900	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0900 - 1000	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1000 - 1100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1100 - 1200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1200 - 1300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1300 - 1400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1400 - 1500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1500 - 1600	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1600 - 1700	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1700 - 1800	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1800 - 1900	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1900 - 2000	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
2000 - 2100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
2100 - 2200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
2200 - 2300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
2300 - 2400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0100 - 0200	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0200 - 0300	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0400 - 0500	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0500 - 0600	5				1.97E-03	1.97E-03	1.97E-03				0.03	0.03	0.03
0600 - 0700	13				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
0700 - 0800	24				1.97E-03	1.97E-03	1.97E-03				0.14	0.14	0.14
0800 - 0900	29				1.97E-03	1.97E-03	1.97E-03				0.17	0.17	0.17
0900 - 1000	23				1.97E-03	1.97E-03	1.97E-03				0.14	0.14	0.14
1000 - 1100	21				1.97E-03	1.97E-03	1.97E-03				0.13	0.13	0.13
1100 - 1200	23				1.97E-03	1.97E-03	1.97E-03				0.13	0.13	0.13
1200 - 1300	24				1.97E-03	1.97E-03	1.97E-03				0.14	0.14	0.14
1300 - 1400	24				1.97E-03	1.97E-03	1.97E-03				0.14	0.14	0.14
1400 - 1500	23				1.97E-03	1.97E-03	1.97E-03				0.14	0.14	0.14
1500 - 1600	24				1.97E-03	1.97E-03	1.97E-03				0.14	0.14	0.14
1600 - 1700	26				1.97E-03	1.97E-03	1.97E-03				0.15	0.15	0.15
1700 - 1800	27				1.97E-03	1.97E-03	1.97E-03				0.16	0.16	0.16
1800 - 1900	25				1.97E-03	1.97E-03	1.97E-03				0.15	0.15	0.15
1900 - 2000	19				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
2000 - 2100	17				1.97E-03	1.97E-03	1.97E-03				0.10	0.10	0.10
2100 - 2200	17				1.97E-03	1.97E-03	1.97E-03				0.10	0.10	0.10
2200 - 2300	16				1.97E-03	1.97E-03	1.97E-03				0.09	0.09	0.09
2300 - 2400	13				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08

Average Distance from Starting Place to Egress =	86	m
Average Spread Distance outside bus terminus =	614	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00
0500 - 0600				0.04	0.04	0.04				0.01	0.01	0.01
0600 - 0700				0.08	0.08	0.08				0.03	0.03	0.03
0700 - 0800				0.16	0.16	0.16				0.05	0.05	0.05
0800 - 0900				0.17	0.17	0.17				0.06	0.06	0.06
0900 - 1000				0.14	0.14	0.14				0.05	0.05	0.05
1000 - 1100				0.13	0.13	0.13				0.04	0.04	0.04
1100 - 1200				0.13	0.13	0.13				0.04	0.04	0.04
1200 - 1300				0.14	0.14	0.14				0.05	0.05	0.05
1300 - 1400				0.14	0.14	0.14				0.05	0.05	0.05
1400 - 1500				0.14	0.14	0.14				0.05	0.05	0.05
1500 - 1600				0.14	0.14	0.14				0.05	0.05	0.05
1600 - 1700				0.15	0.15	0.15				0.05	0.05	0.05
1700 - 1800				0.16	0.16	0.16				0.05	0.05	0.05
1800 - 1900				0.15	0.15	0.15				0.05	0.05	0.05
1900 - 2000				0.11	0.11	0.11				0.04	0.04	0.04
2000 - 2100				0.10	0.10	0.10				0.03	0.03	0.03
2100 - 2200				0.10	0.10	0.10				0.03	0.03	0.03
2200 - 2300				0.09	0.09	0.09				0.03	0.03	0.03
2300 - 2400				0.08	0.08	0.08				0.03	0.03	0.03

Hour	Adjusted Start Emission within Loading and Unloading Area (g)						Adjusted Start Emission outside Loading and Unloading Area (g)						Start Emission Rate outside bus terminus (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
												total				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	8				1.97E-03	1.97E-03	1.97E-03				0.04	0.04	0.04
0100 - 0200	4				1.97E-03	1.97E-03	1.97E-03				0.03	0.03	0.03
0200 - 0300	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0300 - 0400	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0400 - 0500	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0500 - 0600	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0600 - 0700	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0700 - 0800	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0800 - 0900	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0900 - 1000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1000 - 1100	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1100 - 1200	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1200 - 1300	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1300 - 1400	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1400 - 1500	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1500 - 1600	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1600 - 1700	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1700 - 1800	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1800 - 1900	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1900 - 2000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
2000 - 2100	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
2100 - 2200	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
2200 - 2300	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
2300 - 2400	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	237	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	FBDD												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	8				0.4467	0.4467	0.4109				0.797	0.797	0.733
0100 - 0200	4				0.4467	0.4467	0.4109				0.455	0.455	0.419
0200 - 0300	2				0.4467	0.4467	0.4109				0.228	0.228	0.209
0300 - 0400	2				0.4467	0.4467	0.4109				0.190	0.190	0.175
0400 - 0500	2				0.4467	0.4467	0.4109				0.228	0.228	0.209
0500 - 0600	6				0.4467	0.4467	0.4109				0.635	0.635	0.584
0600 - 0700	14				0.4467	0.4467	0.4109				1.482	1.482	1.363
0700 - 0800	27				0.4467	0.4467	0.4109				2.858	2.858	2.629
0800 - 0900	29				0.4467	0.4467	0.4109				3.096	3.096	2.848
0900 - 1000	23				0.4467	0.4467	0.4109				2.483	2.483	2.284
1000 - 1100	21				0.4467	0.4467	0.4109				2.261	2.261	2.080
1100 - 1200	23				0.4467	0.4467	0.4109				2.395	2.395	2.203
1200 - 1300	24				0.4467	0.4467	0.4109				2.527	2.527	2.325
1300 - 1400	24				0.4467	0.4467	0.4109				2.527	2.527	2.325
1400 - 1500	23				0.4467	0.4467	0.4109				2.483	2.483	2.284
1500 - 1600	24				0.4467	0.4467	0.4109				2.527	2.527	2.325
1600 - 1700	26				0.4467	0.4467	0.4109				2.705	2.705	2.488
1700 - 1800	27				0.4467	0.4467	0.4109				2.829	2.829	2.603
1800 - 1900	25				0.4467	0.4467	0.4109				2.661	2.661	2.447
1900 - 2000	19				0.4467	0.4467	0.4109				2.040	2.040	1.876
2000 - 2100	17				0.4467	0.4467	0.4109				1.774	1.774	1.631
2100 - 2200	17				0.4467	0.4467	0.4109				1.774	1.774	1.631
2200 - 2300	16				0.4467	0.4467	0.4109				1.685	1.685	1.550
2300 - 2400	13				0.4467	0.4467	0.4109				1.375	1.375	1.264

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Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.842	0.842	0.778				2.34E-04	2.34E-04	2.16E-04
0100 - 0200				0.481	0.481	0.444				1.34E-04	1.34E-04	1.23E-04
0200 - 0300				0.240	0.240	0.222				6.68E-05	6.68E-05	6.17E-05
0300 - 0400				0.200	0.200	0.185				5.56E-05	5.56E-05	5.14E-05
0400 - 0500				0.240	0.240	0.222				6.68E-05	6.68E-05	6.17E-05
0500 - 0600				0.671	0.671	0.620				1.86E-04	1.86E-04	1.72E-04
0600 - 0700				1.565	1.565	1.446				4.35E-04	4.35E-04	4.02E-04
0700 - 0800				3.018	3.018	2.789				8.38E-04	8.38E-04	7.75E-04
0800 - 0900				3.269	3.269	3.021				9.08E-04	9.08E-04	8.39E-04
0900 - 1000				2.622	2.622	2.423				7.28E-04	7.28E-04	6.73E-04
1000 - 1100				2.388	2.388	2.207				6.63E-04	6.63E-04	6.13E-04
1100 - 1200				2.528	2.528	2.336				7.02E-04	7.02E-04	6.49E-04
1200 - 1300				2.669	2.669	2.466				7.41E-04	7.41E-04	6.85E-04
1300 - 1400				2.669	2.669	2.466				7.41E-04	7.41E-04	6.85E-04
1400 - 1500				2.622	2.622	2.423				7.28E-04	7.28E-04	6.73E-04
1500 - 1600				2.669	2.669	2.466				7.41E-04	7.41E-04	6.85E-04
1600 - 1700				2.856	2.856	2.639				7.93E-04	7.93E-04	7.33E-04
1700 - 1800				2.988	2.988	2.761				8.30E-04	8.30E-04	7.67E-04
1800 - 1900				2.809	2.809	2.596				7.80E-04	7.80E-04	7.21E-04
1900 - 2000				2.154	2.154	1.990				5.98E-04	5.98E-04	5.53E-04
2000 - 2100				1.873	1.873	1.731				5.20E-04	5.20E-04	4.81E-04
2100 - 2200				1.873	1.873	1.731				5.20E-04	5.20E-04	4.81E-04
2200 - 2300				1.779	1.779	1.644				4.94E-04	4.94E-04	4.57E-04
2300 - 2400				1.451	1.451	1.341				4.03E-04	4.03E-04	3.73E-04
					total					1.29E-02	1.29E-02	1.19E-02

Daily Emission Distribution

Hour	TSP	RSP	FSP
00 - 01	2%	2%	2%
01 - 02	1%	1%	1%
02 - 03	1%	1%	1%
03 - 04	0%	0%	0%
04 - 05	1%	1%	1%
05 - 06	1%	1%	1%
06 - 07	3%	3%	3%
07 - 08	6%	6%	6%
08 - 09	7%	7%	7%
09 - 10	6%	6%	6%
10 - 11	5%	5%	5%
11 - 12	5%	5%	5%
12 - 13	6%	6%	6%
13 - 14	6%	6%	6%
14 - 15	6%	6%	6%
15 - 16	6%	6%	6%
16 - 17	6%	6%	6%
17 - 18	6%	6%	6%
18 - 19	6%	6%	6%
19 - 20	5%	5%	5%
20 - 21	4%	4%	4%
21 - 22	4%	4%	4%
22 - 23	4%	4%	4%
23 - 24	3%	3%	3%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

Airport (Ground Transportation Centre) Bus Terminus - PTI_GTC02

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.77	1.39	1.85	2.62	3.23	4.31	6.32	7.86	11.55	15.09	16.94	20.02	22.03	23.10	23.72	24.34	24.64	24.64
NO	0.72	1.30	1.74	2.46	3.04	4.06	5.94	7.39	10.87	14.21	15.95	18.85	20.73	21.75	22.33	22.91	23.20	23.20
NO2	0.05	0.08	0.11	0.15	0.19	0.25	0.37	0.46	0.68	0.89	1.00	1.18	1.29	1.36	1.39	1.43	1.45	1.45
TSP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RSP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FSP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Soaking Time (min) / Hour	No. of Trips of FBDD																		Total Start Emission of FBDD (g)					
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	NOx	NO	NO2	TSP	RSP	FSP
0000 - 0100	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0100 - 0200	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0200 - 0300	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0300 - 0400	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0400 - 0500	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0500 - 0600	0	2	6	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0				0	0	0
0600 - 0700	0	6	14	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0				0	0	0
0700 - 0800	0	13	29	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0				0	0	0
0800 - 0900	0	14	35	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0900 - 1000	0	11	28	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1000 - 1100	0	10	25	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1100 - 1200	0	10	27	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1200 - 1300	0	11	28	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1300 - 1400	0	11	28	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1400 - 1500	0	11	28	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1500 - 1600	0	11	28	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1600 - 1700	0	12	30	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1700 - 1800	0	12	31	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1800 - 1900	0	12	30	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1900 - 2000	0	9	23	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2000 - 2100	0	8	20	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2100 - 2200	0	8	20	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2200 - 2300	0	7	19	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2300 - 2400	0	6	15	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0				0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBDD												FBDD											
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	7				1.97E-03	1.97E-03	1.97E-03				0.04	0.04	0.04
0100 - 0200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	7				1.97E-03	1.97E-03	1.97E-03				0.04	0.04	0.04
0200 - 0300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	7				1.97E-03	1.97E-03	1.97E-03				0.04	0.04	0.04
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	7				1.97E-03	1.97E-03	1.97E-03				0.04	0.04	0.04
0400 - 0500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	7				1.97E-03	1.97E-03	1.97E-03				0.04	0.04	0.04
0500 - 0600	4				1.97E-03	1.97E-03	1.97E-03				0.024	0.024	0.024	8				1.97E-03	1.97E-03	1.97E-03				0.05	0.05	0.05
0600 - 0700	4				1.97E-03	1.97E-03	1.97E-03				0.024	0.024	0.024	20				1.97E-03	1.97E-03	1.97E-03				0.12	0.12	0.12
0700 - 0800	6				1.97E-03	1.97E-03	1.97E-03				0.036	0.036	0.036	42				1.97E-03	1.97E-03	1.97E-03				0.25	0.25	0.25
0800 - 0900	3				1.97E-03	1.97E-03	1.97E-03				0.018	0.018	0.018	49				1.97E-03	1.97E-03	1.97E-03				0.29	0.29	0.29
0900 - 1000	3				1.97E-03	1.97E-03	1.97E-03				0.018	0.018	0.018	39				1.97E-03	1.97E-03	1.97E-03				0.23	0.23	0.23
1000 - 1100	3				1.97E-03	1.97E-03	1.97E-03				0.018	0.018	0.018	35				1.97E-03	1.97E-03	1.97E-03				0.21	0.21	0.21
1100 - 1200	7				1.97E-03	1.97E-03	1.97E-03				0.041	0.041	0.041	37				1.97E-03	1.97E-03	1.97E-03				0.22	0.22	0.22
1200 - 1300	7				1.97E-03	1.97E-03	1.97E-03				0.041	0.041	0.041	39				1.97E-03	1.97E-03	1.97E-03				0.23	0.23	0.23
1300 - 1400	7				1.97E-03	1.97E-03	1.97E-03				0.041	0.041	0.041	39				1.97E-03	1.97E-03	1.97E-03				0.23	0.23	0.23
1400 - 1500	7				1.97E-03	1.97E-03	1.97E-03				0.041	0.041	0.041	39				1.97E-03	1.97E-03	1.97E-03				0.23	0.23	0.23
1500 - 1600	7				1.97E-03	1.97E-03	1.97E-03				0.041	0.041	0.041	39				1.97E-03	1.97E-03	1.97E-03				0.23	0.23	0.23
1600 - 1700	7				1.97E-03	1.97E-03	1.97E-03				0.041	0.041	0.041	42				1.97E-03	1.97E-03	1.97E-03				0.25	0.25	0.25
1700 - 1800	8				1.97E-03	1.97E-03	1.97E-03				0.047	0.047	0.047	43				1.97E-03	1.97E-03	1.97E-03				0.25	0.25	0.25
1800 - 1900	8				1.97E-03	1.97E-03	1.97E-03				0.047	0.047	0.047	42				1.97E-03	1.97E-03	1.97E-03				0.25	0.25	0.25
1900 - 2000	8				1.97E-03	1.97E-03	1.97E-03				0.047	0.047	0.047	32				1.97E-03	1.97E-03	1.97E-03				0.19	0.19	0.19
2000 - 2100	8				1.97E-03	1.97E-03	1.97E-03				0.047	0.047	0.047	28				1.97E-03	1.97E-03	1.97E-03				0.17	0.17	0.17
2100 - 2200	8				1.97E-03	1.97E-03	1.97E-03				0.047	0.047	0.047	28				1.97E-03	1.97E-03	1.97E-03				0.17	0.17	0.17
2200 - 2300	8				1.97E-03	1.97E-03	1.97E-03				0.047	0.047	0.047	26				1.97E-03	1.97E-03	1.97E-03				0.15	0.15	0.15
2300 - 2400	3				1.97E-03	1.97E-03	1.97E-03				0.018	0.018	0.018	21				1.97E-03	1.97E-03	1.97E-03				0.12	0.12	0.12

Average Distance from Starting Place to Egress =	208	m
Average Spread Distance outside bus terminus =	493	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.04	0.04	0.04				0.01	0.01	0.01
0100 - 0200				0.04	0.04	0.04				0.01	0.01	0.01
0200 - 0300				0.04	0.04	0.04				0.01	0.01	0.01
0300 - 0400				0.04	0.04	0.04				0.01	0.01	0.01
0400 - 0500				0.04	0.04	0.04				0.01	0.01	0.01
0500 - 0600				0.07	0.07	0.07				0.02	0.02	0.02
0600 - 0700				0.14	0.14	0.14				0.05	0.05	0.05
0700 - 0800				0.28	0.28	0.28				0.09	0.09	0.09
0800 - 0900				0.31	0.31	0.31				0.10	0.10	0.10
0900 - 1000				0.25	0.25	0.25				0.08	0.08	0.08
1000 - 1100				0.22	0.22	0.22				0.07	0.07	0.07
1100 - 1200				0.26	0.26	0.26				0.09	0.09	0.09
1200 - 1300				0.27	0.27	0.27				0.09	0.09	0.09
1300 - 1400				0.27	0.27	0.27				0.09	0.09	0.09
1400 - 1500				0.27	0.27	0.27				0.09	0.09	0.09
1500 - 1600				0.27	0.27	0.27				0.09	0.09	0.09
1600 - 1700				0.29	0.29	0.29				0.10	0.10	0.10
1700 - 1800				0.30	0.30	0.30				0.10	0.10	0.10
1800 - 1900				0.30	0.30	0.30				0.10	0.10	0.10
1900 - 2000				0.24	0.24	0.24				0.08	0.08	0.08
2000 - 2100				0.21	0.21	0.21				0.07	0.07	0.07
2100 - 2200				0.21	0.21	0.21				0.07	0.07	0.07
2200 - 2300				0.20	0.20	0.20				0.07	0.07	0.07
2300 - 2400				0.14	0.14	0.14				0.05	0.05	0.05

Adjusted Start Emission within Loading and Unloading Area (g)						Adjusted Start Emission outside Loading and Unloading Area (g)						Start Emission Rate outside bus terminus (g/s)					
NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
												total			0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	31				1.97E-03	1.97E-03	1.97E-03				0.18	0.18	0.18
0100 - 0200	15				1.97E-03	1.97E-03	1.97E-03				0.09	0.09	0.09
0200 - 0300	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0300 - 0400	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0400 - 0500	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0500 - 0600	13				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
0600 - 0700	32				1.97E-03	1.97E-03	1.97E-03				0.19	0.19	0.19
0700 - 0800	69				1.97E-03	1.97E-03	1.97E-03				0.41	0.41	0.41
0800 - 0900	67				1.97E-03	1.97E-03	1.97E-03				0.40	0.40	0.40
0900 - 1000	58				1.97E-03	1.97E-03	1.97E-03				0.35	0.35	0.35
1000 - 1100	53				1.97E-03	1.97E-03	1.97E-03				0.32	0.32	0.32
1100 - 1200	53				1.97E-03	1.97E-03	1.97E-03				0.31	0.31	0.31
1200 - 1300	56				1.97E-03	1.97E-03	1.97E-03				0.33	0.33	0.33
1300 - 1400	56				1.97E-03	1.97E-03	1.97E-03				0.33	0.33	0.33
1400 - 1500	54				1.97E-03	1.97E-03	1.97E-03				0.32	0.32	0.32
1500 - 1600	56				1.97E-03	1.97E-03	1.97E-03				0.33	0.33	0.33
1600 - 1700	60				1.97E-03	1.97E-03	1.97E-03				0.36	0.36	0.36
1700 - 1800	67				1.97E-03	1.97E-03	1.97E-03				0.40	0.40	0.40
1800 - 1900	58				1.97E-03	1.97E-03	1.97E-03				0.34	0.34	0.34
1900 - 2000	42				1.97E-03	1.97E-03	1.97E-03				0.25	0.25	0.25
2000 - 2100	36				1.97E-03	1.97E-03	1.97E-03				0.21	0.21	0.21
2100 - 2200	36				1.97E-03	1.97E-03	1.97E-03				0.21	0.21	0.21
2200 - 2300	34				1.97E-03	1.97E-03	1.97E-03				0.20	0.20	0.20
2300 - 2400	32				1.97E-03	1.97E-03	1.97E-03				0.19	0.19	0.19

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	415	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	FBDD												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	38				0.4467	0.4467	0.4109				6.979	6.979	6.419
0100 - 0200	22				0.4467	0.4467	0.4109				3.988	3.988	3.668
0200 - 0300	11				0.4467	0.4467	0.4109				1.994	1.994	1.834
0300 - 0400	9				0.4467	0.4467	0.4109				1.661	1.661	1.528
0400 - 0500	11				0.4467	0.4467	0.4109				1.994	1.994	1.834
0500 - 0600	25				0.4467	0.4467	0.4109				4.653	4.653	4.280
0600 - 0700	56				0.4467	0.4467	0.4109				10.302	10.302	9.476
0700 - 0800	117				0.4467	0.4467	0.4109				21.599	21.599	19.868
0800 - 0900	119				0.4467	0.4467	0.4109				22.065	22.065	20.297
0900 - 1000	100				0.4467	0.4467	0.4109				18.608	18.608	17.116
1000 - 1100	91				0.4467	0.4467	0.4109				16.947	16.947	15.589
1100 - 1200	97				0.4467	0.4467	0.4109				17.943	17.943	16.505
1200 - 1300	102				0.4467	0.4467	0.4109				18.941	18.941	17.423
1300 - 1400	102				0.4467	0.4467	0.4109				18.941	18.941	17.423
1400 - 1500	100				0.4467	0.4467	0.4109				18.608	18.608	17.116
1500 - 1600	102				0.4467	0.4467	0.4109				18.941	18.941	17.423
1600 - 1700	109				0.4467	0.4467	0.4109				20.270	20.270	18.645
1700 - 1800	118				0.4467	0.4467	0.4109				21.966	21.966	20.205
1800 - 1900	108				0.4467	0.4467	0.4109				19.938	19.938	18.340
1900 - 2000	82				0.4467	0.4467	0.4109				15.286	15.286	14.061
2000 - 2100	72				0.4467	0.4467	0.4109				13.293	13.293	12.227
2100 - 2200	72				0.4467	0.4467	0.4109				13.293	13.293	12.227
2200 - 2300	68				0.4467	0.4467	0.4109				12.627	12.627	11.615
2300 - 2400	56				0.4467	0.4467	0.4109				10.302	10.302	9.476
	1786												

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				7.202	7.202	6.642				2.00E-03	2.00E-03	1.85E-03
0100 - 0200				4.115	4.115	3.795				1.14E-03	1.14E-03	1.05E-03
0200 - 0300				2.057	2.057	1.898				5.72E-04	5.72E-04	5.27E-04
0300 - 0400				1.714	1.714	1.581				4.76E-04	4.76E-04	4.39E-04
0400 - 0500				2.057	2.057	1.898				5.72E-04	5.72E-04	5.27E-04
0500 - 0600				4.802	4.802	4.429				1.33E-03	1.33E-03	1.23E-03
0600 - 0700				10.631	10.631	9.805				2.95E-03	2.95E-03	2.72E-03
0700 - 0800				22.288	22.288	20.557				6.19E-03	6.19E-03	5.71E-03
0800 - 0900				22.770	22.770	21.001				6.32E-03	6.32E-03	5.83E-03
0900 - 1000				19.202	19.202	17.711				5.33E-03	5.33E-03	4.92E-03
1000 - 1100				17.489	17.489	16.130				4.86E-03	4.86E-03	4.48E-03
1100 - 1200				18.516	18.516	17.078				5.14E-03	5.14E-03	4.74E-03
1200 - 1300				19.546	19.546	18.028				5.43E-03	5.43E-03	5.01E-03
1300 - 1400				19.546	19.546	18.028				5.43E-03	5.43E-03	5.01E-03
1400 - 1500				19.202	19.202	17.711				5.33E-03	5.33E-03	4.92E-03
1500 - 1600				19.546	19.546	18.028				5.43E-03	5.43E-03	5.01E-03
1600 - 1700				20.917	20.917	19.292				5.81E-03	5.81E-03	5.36E-03
1700 - 1800				22.667	22.667	20.907				6.30E-03	6.30E-03	5.81E-03
1800 - 1900				20.574	20.574	18.977				5.72E-03	5.72E-03	5.27E-03
1900 - 2000				15.775	15.775	14.550				4.38E-03	4.38E-03	4.04E-03
2000 - 2100				13.717	13.717	12.652				3.81E-03	3.81E-03	3.51E-03
2100 - 2200				13.717	13.717	12.652				3.81E-03	3.81E-03	3.51E-03
2200 - 2300				13.030	13.030	12.018				3.62E-03	3.62E-03	3.34E-03
2300 - 2400				10.631	10.631	9.805				2.95E-03	2.95E-03	2.72E-03
					total					9.49E-02	9.49E-02	8.75E-02

Daily Emission Distribution

Hour	TSP	RSP	FSP
00 - 01	2%	2%	2%
01 - 02	1%	1%	1%
02 - 03	1%	1%	1%
03 - 04	1%	1%	1%
04 - 05	1%	1%	1%
05 - 06	1%	1%	1%
06 - 07	3%	3%	3%
07 - 08	7%	7%	7%
08 - 09	7%	7%	7%
09 - 10	6%	6%	6%
10 - 11	5%	5%	5%
11 - 12	5%	5%	5%
12 - 13	6%	6%	6%
13 - 14	6%	6%	6%
14 - 15	6%	6%	6%
15 - 16	6%	6%	6%
16 - 17	6%	6%	6%
17 - 18	7%	7%	7%
18 - 19	6%	6%	6%
19 - 20	5%	5%	5%
20 - 21	4%	4%	4%
21 - 22	4%	4%	4%
22 - 23	4%	4%	4%
23 - 24	3%	3%	3%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

TradePort Car Park / Truck Park

Temp: 7 **RH:** 15

Start Emission - Terminating HGV

	Heavy Good Vehicles >24t (HGV9) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.21	0.37	0.50	0.70	0.87	1.16	1.69	2.10	3.09	4.04	4.54	5.36	5.90	6.19	6.35	6.52	6.60	6.60
NO	0.18	0.33	0.43	0.62	0.76	1.01	1.48	1.85	2.72	3.55	3.98	4.71	5.18	5.43	5.58	5.72	5.79	5.79
NO2	0.03	0.05	0.06	0.09	0.11	0.14	0.21	0.26	0.38	0.50	0.56	0.66	0.72	0.76	0.78	0.80	0.81	0.81
TSP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RSP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FSP	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	No. of Trips of HGV9																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0

Hour	Total Start Emission of HGV9 (g)					
	NOx	NO	NO2	TSP	RSP	FSP
0000 - 0100				0	0	0
0100 - 0200				0	0	0
0200 - 0300				0	0	0
0300 - 0400				0	0	0
0400 - 0500				0	0	0
0500 - 0600				0	0	0
0600 - 0700				0	0	0
0700 - 0800				0	0	0
0800 - 0900				0	0	0
0900 - 1000				0	0	0
1000 - 1100				0	0	0
1100 - 1200				0	0	0
1200 - 1300				0	0	0
1300 - 1400				0	0	0
1400 - 1500				0	0	0
1500 - 1600				0	0	0
1600 - 1700				0	0	0
1700 - 1800				0	0	0
1800 - 1900				0	0	0
1900 - 2000				0	0	0
2000 - 2100				0	0	0
2100 - 2200				0	0	0
2200 - 2300				0	0	0
2300 - 2400				0	0	0

Idling Emission - Terminating HGV

Idling Time =	0	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	HGV9													HGV9												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	8				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0100 - 0200	4				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0200 - 0300	2				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0300 - 0400	2				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0400 - 0500	2				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0500 - 0600	5				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0600 - 0700	11				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0700 - 0800	24				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0800 - 0900	18				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0900 - 1000	20				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1000 - 1100	19				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1100 - 1200	20				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1200 - 1300	21				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1300 - 1400	21				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1400 - 1500	20				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1500 - 1600	21				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1600 - 1700	22				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1700 - 1800	28				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1800 - 1900	22				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1900 - 2000	17				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
2000 - 2100	15				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
2100 - 2200	15				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
2200 - 2300	14				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
2300 - 2400	11				1.16E-03	1.16E-03	1.16E-03				0.000	0.000	0.000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	200	m
Average Spread Distance outside bus terminus =	500	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)						Adjusted Start Emission within Parking Area (g)						Adjusted Start Emission outside Parking Area (g)						Start Emission Rate outside Parking Area (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
																								total				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass HGV

Idling Time =	0	min

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0100 - 0200	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0200 - 0300	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0300 - 0400	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0400 - 0500	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0500 - 0600	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0600 - 0700	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0700 - 0800	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0800 - 0900	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
0900 - 1000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1000 - 1100	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1100 - 1200	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1200 - 1300	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1300 - 1400	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1400 - 1500	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1500 - 1600	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1600 - 1700	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1700 - 1800	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1800 - 1900	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
1900 - 2000	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
2000 - 2100	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
2100 - 2200	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
2200 - 2300	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00
2300 - 2400	0				1.39E-03	1.39E-03	1.39E-03				0.00	0.00	0.00

Running Emission - Terminating HGV and Bypass HGV

The Longest Travelling Distance within bus terminus =	400	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	HGV9												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	8				0.3168	0.3168	0.2915				0.967	0.967	0.890
0100 - 0200	4				0.3168	0.3168	0.2915				0.551	0.551	0.507
0200 - 0300	2				0.3168	0.3168	0.2915				0.276	0.276	0.254
0300 - 0400	2				0.3168	0.3168	0.2915				0.231	0.231	0.212
0400 - 0500	2				0.3168	0.3168	0.2915				0.276	0.276	0.254
0500 - 0600	5				0.3168	0.3168	0.2915				0.644	0.644	0.592
0600 - 0700	11				0.3168	0.3168	0.2915				1.427	1.427	1.313
0700 - 0800	24				0.3168	0.3168	0.2915				2.991	2.991	2.752
0800 - 0900	18				0.3168	0.3168	0.2915				2.320	2.320	2.135
0900 - 1000	20				0.3168	0.3168	0.2915				2.576	2.576	2.370
1000 - 1100	19				0.3168	0.3168	0.2915				2.346	2.346	2.158
1100 - 1200	20				0.3168	0.3168	0.2915				2.485	2.485	2.287
1200 - 1300	21				0.3168	0.3168	0.2915				2.624	2.624	2.415
1300 - 1400	21				0.3168	0.3168	0.2915				2.624	2.624	2.415
1400 - 1500	20				0.3168	0.3168	0.2915				2.576	2.576	2.370
1500 - 1600	21				0.3168	0.3168	0.2915				2.624	2.624	2.415
1600 - 1700	22				0.3168	0.3168	0.2915				2.808	2.808	2.584
1700 - 1800	28				0.3168	0.3168	0.2915				3.535	3.535	3.253
1800 - 1900	22				0.3168	0.3168	0.2915				2.761	2.761	2.541
1900 - 2000	17				0.3168	0.3168	0.2915				2.117	2.117	1.948
2000 - 2100	15				0.3168	0.3168	0.2915				1.840	1.840	1.693
2100 - 2200	15				0.3168	0.3168	0.2915				1.840	1.840	1.693
2200 - 2300	14				0.3168	0.3168	0.2915				1.750	1.750	1.610
2300 - 2400	11				0.3168	0.3168	0.2915				1.427	1.427	1.313

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.967	0.967	0.890				2.69E-04	2.69E-04	2.47E-04
0100 - 0200				0.551	0.551	0.507				1.53E-04	1.53E-04	1.41E-04
0200 - 0300				0.276	0.276	0.254				7.67E-05	7.67E-05	7.06E-05
0300 - 0400				0.231	0.231	0.212				6.41E-05	6.41E-05	5.89E-05
0400 - 0500				0.276	0.276	0.254				7.67E-05	7.67E-05	7.06E-05
0500 - 0600				0.644	0.644	0.592				1.79E-04	1.79E-04	1.65E-04
0600 - 0700				1.427	1.427	1.313				3.96E-04	3.96E-04	3.65E-04
0700 - 0800				2.991	2.991	2.752				8.31E-04	8.31E-04	7.64E-04
0800 - 0900				2.320	2.320	2.135				6.45E-04	6.45E-04	5.93E-04
0900 - 1000				2.576	2.576	2.370				7.16E-04	7.16E-04	6.58E-04
1000 - 1100				2.346	2.346	2.158				6.52E-04	6.52E-04	6.00E-04
1100 - 1200				2.485	2.485	2.287				6.90E-04	6.90E-04	6.35E-04
1200 - 1300				2.624	2.624	2.415				7.29E-04	7.29E-04	6.71E-04
1300 - 1400				2.624	2.624	2.415				7.29E-04	7.29E-04	6.71E-04
1400 - 1500				2.576	2.576	2.370				7.16E-04	7.16E-04	6.58E-04
1500 - 1600				2.624	2.624	2.415				7.29E-04	7.29E-04	6.71E-04
1600 - 1700				2.808	2.808	2.584				7.80E-04	7.80E-04	7.18E-04
1700 - 1800				3.535	3.535	3.253				9.82E-04	9.82E-04	9.04E-04
1800 - 1900				2.761	2.761	2.541				7.67E-04	7.67E-04	7.06E-04
1900 - 2000				2.117	2.117	1.948				5.88E-04	5.88E-04	5.41E-04
2000 - 2100				1.840	1.840	1.693				5.11E-04	5.11E-04	4.70E-04
2100 - 2200				1.840	1.840	1.693				5.11E-04	5.11E-04	4.70E-04
2200 - 2300				1.750	1.750	1.610				4.86E-04	4.86E-04	4.47E-04
2300 - 2400				1.427	1.427	1.313				3.96E-04	3.96E-04	3.65E-04
						total				1.27E-02	1.27E-02	1.17E-02

Daily Emission Distribution

Hour	TSP	RSP	FSP
00 - 01	2%	2%	2%
01 - 02	1%	1%	1%
02 - 03	1%	1%	1%
03 - 04	1%	1%	1%
04 - 05	1%	1%	1%
05 - 06	1%	1%	1%
06 - 07	3%	3%	3%
07 - 08	7%	7%	7%
08 - 09	5%	5%	5%
09 - 10	6%	6%	6%
10 - 11	5%	5%	5%
11 - 12	5%	5%	5%
12 - 13	6%	6%	6%
13 - 14	6%	6%	6%
14 - 15	6%	6%	6%
15 - 16	6%	6%	6%
16 - 17	6%	6%	6%
17 - 18	8%	8%	8%
18 - 19	6%	6%	6%
19 - 20	5%	5%	5%
20 - 21	4%	4%	4%
21 - 22	4%	4%	4%
22 - 23	4%	4%	4%
23 - 24	3%	3%	3%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Heavy Good Vehicles >24t (HGV9) was assumed for Heavy Good Vehicles as conservative approach.

Emission Sources (Airport Island) Listing in AERMOD

Location	Source ID	Type	Coordinates		Base Elevation	Release Height [1]	Length X	Length Y	Area	Angle	Szinit	Daily Emission Rate		
			X	Y	mPD	mAG	m	m	m^2	degree	m	TSP	RSP	FSP
												g/s or $g/m^2/s$		
Planned PTI at Site A3 (FBSD & FBDD)	PTI_SKY01	AREA	811954	819822	7.0	0.25	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY02	AREA	811954	819822	7.0	0.75	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY03	AREA	811954	819822	7.0	1.25	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY04	AREA	811954	819822	7.0	1.75	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY05	AREA	811954	819822	7.0	2.25	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY06	AREA	811954	819822	7.0	2.75	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY07	AREA	811954	819822	7.0	3.25	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY08	AREA	811954	819822	7.0	3.75	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY09	AREA	811954	819822	7.0	4.25	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY10	AREA	811954	819822	7.0	4.75	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY11	AREA	811954	819822	7.0	5.25	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY12	AREA	811954	819822	7.0	5.75	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY13	AREA	811954	819822	7.0	6.25	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY14	AREA	811954	819822	7.0	6.75	19	2	38	161	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY15	AREA	811995	819699	7.0	0.25	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY16	AREA	811995	819699	7.0	0.75	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY17	AREA	811995	819699	7.0	1.25	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY18	AREA	811995	819699	7.0	1.75	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY19	AREA	811995	819699	7.0	2.25	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY20	AREA	811995	819699	7.0	2.75	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY21	AREA	811995	819699	7.0	3.25	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY22	AREA	811995	819699	7.0	3.75	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY23	AREA	811995	819699	7.0	4.25	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY24	AREA	811995	819699	7.0	4.75	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY25	AREA	811995	819699	7.0	5.25	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY26	AREA	811995	819699	7.0	5.75	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY27	AREA	811995	819699	7.0	6.25	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
	PTI_SKY28	AREA	811995	819699	7.0	6.75	28	2	56	166	-	1.58E-05	1.58E-05	1.46E-05
Planned PTI at Site A3 (NFB)	PTI_SKY31	AREA	811981	819832	7.0	0.25	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY32	AREA	811981	819832	7.0	0.75	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY33	AREA	811981	819832	7.0	1.25	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY34	AREA	811981	819832	7.0	1.75	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY35	AREA	811981	819832	7.0	2.25	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY36	AREA	811981	819832	7.0	2.75	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY37	AREA	811981	819832	7.0	3.25	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY38	AREA	811981	819832	7.0	3.75	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY39	AREA	811981	819832	7.0	4.25	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY40	AREA	811981	819832	7.0	4.75	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY41	AREA	811981	819832	7.0	5.25	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY42	AREA	811981	819832	7.0	5.75	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY43	AREA	811981	819832	7.0	6.25	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY44	AREA	811981	819832	7.0	6.75	17	2	34	161	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY45	AREA	812030	819703	7.0	0.25	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY46	AREA	812030	819703	7.0	0.75	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY47	AREA	812030	819703	7.0	1.25	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY48	AREA	812030	819703	7.0	1.75	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY49	AREA	812030	819703	7.0	2.25	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY50	AREA	812030	819703	7.0	2.75	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY51	AREA	812030	819703	7.0	3.25	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY52	AREA	812030	819703	7.0	3.75	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY53	AREA	812030	819703	7.0	4.25	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY54	AREA	812030	819703	7.0	4.75	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY55	AREA	812030	819703	7.0	5.25	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY56	AREA	812030	819703	7.0	5.75	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY57	AREA	812030	819703	7.0	6.25	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
	PTI_SKY58	AREA	812030	819703	7.0	6.75	23	2	46	179	-	9.24E-06	9.24E-06	8.55E-06
Airport (Ground Transportation Centre) Bus Terminus	PTI_GTC01	AREA_POLY	811643	819421	5.3	0	-	-	2980	-	-	4.33E-06	4.33E-06	4.00E-06
Airport (Ground Transportation Centre) Bus Terminus	PTI_GTC02	AREA	811540	819494	5.3	0	205	25	5125	71	-	1.85E-05	1.85E-05	1.71E-05
TradePort Car Park	PTI_TPC01	AREA_POLY	810954	817500	6.3	0	-	-	211	-	-	1E-05	1E-05	9.2E-06
	PTI_TPC02	AREA_POLY	810954	817500	6.3	2	-	-	211	-	-	1E-05	1E-05	9.2E-06
	PTI_TPC03	AREA_POLY	810954	817500	6.3	4	-	-	211	-	-	1E-05	1E-05	9.2E-06
	PTI_TPC04	AREA_POLY	811079	817543	6.3	0	-	-	211	-	-	1E-05	1E-05	9.2E-06
	PTI_TPC05	AREA_POLY	811079	817543	6.3	2	-	-	211	-	-	1E-05	1E-05	9.2E-06
	PTI_TPC06	AREA_POLY	811079	817543	6.3	4	-	-	211	-	-	1E-05	1E-05	9.2E-06

Remarks:

[1] Release height for emission inside bus terminus were made reference to Appendix 3.8 of the approved EIA Report AEIAR-237/2022 for Tung Chung Line Extension.

Emission Sources (Airport Island) Listing in AERMOD

No. of Coordinate	Source ID													
	PTI_GTC01		PTI_TPC01		PTI_TPC02		PTI_TPC03		PTI_TPC04		PTI_TPC05		PTI_TPC06	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
1	811643	819421	810954	817500	810954	817500	810954	817500	811079	817543	811079	817543	811079	817543
2	811620	819413	810954	817498	810954	817498	810954	817498	811080	817541	811080	817541	811080	817541
3	811647	819332	810939	817492	810939	817492	810939	817492	811095	817546	811095	817546	811095	817546
4	811665	819338	810961	817427	810961	817427	810961	817427	811117	817481	811117	817481	811117	817481
5	811683	819344	810977	817433	810977	817433	810977	817433	811102	817476	811102	817476	811102	817476
6	811670	819385	810977	817431	810977	817431	810977	817431	811102	817474	811102	817474	811102	817474
7			810960	817425	810960	817425	810960	817425	811120	817480	811120	817480	811120	817480
8			810936	817494	810936	817494	810936	817494	811096	817549	811096	817549	811096	817549

Hourly Emission Profile

	TSP					RSP					FSP				
Hour	**PTI_SKY_FB**	**PTI_SKY_NFB**	**PTI_GTC01**	**PTI_GTC02**	**PTI_TPC**	**PTI_SKY_FB**	**PTI_SKY_NFB**	**PTI_GTC01**	**PTI_GTC02**	**PTI_TPC**	**PTI_SKY_FB**	**PTI_SKY_NFB**	**PTI_GTC01**	**PTI_GTC02**	**PTI_TPC**
00 - 01	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
01 - 02	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
02 - 03	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
03 - 04	1%	1%	0%	1%	1%	1%	1%	0%	1%	1%	1%	1%	0%	1%	1%
04 - 05	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
05 - 06	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
06 - 07	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
07 - 08	7%	7%	6%	7%	7%	7%	7%	6%	7%	7%	7%	7%	6%	7%	7%
08 - 09	7%	7%	7%	7%	5%	7%	7%	7%	7%	5%	7%	7%	7%	7%	5%
09 - 10	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
10 - 11	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
12 - 13	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
13 - 14	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
14 - 15	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
15 - 16	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
16 - 17	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
17 - 18	7%	7%	6%	7%	8%	7%	7%	6%	7%	8%	7%	7%	6%	7%	8%
18 - 19	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
19 - 20	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
20 - 21	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
21 - 22	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
22 - 23	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
23 - 24	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%

HZMB Hong Kong Port PTI - Layby 5

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

	Non-franchised Buses 15-24t (NFB8) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.22	0.40	0.54	0.76	0.94	1.25	1.83	2.28	3.36	4.38	4.92	5.82	6.40	6.71	6.89	7.07	7.16	7.16
NO	0.19	0.34	0.46	0.65	0.80	1.07	1.56	1.94	2.86	3.74	4.19	4.96	5.45	5.72	5.87	6.02	6.10	6.10
NO2	0.03	0.06	0.08	0.11	0.14	0.19	0.27	0.34	0.50	0.65	0.73	0.86	0.95	0.99	1.02	1.05	1.06	1.06
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of NFB8																		Total Start Emission of FBSD & FBDD (g)					
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	NOx	NO	NO2	TSP	RSP	FSP
0000 - 0100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0100 - 0200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0200 - 0300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0300 - 0400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0400 - 0500	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0500 - 0600	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0600 - 0700	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0700 - 0800	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0800 - 0900	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0900 - 1000	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1000 - 1100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1100 - 1200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1200 - 1300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1300 - 1400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1400 - 1500	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1500 - 1600	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1600 - 1700	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1700 - 1800	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1800 - 1900	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1900 - 2000	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2000 - 2100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2100 - 2200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2200 - 2300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2300 - 2400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	NFB8													NFB8												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0100 - 0200	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0200 - 0300	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0300 - 0400	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0400 - 0500	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0500 - 0600	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0600 - 0700	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0700 - 0800	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0800 - 0900	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0900 - 1000	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1000 - 1100	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1100 - 1200	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1200 - 1300	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1300 - 1400	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1400 - 1500	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1500 - 1600	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1600 - 1700	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1700 - 1800	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1800 - 1900	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1900 - 2000	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2000 - 2100	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2100 - 2200	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2200 - 2300	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2300 - 2400	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	70	m
Average Spread Distance outside bus terminus =	630	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)						Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
																								total				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	NFB8											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	16				7.85E-04	7.85E-04	7.85E-04				0.04	0.04	0.04
0100 - 0200	9				7.85E-04	7.85E-04	7.85E-04				0.02	0.02	0.02
0200 - 0300	5				7.85E-04	7.85E-04	7.85E-04				0.01	0.01	0.01
0300 - 0400	5				7.85E-04	7.85E-04	7.85E-04				0.01	0.01	0.01
0400 - 0500	7				7.85E-04	7.85E-04	7.85E-04				0.02	0.02	0.02
0500 - 0600	12				7.85E-04	7.85E-04	7.85E-04				0.03	0.03	0.03
0600 - 0700	21				7.85E-04	7.85E-04	7.85E-04				0.05	0.05	0.05
0700 - 0800	36				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
0800 - 0900	43				7.85E-04	7.85E-04	7.85E-04				0.10	0.10	0.10
0900 - 1000	34				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1000 - 1100	30				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1100 - 1200	31				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1200 - 1300	35				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1300 - 1400	35				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1400 - 1500	35				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1500 - 1600	31				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1600 - 1700	32				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1700 - 1800	34				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1800 - 1900	33				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1900 - 2000	29				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
2000 - 2100	25				7.85E-04	7.85E-04	7.85E-04				0.06	0.06	0.06
2100 - 2200	25				7.85E-04	7.85E-04	7.85E-04				0.06	0.06	0.06
2200 - 2300	25				7.85E-04	7.85E-04	7.85E-04				0.06	0.06	0.06
2300 - 2400	22				7.85E-04	7.85E-04	7.85E-04				0.05	0.05	0.05

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	140	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	Frequency	NFB8											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	18				0.2972	0.2972	0.2735				0.749	0.749	0.689
0100 - 0200	11				0.2972	0.2972	0.2735				0.458	0.458	0.421
0200 - 0300	7				0.2972	0.2972	0.2735				0.291	0.291	0.268
0300 - 0400	7				0.2972	0.2972	0.2735				0.291	0.291	0.268
0400 - 0500	9				0.2972	0.2972	0.2735				0.374	0.374	0.345
0500 - 0600	14				0.2972	0.2972	0.2735				0.583	0.583	0.536
0600 - 0700	23				0.2972	0.2972	0.2735				0.957	0.957	0.881
0700 - 0800	38				0.2972	0.2972	0.2735				1.581	1.581	1.455
0800 - 0900	45				0.2972	0.2972	0.2735				1.872	1.872	1.723
0900 - 1000	36				0.2972	0.2972	0.2735				1.498	1.498	1.378
1000 - 1100	32				0.2972	0.2972	0.2735				1.331	1.331	1.225
1100 - 1200	33				0.2972	0.2972	0.2735				1.373	1.373	1.264
1200 - 1300	37				0.2972	0.2972	0.2735				1.539	1.539	1.417
1300 - 1400	37				0.2972	0.2972	0.2735				1.539	1.539	1.417
1400 - 1500	37				0.2972	0.2972	0.2735				1.539	1.539	1.417
1500 - 1600	33				0.2972	0.2972	0.2735				1.373	1.373	1.264
1600 - 1700	34				0.2972	0.2972	0.2735				1.415	1.415	1.302
1700 - 1800	36				0.2972	0.2972	0.2735				1.498	1.498	1.378
1800 - 1900	35				0.2972	0.2972	0.2735				1.456	1.456	1.340
1900 - 2000	31				0.2972	0.2972	0.2735				1.290	1.290	1.187
2000 - 2100	27				0.2972	0.2972	0.2735				1.123	1.123	1.034
2100 - 2200	27				0.2972	0.2972	0.2735				1.123	1.123	1.034
2200 - 2300	27				0.2972	0.2972	0.2735				1.123	1.123	1.034
2300 - 2400	24				0.2972	0.2972	0.2735				0.999	0.999	0.919

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.791	0.791	0.732				2.20E-04	2.20E-04	2.03E-04
0100 - 0200				0.484	0.484	0.447				1.34E-04	1.34E-04	1.24E-04
0200 - 0300				0.308	0.308	0.285				8.55E-05	8.55E-05	7.90E-05
0300 - 0400				0.308	0.308	0.285				8.55E-05	8.55E-05	7.90E-05
0400 - 0500				0.396	0.396	0.366				1.10E-04	1.10E-04	1.02E-04
0500 - 0600				0.615	0.615	0.569				1.71E-04	1.71E-04	1.58E-04
0600 - 0700				1.011	1.011	0.935				2.81E-04	2.81E-04	2.60E-04
0700 - 0800				1.671	1.671	1.545				4.64E-04	4.64E-04	4.29E-04
0800 - 0900				1.978	1.978	1.829				5.50E-04	5.50E-04	5.08E-04
0900 - 1000				1.583	1.583	1.463				4.40E-04	4.40E-04	4.06E-04
1000 - 1100				1.407	1.407	1.301				3.91E-04	3.91E-04	3.61E-04
1100 - 1200				1.451	1.451	1.341				4.03E-04	4.03E-04	3.73E-04
1200 - 1300				1.627	1.627	1.504				4.52E-04	4.52E-04	4.18E-04
1300 - 1400				1.627	1.627	1.504				4.52E-04	4.52E-04	4.18E-04
1400 - 1500				1.627	1.627	1.504				4.52E-04	4.52E-04	4.18E-04
1500 - 1600				1.451	1.451	1.341				4.03E-04	4.03E-04	3.73E-04
1600 - 1700				1.495	1.495	1.382				4.15E-04	4.15E-04	3.84E-04
1700 - 1800				1.583	1.583	1.463				4.40E-04	4.40E-04	4.06E-04
1800 - 1900				1.539	1.539	1.423				4.27E-04	4.27E-04	3.95E-04
1900 - 2000				1.363	1.363	1.260				3.79E-04	3.79E-04	3.50E-04
2000 - 2100				1.187	1.187	1.097				3.30E-04	3.30E-04	3.05E-04
2100 - 2200				1.187	1.187	1.097				3.30E-04	3.30E-04	3.05E-04
2200 - 2300				1.187	1.187	1.097				3.30E-04	3.30E-04	3.05E-04
2300 - 2400				1.055	1.055	0.976				2.93E-04	2.93E-04	2.71E-04
					total					8.04E-03	8.04E-03	7.43E-03

Daily Emission Distribution

Hour	TSP	RSP	FSP
00 - 01	3%	3%	3%
01 - 02	2%	2%	2%
02 - 03	1%	1%	1%
03 - 04	1%	1%	1%
04 - 05	1%	1%	1%
05 - 06	2%	2%	2%
06 - 07	3%	3%	3%
07 - 08	6%	6%	6%
08 - 09	7%	7%	7%
09 - 10	5%	5%	5%
10 - 11	5%	5%	5%
11 - 12	5%	5%	5%
12 - 13	6%	6%	6%
13 - 14	6%	6%	6%
14 - 15	6%	6%	6%
15 - 16	5%	5%	5%
16 - 17	5%	5%	5%
17 - 18	5%	5%	5%
18 - 19	5%	5%	5%
19 - 20	5%	5%	5%
20 - 21	4%	4%	4%
21 - 22	4%	4%	4%
22 - 23	4%	4%	4%
23 - 24	4%	4%	4%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

HZMB Hong Kong Port PTI - Layby 6

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Non-franchised Buses 15-24t (NFB8) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.22	0.40	0.54	0.76	0.94	1.25	1.83	2.28	3.36	4.38	4.92	5.82	6.40	6.71	6.89	7.07	7.16	7.16
NO	0.19	0.34	0.46	0.65	0.80	1.07	1.56	1.94	2.86	3.74	4.19	4.96	5.45	5.72	5.87	6.02	6.10	6.10
NO2	0.03	0.06	0.08	0.11	0.14	0.19	0.27	0.34	0.50	0.65	0.73	0.86	0.95	0.99	1.02	1.05	1.06	1.06
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of NFB8																		Total Start Emission of NFB8 (g)					
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	NOx	NO	NO2	TSP	RSP	FSP
0000 - 0100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0100 - 0200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0200 - 0300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0300 - 0400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0400 - 0500	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0500 - 0600	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0600 - 0700	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0700 - 0800	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0800 - 0900	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0900 - 1000	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1000 - 1100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1100 - 1200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1200 - 1300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1300 - 1400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1400 - 1500	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1500 - 1600	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1600 - 1700	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1700 - 1800	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1800 - 1900	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1900 - 2000	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2000 - 2100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2100 - 2200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2200 - 2300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2300 - 2400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

NFB8

Hour	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0100 - 0200	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0200 - 0300	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0300 - 0400	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0400 - 0500	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0500 - 0600	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0600 - 0700	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0700 - 0800	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0800 - 0900	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0900 - 1000	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1000 - 1100	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1100 - 1200	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1200 - 1300	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1300 - 1400	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1400 - 1500	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1500 - 1600	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1600 - 1700	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1700 - 1800	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1800 - 1900	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1900 - 2000	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
2000 - 2100	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
2100 - 2200	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
2200 - 2300	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
2300 - 2400	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005

NFB8

Hour	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0100 - 0200	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0200 - 0300	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0300 - 0400	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0400 - 0500	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0500 - 0600	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0600 - 0700	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0700 - 0800	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0800 - 0900	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0900 - 1000	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1000 - 1100	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1100 - 1200	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1200 - 1300	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1300 - 1400	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1400 - 1500	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1500 - 1600	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1600 - 1700	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1700 - 1800	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1800 - 1900	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1900 - 2000	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2000 - 2100	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2100 - 2200	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2200 - 2300	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2300 - 2400	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	70	m
Average Spread Distance outside bus terminus =	630	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00

Hour	Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
												total				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	NFB8											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	16				7.85E-04	7.85E-04	7.85E-04				0.04	0.04	0.04
0100 - 0200	9				7.85E-04	7.85E-04	7.85E-04				0.02	0.02	0.02
0200 - 0300	5				7.85E-04	7.85E-04	7.85E-04				0.01	0.01	0.01
0300 - 0400	5				7.85E-04	7.85E-04	7.85E-04				0.01	0.01	0.01
0400 - 0500	7				7.85E-04	7.85E-04	7.85E-04				0.02	0.02	0.02
0500 - 0600	12				7.85E-04	7.85E-04	7.85E-04				0.03	0.03	0.03
0600 - 0700	21				7.85E-04	7.85E-04	7.85E-04				0.05	0.05	0.05
0700 - 0800	36				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
0800 - 0900	43				7.85E-04	7.85E-04	7.85E-04				0.10	0.10	0.10
0900 - 1000	34				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1000 - 1100	30				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1100 - 1200	31				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1200 - 1300	35				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1300 - 1400	35				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1400 - 1500	35				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1500 - 1600	31				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1600 - 1700	32				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1700 - 1800	34				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1800 - 1900	33				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1900 - 2000	29				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
2000 - 2100	25				7.85E-04	7.85E-04	7.85E-04				0.06	0.06	0.06
2100 - 2200	25				7.85E-04	7.85E-04	7.85E-04				0.06	0.06	0.06
2200 - 2300	25				7.85E-04	7.85E-04	7.85E-04				0.06	0.06	0.06
2300 - 2400	22				7.85E-04	7.85E-04	7.85E-04				0.05	0.05	0.05

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	140	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	Frequency	NFB8											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	18				0.2972	0.2972	0.2735				0.749	0.749	0.689
0100 - 0200	11				0.2972	0.2972	0.2735				0.458	0.458	0.421
0200 - 0300	7				0.2972	0.2972	0.2735				0.291	0.291	0.268
0300 - 0400	7				0.2972	0.2972	0.2735				0.291	0.291	0.268
0400 - 0500	9				0.2972	0.2972	0.2735				0.374	0.374	0.345
0500 - 0600	14				0.2972	0.2972	0.2735				0.583	0.583	0.536
0600 - 0700	23				0.2972	0.2972	0.2735				0.957	0.957	0.881
0700 - 0800	38				0.2972	0.2972	0.2735				1.581	1.581	1.455
0800 - 0900	45				0.2972	0.2972	0.2735				1.872	1.872	1.723
0900 - 1000	36				0.2972	0.2972	0.2735				1.498	1.498	1.378
1000 - 1100	32				0.2972	0.2972	0.2735				1.331	1.331	1.225
1100 - 1200	33				0.2972	0.2972	0.2735				1.373	1.373	1.264
1200 - 1300	37				0.2972	0.2972	0.2735				1.539	1.539	1.417
1300 - 1400	37				0.2972	0.2972	0.2735				1.539	1.539	1.417
1400 - 1500	37				0.2972	0.2972	0.2735				1.539	1.539	1.417
1500 - 1600	33				0.2972	0.2972	0.2735				1.373	1.373	1.264
1600 - 1700	34				0.2972	0.2972	0.2735				1.415	1.415	1.302
1700 - 1800	36				0.2972	0.2972	0.2735				1.498	1.498	1.378
1800 - 1900	35				0.2972	0.2972	0.2735				1.456	1.456	1.340
1900 - 2000	31				0.2972	0.2972	0.2735				1.290	1.290	1.187
2000 - 2100	27				0.2972	0.2972	0.2735				1.123	1.123	1.034
2100 - 2200	27				0.2972	0.2972	0.2735				1.123	1.123	1.034
2200 - 2300	27				0.2972	0.2972	0.2735				1.123	1.123	1.034
2300 - 2400	24				0.2972	0.2972	0.2735				0.999	0.999	0.919

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.791	0.791	0.732				2.20E-04	2.20E-04	2.03E-04
0100 - 0200				0.484	0.484	0.447				1.34E-04	1.34E-04	1.24E-04
0200 - 0300				0.308	0.308	0.285				8.55E-05	8.55E-05	7.90E-05
0300 - 0400				0.308	0.308	0.285				8.55E-05	8.55E-05	7.90E-05
0400 - 0500				0.396	0.396	0.366				1.10E-04	1.10E-04	1.02E-04
0500 - 0600				0.615	0.615	0.569				1.71E-04	1.71E-04	1.58E-04
0600 - 0700				1.011	1.011	0.935				2.81E-04	2.81E-04	2.60E-04
0700 - 0800				1.671	1.671	1.545				4.64E-04	4.64E-04	4.29E-04
0800 - 0900				1.978	1.978	1.829				5.50E-04	5.50E-04	5.08E-04
0900 - 1000				1.583	1.583	1.463				4.40E-04	4.40E-04	4.06E-04
1000 - 1100				1.407	1.407	1.301				3.91E-04	3.91E-04	3.61E-04
1100 - 1200				1.451	1.451	1.341				4.03E-04	4.03E-04	3.73E-04
1200 - 1300				1.627	1.627	1.504				4.52E-04	4.52E-04	4.18E-04
1300 - 1400				1.627	1.627	1.504				4.52E-04	4.52E-04	4.18E-04
1400 - 1500				1.627	1.627	1.504				4.52E-04	4.52E-04	4.18E-04
1500 - 1600				1.451	1.451	1.341				4.03E-04	4.03E-04	3.73E-04
1600 - 1700				1.495	1.495	1.382				4.15E-04	4.15E-04	3.84E-04
1700 - 1800				1.583	1.583	1.463				4.40E-04	4.40E-04	4.06E-04
1800 - 1900				1.539	1.539	1.423				4.27E-04	4.27E-04	3.95E-04
1900 - 2000				1.363	1.363	1.260				3.79E-04	3.79E-04	3.50E-04
2000 - 2100				1.187	1.187	1.097				3.30E-04	3.30E-04	3.05E-04
2100 - 2200				1.187	1.187	1.097				3.30E-04	3.30E-04	3.05E-04
2200 - 2300				1.187	1.187	1.097				3.30E-04	3.30E-04	3.05E-04
2300 - 2400				1.055	1.055	0.976				2.93E-04	2.93E-04	2.71E-04
					total					8.04E-03	8.04E-03	7.43E-03

Daily Emission Distribution

Hour	TSP	RSP	FSP
00 - 01	3%	3%	3%
01 - 02	2%	2%	2%
02 - 03	1%	1%	1%
03 - 04	1%	1%	1%
04 - 05	1%	1%	1%
05 - 06	2%	2%	2%
06 - 07	3%	3%	3%
07 - 08	6%	6%	6%
08 - 09	7%	7%	7%
09 - 10	5%	5%	5%
10 - 11	5%	5%	5%
11 - 12	5%	5%	5%
12 - 13	6%	6%	6%
13 - 14	6%	6%	6%
14 - 15	6%	6%	6%
15 - 16	5%	5%	5%
16 - 17	5%	5%	5%
17 - 18	5%	5%	5%
18 - 19	5%	5%	5%
19 - 20	5%	5%	5%
20 - 21	4%	4%	4%
21 - 22	4%	4%	4%
22 - 23	4%	4%	4%
23 - 24	4%	4%	4%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

HZMB Hong Kong Port PTI - Layby 7

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
	5	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
NOx	0.35	0.63	0.84	1.19	1.47	1.96	2.87	3.57	5.24	6.85	7.69	9.09	10.00	10.49	10.77	11.05	11.19	11.19
NO	0.33	0.59	0.78	1.11	1.37	1.83	2.68	3.33	4.90	6.40	7.19	8.49	9.34	9.80	10.06	10.32	10.45	10.45
NO2	0.02	0.04	0.06	0.08	0.10	0.13	0.19	0.23	0.34	0.45	0.51	0.60	0.66	0.69	0.71	0.73	0.74	0.74
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of FBSD																	
	5	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBSD (g)					
NOx	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

FBSD (Cold Idling)

Hour	Frequency	Cold Idling Emission Factor (g/min) NOx	NO	NO_2	TSP	RSP	FSP	Cold Idling Emission (g) NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0900 - 1000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1000 - 1100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1100 - 1200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1200 - 1300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1300 - 1400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1400 - 1500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1500 - 1600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1600 - 1700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1700 - 1800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1800 - 1900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1900 - 2000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

FBSD (Hot Idling)

Hour	Frequency	Hot Idling Emission Factor (g/min) NOx	NO	NO_2	TSP	RSP	FSP	Hot Idling Emission (g) NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0900 - 1000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1000 - 1100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1100 - 1200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1200 - 1300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1300 - 1400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1400 - 1500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1500 - 1600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1600 - 1700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1700 - 1800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1800 - 1900	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1900 - 2000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	163	m
Average Spread Distance outside bus terminus =	537	m

Hour	Total Idling Emission (g) NOx	NO	NO_2	TSP	RSP	FSP	Idling Emission for Start Emission Adjustment (g) NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00
0600 - 0700				0.01	0.01	0.01				0.00	0.00	0.00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00

Hour	Adjusted Start Emission within Loading and Unloading Area (g) NOx	NO	NO_2	TSP	RSP	FSP	Adjusted Start Emission outside PTI (g) NOx	NO	NO_2	TSP	RSP	FSP	Start Emission Rate outside PTI (g/s) NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
												total				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	FBSD											
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0900 - 1000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1000 - 1100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1100 - 1200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1200 - 1300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1300 - 1400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1400 - 1500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1500 - 1600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1600 - 1700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1700 - 1800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1800 - 1900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1900 - 2000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	FBSD											
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0100 - 0200	1				0.2265	0.2265	0.2084				0.074	0.074	0.068
0200 - 0300	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0300 - 0400	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0400 - 0500	1				0.2265	0.2265	0.2084				0.074	0.074	0.068
0500 - 0600	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0600 - 0700	2				0.2265	0.2265	0.2084				0.148	0.148	0.136
0700 - 0800	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0800 - 0900	1				0.2265	0.2265	0.2084				0.074	0.074	0.068
0900 - 1000	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1000 - 1100	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1100 - 1200	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1200 - 1300	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1300 - 1400	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1400 - 1500	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1500 - 1600	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1600 - 1700	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1700 - 1800	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1800 - 1900	1				0.2265	0.2265	0.2084				0.074	0.074	0.068
1900 - 2000	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
2000 - 2100	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
2100 - 2200	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
2200 - 2300	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
2300 - 2400	1				0.2265	0.2265	0.2084				0.074	0.074	0.068

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.079	0.079	0.073				2.18E-05	2.18E-05	2.02E-05
0200 - 0300				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.079	0.079	0.073				2.18E-05	2.18E-05	2.02E-05
0500 - 0600				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.157	0.157	0.145				4.37E-05	4.37E-05	4.04E-05
0700 - 0800				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.079	0.079	0.073				2.18E-05	2.18E-05	2.02E-05
0900 - 1000				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.079	0.079	0.073				2.18E-05	2.18E-05	2.02E-05
1900 - 2000				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.079	0.079	0.073				2.18E-05	2.18E-05	2.02E-05
				total						1.53E-04	1.53E-04	1.41E-04

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

HZMB Hong Kong Port PTI - Layby 7

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.77	1.39	1.85	2.62	3.23	4.31	6.32	7.86	11.55	15.09	16.94	20.02	22.03	23.10	23.72	24.34	24.64	24.64
NO	0.72	1.30	1.74	2.46	3.04	4.06	5.94	7.39	10.87	14.21	15.95	18.85	20.73	21.75	22.33	22.91	23.20	23.20
NO2	0.05	0.08	0.11	0.15	0.19	0.25	0.37	0.46	0.68	0.89	1.00	1.18	1.29	1.36	1.39	1.43	1.45	1.45
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of FBDD																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0700 - 0800	0	2	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
0800 - 0900	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBDD (g)					
NOx	NO	NO2	TSP	RSP	FSP
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBDD												FBDD											
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0100 - 0200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0200 - 0300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0400 - 0500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0500 - 0600	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0600 - 0700	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0700 - 0800	2				1.97E-03	1.97E-03	1.97E-03				0.012	0.012	0.012	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0800 - 0900	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0900 - 1000	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1000 - 1100	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1100 - 1200	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1200 - 1300	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1300 - 1400	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1400 - 1500	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1500 - 1600	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1600 - 1700	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1700 - 1800	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1800 - 1900	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1900 - 2000	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
2000 - 2100	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
2100 - 2200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
2200 - 2300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
2300 - 2400	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01

Average Distance from Starting Place to Egress =	163	m
Average Spread Distance outside bus terminus =	537	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.02	0.02	0.02				0.01	0.01	0.01
0100 - 0200				0.01	0.01	0.01				0.00	0.00	0.00
0200 - 0300				0.01	0.01	0.01				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.02	0.02	0.02				0.01	0.01	0.01
0500 - 0600				0.01	0.01	0.01				0.00	0.00	0.00
0600 - 0700				0.01	0.01	0.01				0.00	0.00	0.00
0700 - 0800				0.03	0.03	0.03				0.01	0.01	0.01
0800 - 0900				0.02	0.02	0.02				0.01	0.01	0.01
0900 - 1000				0.02	0.02	0.02				0.01	0.01	0.01
1000 - 1100				0.03	0.03	0.03				0.01	0.01	0.01
1100 - 1200				0.02	0.02	0.02				0.01	0.01	0.01
1200 - 1300				0.03	0.03	0.03				0.01	0.01	0.01
1300 - 1400				0.03	0.03	0.03				0.01	0.01	0.01
1400 - 1500				0.03	0.03	0.03				0.01	0.01	0.01
1500 - 1600				0.03	0.03	0.03				0.01	0.01	0.01
1600 - 1700				0.03	0.03	0.03				0.01	0.01	0.01
1700 - 1800				0.03	0.03	0.03				0.01	0.01	0.01
1800 - 1900				0.03	0.03	0.03				0.01	0.01	0.01
1900 - 2000				0.02	0.02	0.02				0.01	0.01	0.01
2000 - 2100				0.03	0.03	0.03				0.01	0.01	0.01
2100 - 2200				0.02	0.02	0.02				0.01	0.01	0.01
2200 - 2300				0.02	0.02	0.02				0.01	0.01	0.01
2300 - 2400				0.02	0.02	0.02				0.01	0.01	0.01

Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
										total					0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0100 - 0200	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0200 - 0300	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0300 - 0400	1				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0400 - 0500	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0500 - 0600	5				1.97E-03	1.97E-03	1.97E-03				0.03	0.03	0.03
0600 - 0700	10				1.97E-03	1.97E-03	1.97E-03				0.06	0.06	0.06
0700 - 0800	10				1.97E-03	1.97E-03	1.97E-03				0.06	0.06	0.06
0800 - 0900	10				1.97E-03	1.97E-03	1.97E-03				0.06	0.06	0.06
0900 - 1000	11				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
1000 - 1100	10				1.97E-03	1.97E-03	1.97E-03				0.06	0.06	0.06
1100 - 1200	13				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
1200 - 1300	14				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
1300 - 1400	14				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
1400 - 1500	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
1500 - 1600	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
1600 - 1700	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
1700 - 1800	13				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
1800 - 1900	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
1900 - 2000	13				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
2000 - 2100	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
2100 - 2200	13				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
2200 - 2300	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
2300 - 2400	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	FBDD												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	7				0.4467	0.4467	0.4109				0.947	0.947	0.871
0100 - 0200	4				0.4467	0.4467	0.4109				0.582	0.582	0.536
0200 - 0300	3				0.4467	0.4467	0.4109				0.364	0.364	0.335
0300 - 0400	1				0.4467	0.4467	0.4109				0.073	0.073	0.067
0400 - 0500	6				0.4467	0.4467	0.4109				0.801	0.801	0.737
0500 - 0600	7				0.4467	0.4467	0.4109				1.019	1.019	0.938
0600 - 0700	12				0.4467	0.4467	0.4109				1.675	1.675	1.540
0700 - 0800	15				0.4467	0.4467	0.4109				2.112	2.112	1.942
0800 - 0900	14				0.4467	0.4467	0.4109				1.966	1.966	1.808
0900 - 1000	15				0.4467	0.4467	0.4109				2.184	2.184	2.009
1000 - 1100	15				0.4467	0.4467	0.4109				2.184	2.184	2.009
1100 - 1200	17				0.4467	0.4467	0.4109				2.476	2.476	2.277
1200 - 1300	19				0.4467	0.4467	0.4109				2.694	2.694	2.478
1300 - 1400	19				0.4467	0.4467	0.4109				2.767	2.767	2.545
1400 - 1500	17				0.4467	0.4467	0.4109				2.476	2.476	2.277
1500 - 1600	17				0.4467	0.4467	0.4109				2.403	2.403	2.210
1600 - 1700	17				0.4467	0.4467	0.4109				2.403	2.403	2.210
1700 - 1800	18				0.4467	0.4467	0.4109				2.548	2.548	2.344
1800 - 1900	17				0.4467	0.4467	0.4109				2.476	2.476	2.277
1900 - 2000	17				0.4467	0.4467	0.4109				2.403	2.403	2.210
2000 - 2100	17				0.4467	0.4467	0.4109				2.476	2.476	2.277
2100 - 2200	17				0.4467	0.4467	0.4109				2.476	2.476	2.277
2200 - 2300	15				0.4467	0.4467	0.4109				2.184	2.184	2.009
2300 - 2400	15				0.4467	0.4467	0.4109				2.112	2.112	1.942

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.985	0.985	0.909				2.74E-04	2.74E-04	2.53E-04
0100 - 0200				0.606	0.606	0.559				1.68E-04	1.68E-04	1.55E-04
0200 - 0300				0.379	0.379	0.350				1.05E-04	1.05E-04	9.71E-05
0300 - 0400				0.076	0.076	0.070				2.10E-05	2.10E-05	1.94E-05
0400 - 0500				0.833	0.833	0.769				2.32E-04	2.32E-04	2.14E-04
0500 - 0600				1.061	1.061	0.979				2.95E-04	2.95E-04	2.72E-04
0600 - 0700				1.743	1.743	1.609				4.84E-04	4.84E-04	4.47E-04
0700 - 0800				2.197	2.197	2.028				6.10E-04	6.10E-04	5.63E-04
0800 - 0900				2.046	2.046	1.888				5.68E-04	5.68E-04	5.25E-04
0900 - 1000				2.273	2.273	2.098				6.31E-04	6.31E-04	5.83E-04
1000 - 1100				2.273	2.273	2.098				6.31E-04	6.31E-04	5.83E-04
1100 - 1200				2.576	2.576	2.378				7.16E-04	7.16E-04	6.61E-04
1200 - 1300				2.804	2.804	2.588				7.79E-04	7.79E-04	7.19E-04
1300 - 1400				2.879	2.879	2.658				8.00E-04	8.00E-04	7.38E-04
1400 - 1500				2.576	2.576	2.378				7.16E-04	7.16E-04	6.61E-04
1500 - 1600				2.500	2.500	2.308				6.95E-04	6.95E-04	6.41E-04
1600 - 1700				2.500	2.500	2.308				6.95E-04	6.95E-04	6.41E-04
1700 - 1800				2.652	2.652	2.448				7.37E-04	7.37E-04	6.80E-04
1800 - 1900				2.576	2.576	2.378				7.16E-04	7.16E-04	6.61E-04
1900 - 2000				2.500	2.500	2.308				6.95E-04	6.95E-04	6.41E-04
2000 - 2100				2.576	2.576	2.378				7.16E-04	7.16E-04	6.61E-04
2100 - 2200				2.576	2.576	2.378				7.16E-04	7.16E-04	6.61E-04
2200 - 2300				2.273	2.273	2.098				6.31E-04	6.31E-04	5.83E-04
2300 - 2400				2.197	2.197	2.028				6.10E-04	6.10E-04	5.63E-04
						total				1.32E-02	1.32E-02	1.22E-02

Daily Emission Distribution

Hour	TSP	RSP	FSP
00 - 01	2%	2%	2%
01 - 02	1%	1%	1%
02 - 03	1%	1%	1%
03 - 04	0%	0%	0%
04 - 05	2%	2%	2%
05 - 06	2%	2%	2%
06 - 07	4%	4%	4%
07 - 08	5%	5%	5%
08 - 09	4%	4%	4%
09 - 10	5%	5%	5%
10 - 11	5%	5%	5%
11 - 12	5%	5%	5%
12 - 13	6%	6%	6%
13 - 14	6%	6%	6%
14 - 15	5%	5%	5%
15 - 16	5%	5%	5%
16 - 17	5%	5%	5%
17 - 18	6%	6%	6%
18 - 19	6%	6%	6%
19 - 20	5%	5%	5%
20 - 21	5%	5%	5%
21 - 22	5%	5%	5%
22 - 23	5%	5%	5%
23 - 24	5%	5%	5%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

HZMB Hong Kong Port PTI - Layby 8

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
NOx	0.35	0.63	0.84	1.19	1.47	1.96	2.87	3.57	5.24	6.85	7.69	9.09	10.00	10.49	10.77	11.05	11.19	11.19
NO	0.33	0.59	0.78	1.11	1.37	1.83	2.68	3.33	4.90	6.40	7.19	8.49	9.34	9.80	10.06	10.32	10.45	10.45
NO2	0.02	0.04	0.06	0.08	0.10	0.13	0.19	0.23	0.34	0.45	0.51	0.60	0.66	0.69	0.71	0.73	0.74	0.74
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	NOx	NO	NO2	TSP	RSP	FSP
	No. of Trips of FBSD																		Total Start Emission of FBSD (g)					
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0100 - 0200	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0400 - 0500	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0600 - 0700	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0				0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0800 - 0900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0900 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1000 - 1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1800 - 1900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2300 - 2400	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0900 - 1000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1000 - 1100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1100 - 1200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1200 - 1300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1300 - 1400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1400 - 1500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1500 - 1600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1600 - 1700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1700 - 1800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1800 - 1900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1900 - 2000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

Hour	FBSD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0900 - 1000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1000 - 1100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1100 - 1200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1200 - 1300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1300 - 1400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1400 - 1500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1500 - 1600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1600 - 1700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1700 - 1800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1800 - 1900	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1900 - 2000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	163	m
Average Spread Distance outside bus terminus =	537	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00
0600 - 0700				0.01	0.01	0.01				0.00	0.00	0.00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00

Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
											total				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	FBSD											
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0900 - 1000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1000 - 1100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1100 - 1200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1200 - 1300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1300 - 1400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1400 - 1500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1500 - 1600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1600 - 1700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1700 - 1800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1800 - 1900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1900 - 2000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	FBSD											
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0100 - 0200	1				0.2265	0.2265	0.2084				0.074	0.074	0.068
0200 - 0300	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0300 - 0400	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0400 - 0500	1				0.2265	0.2265	0.2084				0.074	0.074	0.068
0500 - 0600	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0600 - 0700	2				0.2265	0.2265	0.2084				0.148	0.148	0.136
0700 - 0800	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0800 - 0900	1				0.2265	0.2265	0.2084				0.074	0.074	0.068
0900 - 1000	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1000 - 1100	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1100 - 1200	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1200 - 1300	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1300 - 1400	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1400 - 1500	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1500 - 1600	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1600 - 1700	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1700 - 1800	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
1800 - 1900	1				0.2265	0.2265	0.2084				0.074	0.074	0.068
1900 - 2000	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
2000 - 2100	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
2100 - 2200	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
2200 - 2300	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
2300 - 2400	1				0.2265	0.2265	0.2084				0.074	0.074	0.068

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.079	0.079	0.073				2.18E-05	2.18E-05	2.02E-05
0200 - 0300				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.079	0.079	0.073				2.18E-05	2.18E-05	2.02E-05
0500 - 0600				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.157	0.157	0.145				4.37E-05	4.37E-05	4.04E-05
0700 - 0800				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.079	0.079	0.073				2.18E-05	2.18E-05	2.02E-05
0900 - 1000				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.079	0.079	0.073				2.18E-05	2.18E-05	2.02E-05
1900 - 2000				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.079	0.079	0.073				2.18E-05	2.18E-05	2.02E-05
				total						1.53E-04	1.53E-04	1.41E-04

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

HZMB Hong Kong Port PTI - Layby 8

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.77	1.39	1.85	2.62	3.23	4.31	6.32	7.86	11.55	15.09	16.94	20.02	22.03	23.10	23.72	24.34	24.64	24.64
NO	0.72	1.30	1.74	2.46	3.04	4.06	5.94	7.39	10.87	14.21	15.95	18.85	20.73	21.75	22.33	22.91	23.20	23.20
NO2	0.05	0.08	0.11	0.15	0.19	0.25	0.37	0.46	0.68	0.89	1.00	1.18	1.29	1.36	1.39	1.43	1.45	1.45
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of FBDD																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0700 - 0800	0	2	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
0800 - 0900	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0

Hour	Total Start Emission of FBDD (g)					
	NOx	NO	NO2	TSP	RSP	FSP
0000 - 0100				0	0	0
0100 - 0200				0	0	0
0200 - 0300				0	0	0
0300 - 0400				0	0	0
0400 - 0500				0	0	0
0500 - 0600				0	0	0
0600 - 0700				0	0	0
0700 - 0800				0	0	0
0800 - 0900				0	0	0
0900 - 1000				0	0	0
1000 - 1100				0	0	0
1100 - 1200				0	0	0
1200 - 1300				0	0	0
1300 - 1400				0	0	0
1400 - 1500				0	0	0
1500 - 1600				0	0	0
1600 - 1700				0	0	0
1700 - 1800				0	0	0
1800 - 1900				0	0	0
1900 - 2000				0	0	0
2000 - 2100				0	0	0
2100 - 2200				0	0	0
2200 - 2300				0	0	0
2300 - 2400				0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBDD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0100 - 0200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0200 - 0300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0400 - 0500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0500 - 0600	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
0600 - 0700	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
0700 - 0800	2				1.97E-03	1.97E-03	1.97E-03				0.012	0.012	0.012
0800 - 0900	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0900 - 1000	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1000 - 1100	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
1100 - 1200	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
1200 - 1300	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
1300 - 1400	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
1400 - 1500	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
1500 - 1600	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
1600 - 1700	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
1700 - 1800	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
1800 - 1900	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
1900 - 2000	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
2000 - 2100	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006
2100 - 2200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
2200 - 2300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
2300 - 2400	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0100 - 0200	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0200 - 0300	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0400 - 0500	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0500 - 0600	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0600 - 0700	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0700 - 0800	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0800 - 0900	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0900 - 1000	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1000 - 1100	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1100 - 1200	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1200 - 1300	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1300 - 1400	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1400 - 1500	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1500 - 1600	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1600 - 1700	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1700 - 1800	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1800 - 1900	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1900 - 2000	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
2000 - 2100	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
2100 - 2200	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
2200 - 2300	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
2300 - 2400	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01

Average Distance from Starting Place to Egress =	163	m
Average Spread Distance outside bus terminus =	537	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.02	0.02	0.02				0.01	0.01	0.01
0100 - 0200				0.01	0.01	0.01				0.00	0.00	0.00
0200 - 0300				0.01	0.01	0.01				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.02	0.02	0.02				0.01	0.01	0.01
0500 - 0600				0.01	0.01	0.01				0.00	0.00	0.00
0600 - 0700				0.01	0.01	0.01				0.00	0.00	0.00
0700 - 0800				0.03	0.03	0.03				0.01	0.01	0.01
0800 - 0900				0.02	0.02	0.02				0.01	0.01	0.01
0900 - 1000				0.02	0.02	0.02				0.01	0.01	0.01
1000 - 1100				0.03	0.03	0.03				0.01	0.01	0.01
1100 - 1200				0.02	0.02	0.02				0.01	0.01	0.01
1200 - 1300				0.03	0.03	0.03				0.01	0.01	0.01
1300 - 1400				0.03	0.03	0.03				0.01	0.01	0.01
1400 - 1500				0.03	0.03	0.03				0.01	0.01	0.01
1500 - 1600				0.03	0.03	0.03				0.01	0.01	0.01
1600 - 1700				0.03	0.03	0.03				0.01	0.01	0.01
1700 - 1800				0.03	0.03	0.03				0.01	0.01	0.01
1800 - 1900				0.03	0.03	0.03				0.01	0.01	0.01
1900 - 2000				0.02	0.02	0.02				0.01	0.01	0.01
2000 - 2100				0.03	0.03	0.03				0.01	0.01	0.01
2100 - 2200				0.02	0.02	0.02				0.01	0.01	0.01
2200 - 2300				0.02	0.02	0.02				0.01	0.01	0.01
2300 - 2400				0.02	0.02	0.02				0.01	0.01	0.01

Hour	Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
												total				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0100 - 0200	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0200 - 0300	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0300 - 0400	1				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0400 - 0500	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0500 - 0600	5				1.97E-03	1.97E-03	1.97E-03				0.03	0.03	0.03
0600 - 0700	10				1.97E-03	1.97E-03	1.97E-03				0.06	0.06	0.06
0700 - 0800	10				1.97E-03	1.97E-03	1.97E-03				0.06	0.06	0.06
0800 - 0900	10				1.97E-03	1.97E-03	1.97E-03				0.06	0.06	0.06
0900 - 1000	11				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
1000 - 1100	10				1.97E-03	1.97E-03	1.97E-03				0.06	0.06	0.06
1100 - 1200	13				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
1200 - 1300	14				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
1300 - 1400	14				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
1400 - 1500	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
1500 - 1600	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
1600 - 1700	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
1700 - 1800	13				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
1800 - 1900	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
1900 - 2000	13				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
2000 - 2100	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
2100 - 2200	13				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
2200 - 2300	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
2300 - 2400	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	FBDD												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	7				0.4467	0.4467	0.4109				0.947	0.947	0.871
0100 - 0200	4				0.4467	0.4467	0.4109				0.582	0.582	0.536
0200 - 0300	3				0.4467	0.4467	0.4109				0.364	0.364	0.335
0300 - 0400	1				0.4467	0.4467	0.4109				0.073	0.073	0.067
0400 - 0500	6				0.4467	0.4467	0.4109				0.801	0.801	0.737
0500 - 0600	7				0.4467	0.4467	0.4109				1.019	1.019	0.938
0600 - 0700	12				0.4467	0.4467	0.4109				1.675	1.675	1.540
0700 - 0800	15				0.4467	0.4467	0.4109				2.112	2.112	1.942
0800 - 0900	14				0.4467	0.4467	0.4109				1.966	1.966	1.808
0900 - 1000	15				0.4467	0.4467	0.4109				2.184	2.184	2.009
1000 - 1100	15				0.4467	0.4467	0.4109				2.184	2.184	2.009
1100 - 1200	17				0.4467	0.4467	0.4109				2.476	2.476	2.277
1200 - 1300	19				0.4467	0.4467	0.4109				2.694	2.694	2.478
1300 - 1400	19				0.4467	0.4467	0.4109				2.767	2.767	2.545
1400 - 1500	17				0.4467	0.4467	0.4109				2.476	2.476	2.277
1500 - 1600	17				0.4467	0.4467	0.4109				2.403	2.403	2.210
1600 - 1700	17				0.4467	0.4467	0.4109				2.403	2.403	2.210
1700 - 1800	18				0.4467	0.4467	0.4109				2.548	2.548	2.344
1800 - 1900	17				0.4467	0.4467	0.4109				2.476	2.476	2.277
1900 - 2000	17				0.4467	0.4467	0.4109				2.403	2.403	2.210
2000 - 2100	17				0.4467	0.4467	0.4109				2.476	2.476	2.277
2100 - 2200	17				0.4467	0.4467	0.4109				2.476	2.476	2.277
2200 - 2300	15				0.4467	0.4467	0.4109				2.184	2.184	2.009
2300 - 2400	15				0.4467	0.4467	0.4109				2.112	2.112	1.942

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.985	0.985	0.909				2.74E-04	2.74E-04	2.53E-04
0100 - 0200				0.606	0.606	0.559				1.68E-04	1.68E-04	1.55E-04
0200 - 0300				0.379	0.379	0.350				1.05E-04	1.05E-04	9.71E-05
0300 - 0400				0.076	0.076	0.070				2.10E-05	2.10E-05	1.94E-05
0400 - 0500				0.833	0.833	0.769				2.32E-04	2.32E-04	2.14E-04
0500 - 0600				1.061	1.061	0.979				2.95E-04	2.95E-04	2.72E-04
0600 - 0700				1.743	1.743	1.609				4.84E-04	4.84E-04	4.47E-04
0700 - 0800				2.197	2.197	2.028				6.10E-04	6.10E-04	5.63E-04
0800 - 0900				2.046	2.046	1.888				5.68E-04	5.68E-04	5.25E-04
0900 - 1000				2.273	2.273	2.098				6.31E-04	6.31E-04	5.83E-04
1000 - 1100				2.273	2.273	2.098				6.31E-04	6.31E-04	5.83E-04
1100 - 1200				2.576	2.576	2.378				7.16E-04	7.16E-04	6.61E-04
1200 - 1300				2.804	2.804	2.588				7.79E-04	7.79E-04	7.19E-04
1300 - 1400				2.879	2.879	2.658				8.00E-04	8.00E-04	7.38E-04
1400 - 1500				2.576	2.576	2.378				7.16E-04	7.16E-04	6.61E-04
1500 - 1600				2.500	2.500	2.308				6.95E-04	6.95E-04	6.41E-04
1600 - 1700				2.500	2.500	2.308				6.95E-04	6.95E-04	6.41E-04
1700 - 1800				2.652	2.652	2.448				7.37E-04	7.37E-04	6.80E-04
1800 - 1900				2.576	2.576	2.378				7.16E-04	7.16E-04	6.61E-04
1900 - 2000				2.500	2.500	2.308				6.95E-04	6.95E-04	6.41E-04
2000 - 2100				2.576	2.576	2.378				7.16E-04	7.16E-04	6.61E-04
2100 - 2200				2.576	2.576	2.378				7.16E-04	7.16E-04	6.61E-04
2200 - 2300				2.273	2.273	2.098				6.31E-04	6.31E-04	5.83E-04
2300 - 2400				2.197	2.197	2.028				6.10E-04	6.10E-04	5.63E-04
						total				1.32E-02	1.32E-02	1.22E-02

Daily Emission Distribution

Hour	TSP	RSP	FSP
00 - 01	2%	2%	2%
01 - 02	1%	1%	1%
02 - 03	1%	1%	1%
03 - 04	0%	0%	0%
04 - 05	2%	2%	2%
05 - 06	2%	2%	2%
06 - 07	4%	4%	4%
07 - 08	5%	5%	5%
08 - 09	4%	4%	4%
09 - 10	5%	5%	5%
10 - 11	5%	5%	5%
11 - 12	5%	5%	5%
12 - 13	6%	6%	6%
13 - 14	6%	6%	6%
14 - 15	5%	5%	5%
15 - 16	5%	5%	5%
16 - 17	5%	5%	5%
17 - 18	5%	5%	5%
18 - 19	5%	5%	5%
19 - 20	5%	5%	5%
20 - 21	5%	5%	5%
21 - 22	5%	5%	5%
22 - 23	5%	5%	5%
23 - 24	5%	5%	5%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

HZMB Hong Kong Port PTI - Layby 8

Temp: 7 **RH:** 15

Start Emission - Terminating PLB-DSL

Soaking Time (min) / Pollutant	Public Light Bus (PLB-DSL) Start Emission Factor (g/trip)																	
	5	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
NOx	0.05	0.10	0.13	0.19	0.23	0.30	0.45	0.56	0.82	1.07	1.20	1.41	1.56	1.63	1.68	1.72	1.74	1.74
NO	0.04	0.07	0.09	0.13	0.16	0.22	0.32	0.40	0.59	0.77	0.86	1.02	1.12	1.18	1.21	1.24	1.25	1.25
NO2	0.02	0.03	0.04	0.05	0.06	0.09	0.12	0.16	0.23	0.30	0.34	0.40	0.44	0.46	0.47	0.48	0.49	0.49
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of PLB-DSL																		**Total Start Emission of PLB-DSL (g)**					
Soaking Time (min) / Hour	**5**	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**	**NOx**	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0900 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1000 - 1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2300 - 2400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0

Idling Emission - Terminating PLB-DSL

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB-DSL													PLB-DSL												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0100 - 0200	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0200 - 0300	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0300 - 0400	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0400 - 0500	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0500 - 0600	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0600 - 0700	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0700 - 0800	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0800 - 0900	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0900 - 1000	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1000 - 1100	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1100 - 1200	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1200 - 1300	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1300 - 1400	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1400 - 1500	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1500 - 1600	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1600 - 1700	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1700 - 1800	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1800 - 1900	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1900 - 2000	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
2000 - 2100	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
2100 - 2200	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
2200 - 2300	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
2300 - 2400	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00	0				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	163	m
Average Spread Distance outside bus terminus =	537	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)						Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass PLB-DSL

Idling Time =	3	min

Hour	PLB-DSL												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0100 - 0200	1				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0200 - 0300	1				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0300 - 0400	1				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0400 - 0500	1				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0500 - 0600	1				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0600 - 0700	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0700 - 0800	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0800 - 0900	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
0900 - 1000	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1000 - 1100	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1100 - 1200	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1200 - 1300	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1300 - 1400	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1400 - 1500	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1500 - 1600	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1600 - 1700	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1700 - 1800	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1800 - 1900	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
1900 - 2000	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
2000 - 2100	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
2100 - 2200	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
2200 - 2300	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00
2300 - 2400	3				4.33E-04	4.33E-04	4.33E-04				0.00	0.00	0.00

Running Emission - Terminating PLB-DSL and Bypass PLB-DSL

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	PLB-DSL												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
0100 - 0200	1				0.0747	0.0747	0.0687				0.034	0.034	0.031
0200 - 0300	1				0.0747	0.0747	0.0687				0.034	0.034	0.031
0300 - 0400	1				0.0747	0.0747	0.0687				0.034	0.034	0.031
0400 - 0500	1				0.0747	0.0747	0.0687				0.034	0.034	0.031
0500 - 0600	1				0.0747	0.0747	0.0687				0.034	0.034	0.031
0600 - 0700	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
0700 - 0800	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
0800 - 0900	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
0900 - 1000	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
1000 - 1100	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
1100 - 1200	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
1200 - 1300	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
1300 - 1400	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
1400 - 1500	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
1500 - 1600	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
1600 - 1700	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
1700 - 1800	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
1800 - 1900	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
1900 - 2000	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
2000 - 2100	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
2100 - 2200	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
2200 - 2300	3				0.0747	0.0747	0.0687				0.084	0.084	0.078
2300 - 2400	3				0.0747	0.0747	0.0687				0.084	0.084	0.078

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
0100 - 0200				0.036	0.036	0.033				9.88E-06	9.88E-06	9.12E-06
0200 - 0300				0.036	0.036	0.033				9.88E-06	9.88E-06	9.12E-06
0300 - 0400				0.036	0.036	0.033				9.88E-06	9.88E-06	9.12E-06
0400 - 0500				0.036	0.036	0.033				9.88E-06	9.88E-06	9.12E-06
0500 - 0600				0.036	0.036	0.033				9.88E-06	9.88E-06	9.12E-06
0600 - 0700				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
0700 - 0800				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
0800 - 0900				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
0900 - 1000				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
1000 - 1100				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
1100 - 1200				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
1200 - 1300				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
1300 - 1400				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
1400 - 1500				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
1500 - 1600				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
1600 - 1700				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
1700 - 1800				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
1800 - 1900				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
1900 - 2000				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
2000 - 2100				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
2100 - 2200				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
2200 - 2300				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
2300 - 2400				0.089	0.089	0.082				2.47E-05	2.47E-05	2.28E-05
						total				5.18E-04	5.18E-04	4.79E-04

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Heavy Good Vehicles > 24t (HGV9) was assumed for Heavy Good Vehicle as conservative approach.

HZMB Hong Kong Port PTI - Layby 8

Temp: 7 **RH:** 15

Start Emission - Terminating PLB-LPG

Soaking Time (min) / Pollutant	Public Light Bus (PLB-LPG) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	1.73	2.61	4.16	5.42	6.39	7.07	7.47	7.68	7.65	7.60	7.55	7.47	7.39	7.28	7.17	7.03	6.89	6.72
NO	1.73	2.60	4.14	5.39	6.35	7.04	7.43	7.63	7.61	7.56	7.51	7.43	7.35	7.24	7.13	7.00	6.85	6.69
NO2	0.01	0.01	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of PLB-LPG																		Total Start Emission of PLB-LPG (g)					
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	NOx	NO	NO2	TSP	RSP	FSP
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0900 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1000 - 1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2300 - 2400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0

Idling Emission - Terminating PLB-LPG

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB-LPG													PLB-LPG												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
0100 - 0200	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
0200 - 0300	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
0300 - 0400	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
0400 - 0500	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
0500 - 0600	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
0600 - 0700	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
0700 - 0800	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
0800 - 0900	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
0900 - 1000	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
1000 - 1100	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
1100 - 1200	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
1200 - 1300	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
1300 - 1400	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
1400 - 1500	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
1500 - 1600	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
1600 - 1700	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
1700 - 1800	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
1800 - 1900	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
1900 - 2000	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
2000 - 2100	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
2100 - 2200	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
2200 - 2300	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00
2300 - 2400	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00	0				6.82E-04	6.82E-04	6.82E-04				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	150	m
Average Spread Distance outside bus terminus =	0	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)						Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass PLB-LPG

Idling Time =	3	min

Hour	Frequency	PLB - LPG											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
0100 - 0200	1				6.82E-04	6.82E-04	6.82E-04				0	0	0
0200 - 0300	1				6.82E-04	6.82E-04	6.82E-04				0	0	0
0300 - 0400	1				6.82E-04	6.82E-04	6.82E-04				0	0	0
0400 - 0500	1				6.82E-04	6.82E-04	6.82E-04				0	0	0
0500 - 0600	1				6.82E-04	6.82E-04	6.82E-04				0	0	0
0600 - 0700	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
0700 - 0800	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
0800 - 0900	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
0900 - 1000	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
1000 - 1100	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
1100 - 1200	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
1200 - 1300	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
1300 - 1400	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
1400 - 1500	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
1500 - 1600	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
1600 - 1700	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
1700 - 1800	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
1800 - 1900	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
1900 - 2000	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
2000 - 2100	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
2100 - 2200	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
2200 - 2300	2				6.82E-04	6.82E-04	6.82E-04				0	0	0
2300 - 2400	2				6.82E-04	6.82E-04	6.82E-04				0	0	0

Running Emission - Terminating PLB-LPG and Bypass PLB-LPG

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

Hour	Frequency	PLB-LPG											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2				0	0	0				0.000	0.000	0.000
0100 - 0200	1				0	0	0				0.000	0.000	0.000
0200 - 0300	1				0	0	0				0.000	0.000	0.000
0300 - 0400	1				0	0	0				0.000	0.000	0.000
0400 - 0500	1				0	0	0				0.000	0.000	0.000
0500 - 0600	1				0	0	0				0.000	0.000	0.000
0600 - 0700	2				0	0	0				0.000	0.000	0.000
0700 - 0800	2				0	0	0				0.000	0.000	0.000
0800 - 0900	2				0	0	0				0.000	0.000	0.000
0900 - 1000	2				0	0	0				0.000	0.000	0.000
1000 - 1100	2				0	0	0				0.000	0.000	0.000
1100 - 1200	2				0	0	0				0.000	0.000	0.000
1200 - 1300	2				0	0	0				0.000	0.000	0.000
1300 - 1400	2				0	0	0				0.000	0.000	0.000
1400 - 1500	2				0	0	0				0.000	0.000	0.000
1500 - 1600	2				0	0	0				0.000	0.000	0.000
1600 - 1700	2				0	0	0				0.000	0.000	0.000
1700 - 1800	2				0	0	0				0.000	0.000	0.000
1800 - 1900	2				0	0	0				0.000	0.000	0.000
1900 - 2000	2				0	0	0				0.000	0.000	0.000
2000 - 2100	2				0	0	0				0.000	0.000	0.000
2100 - 2200	2				0	0	0				0.000	0.000	0.000
2200 - 2300	2				0	0	0				0.000	0.000	0.000
2300 - 2400	2				0	0	0				0.000	0.000	0.000

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
0100 - 0200				0.001	0.001	0.001				3.49E-07	3.49E-07	3.49E-07
0200 - 0300				0.001	0.001	0.001				3.49E-07	3.49E-07	3.49E-07
0300 - 0400				0.001	0.001	0.001				3.49E-07	3.49E-07	3.49E-07
0400 - 0500				0.001	0.001	0.001				3.49E-07	3.49E-07	3.49E-07
0500 - 0600				0.001	0.001	0.001				3.49E-07	3.49E-07	3.49E-07
0600 - 0700				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
0700 - 0800				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
0800 - 0900				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
0900 - 1000				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
1000 - 1100				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
1100 - 1200				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
1200 - 1300				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
1300 - 1400				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
1400 - 1500				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
1500 - 1600				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
1600 - 1700				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
1700 - 1800				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
1800 - 1900				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
1900 - 2000				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
2000 - 2100				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
2100 - 2200				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
2200 - 2300				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
2300 - 2400				0.003	0.003	0.003				8.72E-07	8.72E-07	8.72E-07
						total				1.83E-05	1.83E-05	1.83E-05

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Heavy Good Vehicles > 24t (HGV9) was assumed for Heavy Good Vehicle as conservative approach.
[4] It is assumed that the distance from start place to egress to be 150m.

HZMB Hong Kong Port PTI - Layby 9

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Non-franchised Buses 15-24t (NFB8) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.22	0.40	0.54	0.76	0.94	1.25	1.83	2.28	3.36	4.38	4.92	5.82	6.40	6.71	6.89	7.07	7.16	7.16
NO	0.19	0.34	0.46	0.65	0.80	1.07	1.56	1.94	2.86	3.74	4.19	4.96	5.45	5.72	5.87	6.02	6.10	6.10
NO2	0.03	0.06	0.08	0.11	0.14	0.19	0.27	0.34	0.50	0.65	0.73	0.86	0.95	0.99	1.02	1.05	1.06	1.06
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of NFB8																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBSD & FBDD (g)						
NOx	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	NFB8												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0100 - 0200	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0200 - 0300	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0300 - 0400	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0400 - 0500	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0500 - 0600	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0600 - 0700	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0700 - 0800	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0800 - 0900	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
0900 - 1000	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1000 - 1100	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1100 - 1200	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1200 - 1300	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1300 - 1400	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1400 - 1500	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1500 - 1600	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1600 - 1700	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1700 - 1800	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1800 - 1900	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
1900 - 2000	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
2000 - 2100	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
2100 - 2200	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
2200 - 2300	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005
2300 - 2400	2				7.85E-04	7.85E-04	7.85E-04				0.005	0.005	0.005

Hour	NFB8												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0100 - 0200	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0200 - 0300	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0300 - 0400	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0400 - 0500	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0500 - 0600	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0600 - 0700	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0700 - 0800	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0800 - 0900	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
0900 - 1000	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1000 - 1100	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1100 - 1200	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1200 - 1300	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1300 - 1400	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1400 - 1500	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1500 - 1600	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1600 - 1700	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1700 - 1800	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1800 - 1900	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
1900 - 2000	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2000 - 2100	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2100 - 2200	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2200 - 2300	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00
2300 - 2400	0				7.85E-04	7.85E-04	7.85E-04				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	163	m
Average Spread Distance outside bus terminus =	537	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00

Hour	Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
												total				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	NFB8											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	16				7.85E-04	7.85E-04	7.85E-04				0.04	0.04	0.04
0100 - 0200	9				7.85E-04	7.85E-04	7.85E-04				0.02	0.02	0.02
0200 - 0300	5				7.85E-04	7.85E-04	7.85E-04				0.01	0.01	0.01
0300 - 0400	5				7.85E-04	7.85E-04	7.85E-04				0.01	0.01	0.01
0400 - 0500	7				7.85E-04	7.85E-04	7.85E-04				0.02	0.02	0.02
0500 - 0600	12				7.85E-04	7.85E-04	7.85E-04				0.03	0.03	0.03
0600 - 0700	21				7.85E-04	7.85E-04	7.85E-04				0.05	0.05	0.05
0700 - 0800	36				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
0800 - 0900	43				7.85E-04	7.85E-04	7.85E-04				0.10	0.10	0.10
0900 - 1000	34				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1000 - 1100	30				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1100 - 1200	31				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1200 - 1300	35				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1300 - 1400	35				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1400 - 1500	35				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1500 - 1600	31				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1600 - 1700	32				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1700 - 1800	34				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1800 - 1900	33				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1900 - 2000	29				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
2000 - 2100	25				7.85E-04	7.85E-04	7.85E-04				0.06	0.06	0.06
2100 - 2200	25				7.85E-04	7.85E-04	7.85E-04				0.06	0.06	0.06
2200 - 2300	25				7.85E-04	7.85E-04	7.85E-04				0.06	0.06	0.06
2300 - 2400	22				7.85E-04	7.85E-04	7.85E-04				0.05	0.05	0.05

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

15 15 15 15

Hour	Frequency	NFB8											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	18				0.2972	0.2972	0.2735				1.744	1.744	1.605
0100 - 0200	11				0.2972	0.2972	0.2735				1.066	1.066	0.981
0200 - 0300	7				0.2972	0.2972	0.2735				0.678	0.678	0.624
0300 - 0400	7				0.2972	0.2972	0.2735				0.678	0.678	0.624
0400 - 0500	9				0.2972	0.2972	0.2735				0.872	0.872	0.802
0500 - 0600	14				0.2972	0.2972	0.2735				1.356	1.356	1.248
0600 - 0700	23				0.2972	0.2972	0.2735				2.228	2.228	2.051
0700 - 0800	38				0.2972	0.2972	0.2735				3.682	3.682	3.388
0800 - 0900	45				0.2972	0.2972	0.2735				4.360	4.360	4.012
0900 - 1000	36				0.2972	0.2972	0.2735				3.488	3.488	3.210
1000 - 1100	32				0.2972	0.2972	0.2735				3.100	3.100	2.853
1100 - 1200	33				0.2972	0.2972	0.2735				3.197	3.197	2.942
1200 - 1300	37				0.2972	0.2972	0.2735				3.585	3.585	3.299
1300 - 1400	37				0.2972	0.2972	0.2735				3.585	3.585	3.299
1400 - 1500	37				0.2972	0.2972	0.2735				3.585	3.585	3.299
1500 - 1600	33				0.2972	0.2972	0.2735				3.197	3.197	2.942
1600 - 1700	34				0.2972	0.2972	0.2735				3.294	3.294	3.031
1700 - 1800	36				0.2972	0.2972	0.2735				3.488	3.488	3.210
1800 - 1900	35				0.2972	0.2972	0.2735				3.391	3.391	3.121
1900 - 2000	31				0.2972	0.2972	0.2735				3.004	3.004	2.764
2000 - 2100	27				0.2972	0.2972	0.2735				2.616	2.616	2.407
2100 - 2200	27				0.2972	0.2972	0.2735				2.616	2.616	2.407
2200 - 2300	27				0.2972	0.2972	0.2735				2.616	2.616	2.407
2300 - 2400	24				0.2972	0.2972	0.2735				2.325	2.325	2.140

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				1.786	1.786	1.647				4.96E-04	4.96E-04	4.58E-04
0100 - 0200				1.092	1.092	1.007				3.03E-04	3.03E-04	2.80E-04
0200 - 0300				0.695	0.695	0.641				1.93E-04	1.93E-04	1.78E-04
0300 - 0400				0.695	0.695	0.641				1.93E-04	1.93E-04	1.78E-04
0400 - 0500				0.893	0.893	0.824				2.48E-04	2.48E-04	2.29E-04
0500 - 0600				1.389	1.389	1.281				3.86E-04	3.86E-04	3.56E-04
0600 - 0700				2.283	2.283	2.105				6.34E-04	6.34E-04	5.85E-04
0700 - 0800				3.771	3.771	3.478				1.05E-03	1.05E-03	9.66E-04
0800 - 0900				4.466	4.466	4.118				1.24E-03	1.24E-03	1.14E-03
0900 - 1000				3.573	3.573	3.295				9.92E-04	9.92E-04	9.15E-04
1000 - 1100				3.176	3.176	2.929				8.82E-04	8.82E-04	8.13E-04
1100 - 1200				3.275	3.275	3.020				9.10E-04	9.10E-04	8.39E-04
1200 - 1300				3.672	3.672	3.386				1.02E-03	1.02E-03	9.41E-04
1300 - 1400				3.672	3.672	3.386				1.02E-03	1.02E-03	9.41E-04
1400 - 1500				3.672	3.672	3.386				1.02E-03	1.02E-03	9.41E-04
1500 - 1600				3.275	3.275	3.020				9.10E-04	9.10E-04	8.39E-04
1600 - 1700				3.374	3.374	3.112				9.37E-04	9.37E-04	8.64E-04
1700 - 1800				3.573	3.573	3.295				9.92E-04	9.92E-04	9.15E-04
1800 - 1900				3.474	3.474	3.203				9.65E-04	9.65E-04	8.90E-04
1900 - 2000				3.077	3.077	2.837				8.55E-04	8.55E-04	7.88E-04
2000 - 2100				2.680	2.680	2.471				7.44E-04	7.44E-04	6.86E-04
2100 - 2200				2.680	2.680	2.471				7.44E-04	7.44E-04	6.86E-04
2200 - 2300				2.680	2.680	2.471				7.44E-04	7.44E-04	6.86E-04
2300 - 2400				2.382	2.382	2.196				6.62E-04	6.62E-04	6.10E-04
					total					1.81E-02	1.81E-02	1.67E-02

Daily Emission Distribution

Hour	TSP	RSP	FSP
00 - 01	3%	3%	3%
01 - 02	2%	2%	2%
02 - 03	1%	1%	1%
03 - 04	1%	1%	1%
04 - 05	1%	1%	1%
05 - 06	2%	2%	2%
06 - 07	3%	3%	3%
07 - 08	6%	6%	6%
08 - 09	7%	7%	7%
09 - 10	5%	5%	5%
10 - 11	5%	5%	5%
11 - 12	5%	5%	5%
12 - 13	6%	6%	6%
13 - 14	6%	6%	6%
14 - 15	6%	6%	6%
15 - 16	5%	5%	5%
16 - 17	5%	5%	5%
17 - 18	5%	5%	5%
18 - 19	5%	5%	5%
19 - 20	5%	5%	5%
20 - 21	4%	4%	4%
21 - 22	4%	4%	4%
22 - 23	4%	4%	4%
23 - 24	4%	4%	4%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

HZMB Hong Kong Port PTI - Kiosk

Temp: 7 **RH:** 15

Hot Idling Emission - Bypass NFB

Idling Time =	1	min

Hour	NFB8												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	52				7.85E-04	7.85E-04	7.85E-04				0.04	0.04	0.04
0100 - 0200	24				7.85E-04	7.85E-04	7.85E-04				0.02	0.02	0.02
0200 - 0300	16				7.85E-04	7.85E-04	7.85E-04				0.01	0.01	0.01
0300 - 0400	16				7.85E-04	7.85E-04	7.85E-04				0.01	0.01	0.01
0400 - 0500	20				7.85E-04	7.85E-04	7.85E-04				0.02	0.02	0.02
0500 - 0600	36				7.85E-04	7.85E-04	7.85E-04				0.03	0.03	0.03
0600 - 0700	60				7.85E-04	7.85E-04	7.85E-04				0.05	0.05	0.05
0700 - 0800	108				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
0800 - 0900	128				7.85E-04	7.85E-04	7.85E-04				0.10	0.10	0.10
0900 - 1000	100				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1000 - 1100	88				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1100 - 1200	92				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1200 - 1300	104				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1300 - 1400	104				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1400 - 1500	104				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1500 - 1600	92				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1600 - 1700	92				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
1700 - 1800	100				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1800 - 1900	96				7.85E-04	7.85E-04	7.85E-04				0.08	0.08	0.08
1900 - 2000	88				7.85E-04	7.85E-04	7.85E-04				0.07	0.07	0.07
2000 - 2100	76				7.85E-04	7.85E-04	7.85E-04				0.06	0.06	0.06
2100 - 2200	76				7.85E-04	7.85E-04	7.85E-04				0.06	0.06	0.06
2200 - 2300	72				7.85E-04	7.85E-04	7.85E-04				0.06	0.06	0.06
2300 - 2400	68				7.85E-04	7.85E-04	7.85E-04				0.05	0.05	0.05

Running Emission - Bypass NFB

The Travelling Distance within Kiosk =	57	m
Average Travelling Speed =	5	km/h

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Hour	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	52				0.2972	0.2972	0.2735				0.882	0.882	0.811
0100 - 0200	24				0.2972	0.2972	0.2735				0.407	0.407	0.375
0200 - 0300	16				0.2972	0.2972	0.2735				0.271	0.271	0.249
0300 - 0400	16				0.2972	0.2972	0.2735				0.271	0.271	0.249
0400 - 0500	20				0.2972	0.2972	0.2735				0.339	0.339	0.312
0500 - 0600	36				0.2972	0.2972	0.2735				0.611	0.611	0.562
0600 - 0700	60				0.2972	0.2972	0.2735				1.017	1.017	0.936
0700 - 0800	108				0.2972	0.2972	0.2735				1.832	1.832	1.686
0800 - 0900	128				0.2972	0.2972	0.2735				2.170	2.170	1.997
0900 - 1000	100				0.2972	0.2972	0.2735				1.695	1.695	1.560
1000 - 1100	88				0.2972	0.2972	0.2735				1.492	1.492	1.373
1100 - 1200	92				0.2972	0.2972	0.2735				1.560	1.560	1.435
1200 - 1300	104				0.2972	0.2972	0.2735				1.764	1.764	1.623
1300 - 1400	104				0.2972	0.2972	0.2735				1.763	1.763	1.623
1400 - 1500	104				0.2972	0.2972	0.2735				1.763	1.763	1.623
1500 - 1600	92				0.2972	0.2972	0.2735				1.560	1.560	1.435
1600 - 1700	92				0.2972	0.2972	0.2735				1.560	1.560	1.435
1700 - 1800	100				0.2972	0.2972	0.2735				1.695	1.695	1.560
1800 - 1900	96				0.2972	0.2972	0.2735				1.628	1.628	1.498
1900 - 2000	88				0.2972	0.2972	0.2735				1.492	1.492	1.373
2000 - 2100	76				0.2972	0.2972	0.2735				1.289	1.289	1.186
2100 - 2200	76				0.2972	0.2972	0.2735				1.289	1.289	1.186
2200 - 2300	72				0.2972	0.2972	0.2735				1.221	1.221	1.124
2300 - 2400	68				0.2972	0.2972	0.2735				1.153	1.153	1.061

Total Hourly Emission

Hour	Total Emission inside Kiosk (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.922	0.922	0.852				2.56E-04	2.56E-04	2.37E-04
0100 - 0200				0.426	0.426	0.394				1.18E-04	1.18E-04	1.09E-04
0200 - 0300				0.284	0.284	0.262				7.88E-05	7.88E-05	7.28E-05
0300 - 0400				0.284	0.284	0.262				7.88E-05	7.88E-05	7.28E-05
0400 - 0500				0.355	0.355	0.327				9.85E-05	9.85E-05	9.10E-05
0500 - 0600				0.639	0.639	0.590				1.77E-04	1.77E-04	1.64E-04
0600 - 0700				1.064	1.064	0.983				2.96E-04	2.96E-04	2.73E-04
0700 - 0800				1.917	1.917	1.770				5.32E-04	5.32E-04	4.92E-04
0800 - 0900				2.271	2.271	2.098				6.31E-04	6.31E-04	5.83E-04
0900 - 1000				1.774	1.774	1.639				4.93E-04	4.93E-04	4.55E-04
1000 - 1100				1.561	1.561	1.442				4.34E-04	4.34E-04	4.01E-04
1100 - 1200				1.632	1.632	1.508				4.53E-04	4.53E-04	4.19E-04
1200 - 1300				1.846	1.846	1.705				5.13E-04	5.13E-04	4.74E-04
1300 - 1400				1.845	1.845	1.704				5.12E-04	5.12E-04	4.73E-04
1400 - 1500				1.845	1.845	1.704				5.12E-04	5.12E-04	4.73E-04
1500 - 1600				1.632	1.632	1.508				4.53E-04	4.53E-04	4.19E-04
1600 - 1700				1.632	1.632	1.508				4.53E-04	4.53E-04	4.19E-04
1700 - 1800				1.774	1.774	1.639				4.93E-04	4.93E-04	4.55E-04
1800 - 1900				1.703	1.703	1.573				4.73E-04	4.73E-04	4.37E-04
1900 - 2000				1.561	1.561	1.442				4.34E-04	4.34E-04	4.01E-04
2000 - 2100				1.349	1.349	1.246				3.75E-04	3.75E-04	3.46E-04
2100 - 2200				1.349	1.349	1.246				3.75E-04	3.75E-04	3.46E-04
2200 - 2300				1.278	1.278	1.180				3.55E-04	3.55E-04	3.28E-04
2300 - 2400				1.207	1.207	1.115				3.35E-04	3.35E-04	3.10E-04
					total					8.93E-03	8.93E-03	8.25E-03

Daily Emission Distribution

Hour	TSP	RSP	FSP
00 - 01	3%	3%	3%
01 - 02	1%	1%	1%
02 - 03	1%	1%	1%
03 - 04	1%	1%	1%
04 - 05	1%	1%	1%
05 - 06	2%	2%	2%
06 - 07	3%	3%	3%
07 - 08	6%	6%	6%
08 - 09	7%	7%	7%
09 - 10	6%	6%	6%
10 - 11	5%	5%	5%
11 - 12	5%	5%	5%
12 - 13	6%	6%	6%
13 - 14	6%	6%	6%
14 - 15	6%	6%	6%
15 - 16	5%	5%	5%
16 - 17	5%	5%	5%
17 - 18	6%	6%	6%
18 - 19	5%	5%	5%
19 - 20	5%	5%	5%
20 - 21	4%	4%	4%
21 - 22	4%	4%	4%
22 - 23	4%	4%	4%
23 - 24	4%	4%	4%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

Emission Sources (Hong Kong Port Island) Listing in AERMOD

Location	Source ID	Type	Coordinates		Base Elevation	Release Height [1]	Length X	Length Y	Area	Angle	Szinit	Daily Emission Rate		
			X	Y	mPD	mAG	m	m	m^2	degree	m	TSP	RSP	FSP
												g/s or $g/m^2/s$		
HZMB Hong Kong Port PTI - Layby 5	PTI_HKP01	AREA	812878	819791	6.7	0	140	20	2800	106	-	2.87E-06	2.87E-06	2.65E-06
HZMB Hong Kong Port PTI - Layby 6	PTI_HKP02	AREA	812902	819784	6.7	0	140	28	3920	106	-	2.05E-06	2.05E-06	1.90E-06
HZMB Hong Kong Port PTI - Layby 7	PTI_HKP03	AREA	812942	819795	6.1	0	162	43	6966	106	-	1.92E-06	1.92E-06	1.77E-06
HZMB Hong Kong Port PTI - Layby 8	PTI_HKP04	AREA	812996	819779	6.1	0	162	28	4536	106	-	3.07E-06	3.07E-06	2.83E-06
HZMB Hong Kong Port PTI - Layby 9	PTI_HKP05	AREA	813036	819766	6.1	0	162	28	4536	106	-	4.00E-06	4.00E-06	3.69E-06
Kiosks	PTI_HKP06	AREA	812872	820000	7.0	0	57	28	1596	106	-	5.60E-06	5.60E-06	5.17E-06

Remarks:

[1] Release height for emission inside bus terminus were made reference to Appendix 3.8 of the approved EIA Report AEIAR-237/2022 for Tung Chung Line Extension.

Hourly Emission Profile

	TSP						RSP						FSP					
Hour	**PTI_HKP01**	**PTI_HKP02**	**PTI_HKP03**	**PTI_HKP04**	**PTI_HKP05**	**PTI_HKP06**	**PTI_HKP01**	**PTI_HKP02**	**PTI_HKP03**	**PTI_HKP04**	**PTI_HKP05**	**PTI_HKP06**	**PTI_HKP01**	**PTI_HKP02**	**PTI_HKP03**	**PTI_HKP04**	**PTI_HKP05**	**PTI_HKP06**
00 - 01	3%	3%	2%	2%	3%	3%	3%	3%	2%	2%	3%	3%	3%	3%	2%	2%	3%	3%
01 - 02	2%	2%	1%	1%	2%	1%	2%	2%	1%	1%	2%	1%	2%	2%	1%	1%	2%	1%
02 - 03	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
03 - 04	1%	1%	0%	0%	1%	1%	1%	1%	0%	0%	1%	1%	1%	1%	0%	0%	1%	1%
04 - 05	1%	1%	2%	2%	1%	1%	1%	1%	2%	2%	1%	1%	1%	1%	2%	2%	1%	1%
05 - 06	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
06 - 07	3%	3%	4%	4%	3%	3%	3%	3%	4%	4%	3%	3%	3%	3%	4%	4%	3%	3%
07 - 08	6%	6%	5%	5%	6%	6%	6%	6%	5%	5%	6%	6%	6%	6%	5%	5%	6%	6%
08 - 09	7%	7%	4%	4%	7%	7%	7%	7%	4%	4%	7%	7%	7%	7%	4%	4%	7%	7%
09 - 10	5%	5%	5%	5%	5%	6%	5%	5%	5%	5%	5%	6%	5%	5%	5%	5%	5%	6%
10 - 11	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
12 - 13	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
13 - 14	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
14 - 15	6%	6%	5%	5%	6%	6%	6%	6%	5%	5%	6%	6%	6%	6%	5%	5%	6%	6%
15 - 16	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
16 - 17	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
17 - 18	5%	5%	6%	5%	5%	6%	5%	5%	6%	5%	5%	6%	5%	5%	6%	5%	5%	6%
18 - 19	5%	5%	6%	5%	5%	5%	5%	5%	6%	5%	5%	5%	5%	5%	6%	5%	5%	5%
19 - 20	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
20 - 21	4%	4%	5%	5%	4%	4%	4%	4%	5%	5%	4%	4%	4%	4%	5%	5%	4%	4%
21 - 22	4%	4%	5%	5%	4%	4%	4%	4%	5%	5%	4%	4%	4%	4%	5%	5%	4%	4%
22 - 23	4%	4%	5%	5%	4%	4%	4%	4%	5%	5%	4%	4%	4%	4%	5%	5%	4%	4%
23 - 24	4%	4%	5%	5%	4%	4%	4%	4%	5%	5%	4%	4%	4%	4%	5%	5%	4%	4%

Tung Chung Station Bus Terminus

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.35	0.63	0.84	1.19	1.47	1.96	2.87	3.57	5.24	6.85	7.69	9.09	10.00	10.49	10.77	11.05	11.19	11.19
NO	0.33	0.59	0.78	1.11	1.37	1.83	2.68	3.33	4.90	6.40	7.19	8.49	9.34	9.80	10.06	10.32	10.45	10.45
NO2	0.02	0.04	0.06	0.08	0.10	0.13	0.19	0.23	0.34	0.45	0.51	0.60	0.66	0.69	0.71	0.73	0.74	0.74
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of FBSD																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBSD (g)					
NOx	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD													FBSD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0900 - 1000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1000 - 1100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1100 - 1200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1200 - 1300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1300 - 1400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1400 - 1500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1500 - 1600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1600 - 1700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1700 - 1800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1800 - 1900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1900 - 2000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	50	m
Average Spread Distance outside bus terminus =	650	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)						Adjusted Start Emission within Loading and Unloading Area (g)						Adjusted Start Emission outside Loading and Unloading Area (g)						Start Emission Rate outside bus terminus (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	FBSD											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
0900 - 1000	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1000 - 1100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1100 - 1200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1200 - 1300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1300 - 1400	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1400 - 1500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1500 - 1600	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1600 - 1700	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1700 - 1800	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1800 - 1900	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1900 - 2000	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	100	m
Average Travelling Speed =	5	km/h

Hour	Frequency	FBSD											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0100 - 0200	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0200 - 0300	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0300 - 0400	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0400 - 0500	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0500 - 0600	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
0600 - 0700	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
0700 - 0800	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
0800 - 0900	2				0.2265	0.2265	0.2084				0.045	0.045	0.042
0900 - 1000	2				0.2265	0.2265	0.2084				0.045	0.045	0.042
1000 - 1100	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
1100 - 1200	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
1200 - 1300	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
1300 - 1400	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
1400 - 1500	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
1500 - 1600	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
1600 - 1700	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
1700 - 1800	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
1800 - 1900	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
1900 - 2000	1				0.2265	0.2265	0.2084				0.023	0.023	0.021
2000 - 2100	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
2100 - 2200	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
2200 - 2300	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
2300 - 2400	0				0.2265	0.2265	0.2084				0.000	0.000	0.000

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
0600 - 0700				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
0700 - 0800				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
0800 - 0900				0.055	0.055	0.051				1.52E-05	1.52E-05	1.42E-05
0900 - 1000				0.055	0.055	0.051				1.52E-05	1.52E-05	1.42E-05
1000 - 1100				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
1100 - 1200				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
1200 - 1300				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
1300 - 1400				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
1400 - 1500				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
1500 - 1600				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
1600 - 1700				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
1700 - 1800				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
1800 - 1900				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
1900 - 2000				0.027	0.027	0.026				7.61E-06	7.61E-06	7.11E-06
2000 - 2100				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
						total				1.29E-04	1.29E-04	1.21E-04

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

[2] Number of cold starts were provided by the traffic consultant.

Tung Chung Station Bus Terminus

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.77	1.39	1.85	2.62	3.23	4.31	6.32	7.86	11.55	15.09	16.94	20.02	22.03	23.10	23.72	24.34	24.64	24.64
NO	0.72	1.30	1.74	2.46	3.04	4.06	5.94	7.39	10.87	14.21	15.95	18.85	20.73	21.75	22.33	22.91	23.20	23.20
NO2	0.05	0.08	0.11	0.15	0.19	0.25	0.37	0.46	0.68	0.89	1.00	1.18	1.29	1.36	1.39	1.43	1.45	1.45
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of FBDD																		Total Start Emission of FBSD & FBDD (g)					
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	NOx	NO	NO2	TSP	RSP	FSP
0000 - 0100	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0100 - 0200	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0200 - 0300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0700 - 0800	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0800 - 0900	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0900 - 1000	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1000 - 1100	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1100 - 1200	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1200 - 1300	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1300 - 1400	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1400 - 1500	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1500 - 1600	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1600 - 1700	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1700 - 1800	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1800 - 1900	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1900 - 2000	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2000 - 2100	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2100 - 2200	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2200 - 2300	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2300 - 2400	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBDD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0100 - 0200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0200 - 0300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0400 - 0500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0500 - 0600	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0600 - 0700	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0700 - 0800	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0800 - 0900	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
0900 - 1000	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1000 - 1100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1100 - 1200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1200 - 1300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1300 - 1400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1400 - 1500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1500 - 1600	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1600 - 1700	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1700 - 1800	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1800 - 1900	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
1900 - 2000	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
2000 - 2100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
2100 - 2200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
2200 - 2300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000
2300 - 2400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0100 - 0200	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0200 - 0300	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0400 - 0500	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0500 - 0600	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0600 - 0700	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0700 - 0800	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0800 - 0900	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0900 - 1000	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1000 - 1100	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1100 - 1200	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1200 - 1300	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1300 - 1400	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1400 - 1500	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1500 - 1600	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1600 - 1700	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1700 - 1800	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1800 - 1900	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1900 - 2000	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
2000 - 2100	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
2100 - 2200	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
2200 - 2300	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
2300 - 2400	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01

Average Distance from Starting Place to Egress =	50	m
Average Spread Distance outside bus terminus =	650	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.01	0.01	0.01				0.00	0.00	0.00
0100 - 0200				0.01	0.01	0.01				0.00	0.00	0.00
0200 - 0300				0.01	0.01	0.01				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00
0700 - 0800				0.01	0.01	0.01				0.00	0.00	0.00
0800 - 0900				0.02	0.02	0.02				0.01	0.01	0.01
0900 - 1000				0.01	0.01	0.01				0.00	0.00	0.00
1000 - 1100				0.01	0.01	0.01				0.00	0.00	0.00
1100 - 1200				0.01	0.01	0.01				0.00	0.00	0.00
1200 - 1300				0.01	0.01	0.01				0.00	0.00	0.00
1300 - 1400				0.01	0.01	0.01				0.00	0.00	0.00
1400 - 1500				0.01	0.01	0.01				0.00	0.00	0.00
1500 - 1600				0.01	0.01	0.01				0.00	0.00	0.00
1600 - 1700				0.01	0.01	0.01				0.00	0.00	0.00
1700 - 1800				0.01	0.01	0.01				0.00	0.00	0.00
1800 - 1900				0.01	0.01	0.01				0.00	0.00	0.00
1900 - 2000				0.01	0.01	0.01				0.00	0.00	0.00
2000 - 2100				0.01	0.01	0.01				0.00	0.00	0.00
2100 - 2200				0.01	0.01	0.01				0.00	0.00	0.00
2200 - 2300				0.01	0.01	0.01				0.00	0.00	0.00
2300 - 2400				0.01	0.01	0.01				0.00	0.00	0.00

Hour	Adjusted Start Emission within Loading and Unloading Area (g)						Adjusted Start Emission outside Loading and Unloading Area (g)						Start Emission Rate outside bus terminus (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	FBDD											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0100 - 0200	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0200 - 0300	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0400 - 0500	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0500 - 0600	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0600 - 0700	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0700 - 0800	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0800 - 0900	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0900 - 1000	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1000 - 1100	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1100 - 1200	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1200 - 1300	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1300 - 1400	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1400 - 1500	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1500 - 1600	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1600 - 1700	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1700 - 1800	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1800 - 1900	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1900 - 2000	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
2000 - 2100	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
2100 - 2200	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
2200 - 2300	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
2300 - 2400	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	100	m
Average Travelling Speed =	5	km/h

Hour	Frequency	FBDD											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2				0.4467	0.4467	0.4109				0.089	0.089	0.082
0100 - 0200	2				0.4467	0.4467	0.4109				0.089	0.089	0.082
0200 - 0300	2				0.4467	0.4467	0.4109				0.089	0.089	0.082
0300 - 0400	0				0.4467	0.4467	0.4109				0.000	0.000	0.000
0400 - 0500	0				0.4467	0.4467	0.4109				0.000	0.000	0.000
0500 - 0600	0				0.4467	0.4467	0.4109				0.000	0.000	0.000
0600 - 0700	0				0.4467	0.4467	0.4109				0.000	0.000	0.000
0700 - 0800	2				0.4467	0.4467	0.4109				0.089	0.089	0.082
0800 - 0900	6				0.4467	0.4467	0.4109				0.268	0.268	0.247
0900 - 1000	5				0.4467	0.4467	0.4109				0.223	0.223	0.205
1000 - 1100	5				0.4467	0.4467	0.4109				0.223	0.223	0.205
1100 - 1200	4				0.4467	0.4467	0.4109				0.179	0.179	0.164
1200 - 1300	4				0.4467	0.4467	0.4109				0.179	0.179	0.164
1300 - 1400	4				0.4467	0.4467	0.4109				0.179	0.179	0.164
1400 - 1500	4				0.4467	0.4467	0.4109				0.179	0.179	0.164
1500 - 1600	4				0.4467	0.4467	0.4109				0.179	0.179	0.164
1600 - 1700	5				0.4467	0.4467	0.4109				0.223	0.223	0.205
1700 - 1800	4				0.4467	0.4467	0.4109				0.179	0.179	0.164
1800 - 1900	4				0.4467	0.4467	0.4109				0.179	0.179	0.164
1900 - 2000	5				0.4467	0.4467	0.4109				0.223	0.223	0.205
2000 - 2100	5				0.4467	0.4467	0.4109				0.223	0.223	0.205
2100 - 2200	4				0.4467	0.4467	0.4109				0.179	0.179	0.164
2200 - 2300	4				0.4467	0.4467	0.4109				0.179	0.179	0.164
2300 - 2400	3				0.4467	0.4467	0.4109				0.134	0.134	0.123

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.101	0.101	0.094				2.81E-05	2.81E-05	2.61E-05
0100 - 0200				0.101	0.101	0.094				2.81E-05	2.81E-05	2.61E-05
0200 - 0300				0.101	0.101	0.094				2.81E-05	2.81E-05	2.61E-05
0300 - 0400				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.101	0.101	0.094				2.81E-05	2.81E-05	2.61E-05
0800 - 0900				0.304	0.304	0.282				8.43E-05	8.43E-05	7.84E-05
0900 - 1000				0.253	0.253	0.235				7.03E-05	7.03E-05	6.53E-05
1000 - 1100				0.253	0.253	0.235				7.03E-05	7.03E-05	6.53E-05
1100 - 1200				0.202	0.202	0.188				5.62E-05	5.62E-05	5.22E-05
1200 - 1300				0.202	0.202	0.188				5.62E-05	5.62E-05	5.22E-05
1300 - 1400				0.202	0.202	0.188				5.62E-05	5.62E-05	5.22E-05
1400 - 1500				0.202	0.202	0.188				5.62E-05	5.62E-05	5.22E-05
1500 - 1600				0.202	0.202	0.188				5.62E-05	5.62E-05	5.22E-05
1600 - 1700				0.253	0.253	0.235				7.03E-05	7.03E-05	6.53E-05
1700 - 1800				0.202	0.202	0.188				5.62E-05	5.62E-05	5.22E-05
1800 - 1900				0.202	0.202	0.188				5.62E-05	5.62E-05	5.22E-05
1900 - 2000				0.253	0.253	0.235				7.03E-05	7.03E-05	6.53E-05
2000 - 2100				0.253	0.253	0.235				7.03E-05	7.03E-05	6.53E-05
2100 - 2200				0.202	0.202	0.188				5.62E-05	5.62E-05	5.22E-05
2200 - 2300				0.202	0.202	0.188				5.62E-05	5.62E-05	5.22E-05
2300 - 2400				0.152	0.152	0.141				4.22E-05	4.22E-05	3.92E-05
						total				1.10E-03	1.10E-03	1.02E-03

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.

Tung Chung Station Bus Terminus

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
	5	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
NOx	0.35	0.63	0.84	1.19	1.47	1.96	2.87	3.57	5.24	6.85	7.69	9.09	10.00	10.49	10.77	11.05	11.19	11.19
NO	0.33	0.59	0.78	1.11	1.37	1.83	2.68	3.33	4.90	6.40	7.19	8.49	9.34	9.80	10.06	10.32	10.45	10.45
NO2	0.02	0.04	0.06	0.08	0.10	0.13	0.19	0.23	0.34	0.45	0.51	0.60	0.66	0.69	0.71	0.73	0.74	0.74
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of FBSD																		Total Start Emission of FBSD (g)					
	5	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**	**NOx**	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
0000 - 0100	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0100 - 0200	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0600 - 0700	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0				0	0	0
0700 - 0800	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0				0	0	0
0800 - 0900	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0900 - 1000	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1000 - 1100	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1100 - 1200	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1200 - 1300	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1300 - 1400	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1400 - 1500	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1500 - 1600	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1600 - 1700	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1700 - 1800	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1800 - 1900	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1900 - 2000	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2000 - 2100	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2100 - 2200	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2200 - 2300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2300 - 2400	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD												FBSD											
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
0900 - 1000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1000 - 1100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	3				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1100 - 1200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	3				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1200 - 1300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	3				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1300 - 1400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	3				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1400 - 1500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	3				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1500 - 1600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1600 - 1700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1700 - 1800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1800 - 1900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
1900 - 2000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
2000 - 2100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
2100 - 2200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	183	m
Average Spread Distance outside bus terminus =	518	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00
0600 - 0700				0.01	0.01	0.01				0.00	0.00	0.00
0700 - 0800				0.01	0.01	0.01				0.00	0.00	0.00
0800 - 0900				0.01	0.01	0.01				0.00	0.00	0.00
0900 - 1000				0.01	0.01	0.01				0.00	0.00	0.00
1000 - 1100				0.01	0.01	0.01				0.00	0.00	0.00
1100 - 1200				0.01	0.01	0.01				0.00	0.00	0.00
1200 - 1300				0.01	0.01	0.01				0.00	0.00	0.00
1300 - 1400				0.01	0.01	0.01				0.00	0.00	0.00
1400 - 1500				0.01	0.01	0.01				0.00	0.00	0.00
1500 - 1600				0.01	0.01	0.01				0.00	0.00	0.00
1600 - 1700				0.01	0.01	0.01				0.00	0.00	0.00
1700 - 1800				0.01	0.01	0.01				0.00	0.00	0.00
1800 - 1900				0.01	0.01	0.01				0.00	0.00	0.00
1900 - 2000				0.01	0.01	0.01				0.00	0.00	0.00
2000 - 2100				0.01	0.01	0.01				0.00	0.00	0.00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00

Adjusted Start Emission within Loading and Unloading Area (g)						Adjusted Start Emission outside Loading and Unloading Area (g)						Start Emission Rate outside bus terminus (g/s)					
NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	FBSD											
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	4				1.59E-03	1.59E-03	1.59E-03				0.02	0.02	0.02
0100 - 0200	4				1.59E-03	1.59E-03	1.59E-03				0.02	0.02	0.02
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
0500 - 0600	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	7				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
0700 - 0800	9				1.59E-03	1.59E-03	1.59E-03				0.04	0.04	0.04
0800 - 0900	13				1.59E-03	1.59E-03	1.59E-03				0.06	0.06	0.06
0900 - 1000	10				1.59E-03	1.59E-03	1.59E-03				0.05	0.05	0.05
1000 - 1100	10				1.59E-03	1.59E-03	1.59E-03				0.05	0.05	0.05
1100 - 1200	9				1.59E-03	1.59E-03	1.59E-03				0.04	0.04	0.04
1200 - 1300	10				1.59E-03	1.59E-03	1.59E-03				0.05	0.05	0.05
1300 - 1400	9				1.59E-03	1.59E-03	1.59E-03				0.04	0.04	0.04
1400 - 1500	10				1.59E-03	1.59E-03	1.59E-03				0.05	0.05	0.05
1500 - 1600	11				1.59E-03	1.59E-03	1.59E-03				0.05	0.05	0.05
1600 - 1700	11				1.59E-03	1.59E-03	1.59E-03				0.05	0.05	0.05
1700 - 1800	13				1.59E-03	1.59E-03	1.59E-03				0.06	0.06	0.06
1800 - 1900	14				1.59E-03	1.59E-03	1.59E-03				0.07	0.07	0.07
1900 - 2000	11				1.59E-03	1.59E-03	1.59E-03				0.05	0.05	0.05
2000 - 2100	9				1.59E-03	1.59E-03	1.59E-03				0.04	0.04	0.04
2100 - 2200	7				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
2200 - 2300	7				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
2300 - 2400	7				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	365	m
Average Travelling Speed =	5	km/h

Hour	FBSD											
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	5				0.2265	0.2265	0.2084				0.413	0.413	0.380
0100 - 0200	5				0.2265	0.2265	0.2084				0.413	0.413	0.380
0200 - 0300	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0300 - 0400	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0400 - 0500	2				0.2265	0.2265	0.2084				0.165	0.165	0.152
0500 - 0600	1				0.2265	0.2265	0.2084				0.083	0.083	0.076
0600 - 0700	10				0.2265	0.2265	0.2084				0.827	0.827	0.761
0700 - 0800	12				0.2265	0.2265	0.2084				0.992	0.992	0.913
0800 - 0900	15				0.2265	0.2265	0.2084				1.240	1.240	1.141
0900 - 1000	12				0.2265	0.2265	0.2084				0.992	0.992	0.913
1000 - 1100	13				0.2265	0.2265	0.2084				1.075	1.075	0.989
1100 - 1200	12				0.2265	0.2265	0.2084				0.992	0.992	0.913
1200 - 1300	13				0.2265	0.2265	0.2084				1.075	1.075	0.989
1300 - 1400	12				0.2265	0.2265	0.2084				0.992	0.992	0.913
1400 - 1500	13				0.2265	0.2265	0.2084				1.075	1.075	0.989
1500 - 1600	13				0.2265	0.2265	0.2084				1.075	1.075	0.989
1600 - 1700	13				0.2265	0.2265	0.2084				1.075	1.075	0.989
1700 - 1800	15				0.2265	0.2265	0.2084				1.240	1.240	1.141
1800 - 1900	16				0.2265	0.2265	0.2084				1.323	1.323	1.217
1900 - 2000	13				0.2265	0.2265	0.2084				1.075	1.075	0.989
2000 - 2100	11				0.2265	0.2265	0.2084				0.909	0.909	0.837
2100 - 2200	8				0.2265	0.2265	0.2084				0.661	0.661	0.609
2200 - 2300	8				0.2265	0.2265	0.2084				0.661	0.661	0.609
2300 - 2400	8				0.2265	0.2265	0.2084				0.661	0.661	0.609

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.437	0.437	0.404				1.21E-04	1.21E-04	1.12E-04
0100 - 0200				0.437	0.437	0.404				1.21E-04	1.21E-04	1.12E-04
0200 - 0300				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.175	0.175	0.162				4.86E-05	4.86E-05	4.49E-05
0500 - 0600				0.087	0.087	0.081				2.43E-05	2.43E-05	2.25E-05
0600 - 0700				0.874	0.874	0.808				2.43E-04	2.43E-04	2.25E-04
0700 - 0800				1.049	1.049	0.970				2.91E-04	2.91E-04	2.69E-04
0800 - 0900				1.311	1.311	1.212				3.64E-04	3.64E-04	3.37E-04
0900 - 1000				1.049	1.049	0.970				2.91E-04	2.91E-04	2.69E-04
1000 - 1100				1.137	1.137	1.051				3.16E-04	3.16E-04	2.92E-04
1100 - 1200				1.049	1.049	0.970				2.91E-04	2.91E-04	2.69E-04
1200 - 1300				1.137	1.137	1.051				3.16E-04	3.16E-04	2.92E-04
1300 - 1400				1.049	1.049	0.970				2.91E-04	2.91E-04	2.69E-04
1400 - 1500				1.137	1.137	1.051				3.16E-04	3.16E-04	2.92E-04
1500 - 1600				1.137	1.137	1.051				3.16E-04	3.16E-04	2.92E-04
1600 - 1700				1.137	1.137	1.051				3.16E-04	3.16E-04	2.92E-04
1700 - 1800				1.311	1.311	1.212				3.64E-04	3.64E-04	3.37E-04
1800 - 1900				1.399	1.399	1.293				3.89E-04	3.89E-04	3.59E-04
1900 - 2000				1.137	1.137	1.051				3.16E-04	3.16E-04	2.92E-04
2000 - 2100				0.962	0.962	0.889				2.67E-04	2.67E-04	2.47E-04
2100 - 2200				0.699	0.699	0.647				1.94E-04	1.94E-04	1.80E-04
2200 - 2300				0.699	0.699	0.647				1.94E-04	1.94E-04	1.80E-04
2300 - 2400				0.699	0.699	0.647				1.94E-04	1.94E-04	1.80E-04
						total				5.59E-03	5.59E-03	5.16E-03

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

[2] Number of cold starts were provided by the traffic consultant.

Tung Chung Station Bus Terminus

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
	5	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**
NOx	0.77	1.39	1.85	2.62	3.23	4.31	6.32	7.86	11.55	15.09	16.94	20.02	22.03	23.10	23.72	24.34	24.64	24.64
NO	0.72	1.30	1.74	2.46	3.04	4.06	5.94	7.39	10.87	14.21	15.95	18.85	20.73	21.75	22.33	22.91	23.20	23.20
NO2	0.05	0.08	0.11	0.15	0.19	0.25	0.37	0.46	0.68	0.89	1.00	1.18	1.29	1.36	1.39	1.43	1.45	1.45
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of FBDD																		Total Start Emission of FBSD & FBDD (g)					
Soaking Time (min) / Hour	**5**	**10**	**20**	**30**	**40**	**50**	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**	**540**	**600**	**660**	**720**	**NOx**	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
0000 - 0100	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0100 - 0200	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0200 - 0300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0300 - 0400	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0400 - 0500	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0500 - 0600	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0				0	0	0
0600 - 0700	0	0	12	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0				0	0	0
0700 - 0800	0	0	25	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0				0	0	0
0800 - 0900	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
0900 - 1000	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1000 - 1100	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1100 - 1200	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1200 - 1300	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1300 - 1400	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1400 - 1500	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1500 - 1600	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1600 - 1700	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1700 - 1800	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1800 - 1900	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
1900 - 2000	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2000 - 2100	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2100 - 2200	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2200 - 2300	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0
2300 - 2400	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBDD													FBDD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	6				1.97E-03	1.97E-03	1.97E-03				0.04	0.04	0.04
0100 - 0200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0200 - 0300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0400 - 0500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0500 - 0600	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	5				1.97E-03	1.97E-03	1.97E-03				0.03	0.03	0.03
0600 - 0700	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
0700 - 0800	3				1.97E-03	1.97E-03	1.97E-03				0.018	0.018	0.018	25				1.97E-03	1.97E-03	1.97E-03				0.15	0.15	0.15
0800 - 0900	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	25				1.97E-03	1.97E-03	1.97E-03				0.15	0.15	0.15
0900 - 1000	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	19				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
1000 - 1100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	14				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
1100 - 1200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	14				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
1200 - 1300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	14				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
1300 - 1400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	15				1.97E-03	1.97E-03	1.97E-03				0.09	0.09	0.09
1400 - 1500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	13				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
1500 - 1600	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	14				1.97E-03	1.97E-03	1.97E-03				0.08	0.08	0.08
1600 - 1700	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	18				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
1700 - 1800	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	18				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
1800 - 1900	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	19				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
1900 - 2000	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	15				1.97E-03	1.97E-03	1.97E-03				0.09	0.09	0.09
2000 - 2100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
2100 - 2200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
2200 - 2300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	12				1.97E-03	1.97E-03	1.97E-03				0.07	0.07	0.07
2300 - 2400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	9				1.97E-03	1.97E-03	1.97E-03				0.05	0.05	0.05

Average Distance from Starting Place to Egress =	183	m
Average Spread Distance outside bus terminus =	518	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)						Adjusted Start Emission within Loading and Unloading Area (g)						Adjusted Start Emission outside Loading and Unloading Area (g)						Start Emission Rate outside bus terminus (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.04	0.04	0.04				0.01	0.01	0.01				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.01	0.01	0.01				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.01	0.01	0.01				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.01	0.01	0.01				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.01	0.01	0.01				0.00	0.00	0.00				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.04	0.04	0.04				0.01	0.01	0.01				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.08	0.08	0.08				0.03	0.03	0.03				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.17	0.17	0.17				0.06	0.06	0.06				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.15	0.15	0.15				0.05	0.05	0.05				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.11	0.11	0.11				0.04	0.04	0.04				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.08	0.08	0.08				0.03	0.03	0.03				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.08	0.08	0.08				0.03	0.03	0.03				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.08	0.08	0.08				0.03	0.03	0.03				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.09	0.09	0.09				0.03	0.03	0.03				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.08	0.08	0.08				0.03	0.03	0.03				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.08	0.08	0.08				0.03	0.03	0.03				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.11	0.11	0.11				0.04	0.04	0.04				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.11	0.11	0.11				0.04	0.04	0.04				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.11	0.11	0.11				0.04	0.04	0.04				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.09	0.09	0.09				0.03	0.03	0.03				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.07	0.07	0.07				0.02	0.02	0.02				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.07	0.07	0.07				0.02	0.02	0.02				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.07	0.07	0.07				0.02	0.02	0.02				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.05	0.05	0.05				0.02	0.02	0.02				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	7				1.97E-03	1.97E-03	1.97E-03				0.04	0.04	0.04
0100 - 0200	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
0200 - 0300	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0300 - 0400	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0400 - 0500	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0500 - 0600	7				1.97E-03	1.97E-03	1.97E-03				0.04	0.04	0.04
0600 - 0700	18				1.97E-03	1.97E-03	1.97E-03				0.10	0.10	0.10
0700 - 0800	28				1.97E-03	1.97E-03	1.97E-03				0.17	0.17	0.17
0800 - 0900	32				1.97E-03	1.97E-03	1.97E-03				0.19	0.19	0.19
0900 - 1000	22				1.97E-03	1.97E-03	1.97E-03				0.13	0.13	0.13
1000 - 1100	22				1.97E-03	1.97E-03	1.97E-03				0.13	0.13	0.13
1100 - 1200	21				1.97E-03	1.97E-03	1.97E-03				0.12	0.12	0.12
1200 - 1300	21				1.97E-03	1.97E-03	1.97E-03				0.12	0.12	0.12
1300 - 1400	21				1.97E-03	1.97E-03	1.97E-03				0.12	0.12	0.12
1400 - 1500	22				1.97E-03	1.97E-03	1.97E-03				0.13	0.13	0.13
1500 - 1600	22				1.97E-03	1.97E-03	1.97E-03				0.13	0.13	0.13
1600 - 1700	20				1.97E-03	1.97E-03	1.97E-03				0.12	0.12	0.12
1700 - 1800	20				1.97E-03	1.97E-03	1.97E-03				0.12	0.12	0.12
1800 - 1900	22				1.97E-03	1.97E-03	1.97E-03				0.13	0.13	0.13
1900 - 2000	19				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
2000 - 2100	19				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
2100 - 2200	19				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
2200 - 2300	19				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11
2300 - 2400	19				1.97E-03	1.97E-03	1.97E-03				0.11	0.11	0.11

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	365	m
Average Travelling Speed =	5	km/h

Hour	FBDD												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	13				0.4467	0.4467	0.4109				2.038	2.038	1.875
0100 - 0200	5				0.4467	0.4467	0.4109				0.815	0.815	0.750
0200 - 0300	2				0.4467	0.4467	0.4109				0.326	0.326	0.300
0300 - 0400	2				0.4467	0.4467	0.4109				0.326	0.326	0.300
0400 - 0500	3				0.4467	0.4467	0.4109				0.489	0.489	0.450
0500 - 0600	13				0.4467	0.4467	0.4109				2.120	2.120	1.950
0600 - 0700	31				0.4467	0.4467	0.4109				4.973	4.973	4.574
0700 - 0800	56				0.4467	0.4467	0.4109				9.131	9.131	8.399
0800 - 0900	57				0.4467	0.4467	0.4109				9.212	9.212	8.474
0900 - 1000	41				0.4467	0.4467	0.4109				6.603	6.603	6.074
1000 - 1100	36				0.4467	0.4467	0.4109				5.788	5.788	5.324
1100 - 1200	35				0.4467	0.4467	0.4109				5.707	5.707	5.249
1200 - 1300	35				0.4467	0.4467	0.4109				5.625	5.625	5.174
1300 - 1400	36				0.4467	0.4467	0.4109				5.788	5.788	5.324
1400 - 1500	35				0.4467	0.4467	0.4109				5.707	5.707	5.249
1500 - 1600	36				0.4467	0.4467	0.4109				5.788	5.788	5.324
1600 - 1700	38				0.4467	0.4467	0.4109				6.114	6.114	5.624
1700 - 1800	38				0.4467	0.4467	0.4109				6.196	6.196	5.699
1800 - 1900	41				0.4467	0.4467	0.4109				6.603	6.603	6.074
1900 - 2000	34				0.4467	0.4467	0.4109				5.544	5.544	5.099
2000 - 2100	31				0.4467	0.4467	0.4109				5.054	5.054	4.649
2100 - 2200	31				0.4467	0.4467	0.4109				4.973	4.973	4.574
2200 - 2300	31				0.4467	0.4467	0.4109				4.973	4.973	4.574
2300 - 2400	28				0.4467	0.4467	0.4109				4.565	4.565	4.199

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				2.112	2.112	1.949				5.87E-04	5.87E-04	5.41E-04
0100 - 0200				0.845	0.845	0.779				2.35E-04	2.35E-04	2.17E-04
0200 - 0300				0.338	0.338	0.312				9.39E-05	9.39E-05	8.66E-05
0300 - 0400				0.338	0.338	0.312				9.39E-05	9.39E-05	8.66E-05
0400 - 0500				0.507	0.507	0.468				1.41E-04	1.41E-04	1.30E-04
0500 - 0600				2.197	2.197	2.027				6.10E-04	6.10E-04	5.63E-04
0600 - 0700				5.153	5.153	4.755				1.43E-03	1.43E-03	1.32E-03
0700 - 0800				9.462	9.462	8.730				2.63E-03	2.63E-03	2.43E-03
0800 - 0900				9.547	9.547	8.808				2.65E-03	2.65E-03	2.45E-03
0900 - 1000				6.843	6.843	6.314				1.90E-03	1.90E-03	1.75E-03
1000 - 1100				5.998	5.998	5.534				1.67E-03	1.67E-03	1.54E-03
1100 - 1200				5.914	5.914	5.456				1.64E-03	1.64E-03	1.52E-03
1200 - 1300				5.829	5.829	5.379				1.62E-03	1.62E-03	1.49E-03
1300 - 1400				5.998	5.998	5.534				1.67E-03	1.67E-03	1.54E-03
1400 - 1500				5.914	5.914	5.456				1.64E-03	1.64E-03	1.52E-03
1500 - 1600				5.998	5.998	5.534				1.67E-03	1.67E-03	1.54E-03
1600 - 1700				6.336	6.336	5.846				1.76E-03	1.76E-03	1.62E-03
1700 - 1800				6.421	6.421	5.924				1.78E-03	1.78E-03	1.65E-03
1800 - 1900				6.843	6.843	6.314				1.90E-03	1.90E-03	1.75E-03
1900 - 2000				5.745	5.745	5.301				1.60E-03	1.60E-03	1.47E-03
2000 - 2100				5.238	5.238	4.833				1.45E-03	1.45E-03	1.34E-03
2100 - 2200				5.153	5.153	4.755				1.43E-03	1.43E-03	1.32E-03
2200 - 2300				5.153	5.153	4.755				1.43E-03	1.43E-03	1.32E-03
2300 - 2400				4.731	4.731	4.365				1.31E-03	1.31E-03	1.21E-03
						total				3.29E-02	3.29E-02	3.04E-02

Daily Emission Distribution

Hour	TSP	RSP	FSP
00 - 01	2%	2%	2%
01 - 02	1%	1%	1%
02 - 03	0%	0%	0%
03 - 04	0%	0%	0%
04 - 05	0%	0%	0%
05 - 06	2%	2%	2%
06 - 07	4%	4%	4%
07 - 08	7%	7%	7%
08 - 09	8%	8%	8%
09 - 10	6%	6%	6%
10 - 11	5%	5%	5%
11 - 12	5%	5%	5%
12 - 13	5%	5%	5%
13 - 14	5%	5%	5%
14 - 15	5%	5%	5%
15 - 16	5%	5%	5%
16 - 17	5%	5%	5%
17 - 18	6%	6%	6%
18 - 19	6%	6%	6%
19 - 20	5%	5%	5%
20 - 21	5%	5%	5%
21 - 22	4%	4%	4%
22 - 23	4%	4%	4%
23 - 24	4%	4%	4%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

[2] Number of cold starts were provided by the traffic consultant.

Tung Chung Temporary Bus Terminus

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.35	0.63	0.84	1.19	1.47	1.96	2.87	3.57	5.24	6.85	7.69	9.09	10.00	10.49	10.77	11.05	11.19	11.19
NO	0.33	0.59	0.78	1.11	1.37	1.83	2.68	3.33	4.90	6.40	7.19	8.49	9.34	9.80	10.06	10.32	10.45	10.45
NO2	0.02	0.04	0.06	0.08	0.10	0.13	0.19	0.23	0.34	0.45	0.51	0.60	0.66	0.69	0.71	0.73	0.74	0.74
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of FBSD																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
0800 - 0900	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBSD (g)						
NOx	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0900 - 1000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1000 - 1100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1100 - 1200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1200 - 1300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1300 - 1400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1400 - 1500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1500 - 1600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1600 - 1700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1700 - 1800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1800 - 1900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1900 - 2000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

Hour	FBSD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	6				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
0900 - 1000	6				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
1000 - 1100	6				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
1100 - 1200	6				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
1200 - 1300	7				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
1300 - 1400	7				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
1400 - 1500	7				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
1500 - 1600	6				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
1600 - 1700	7				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
1700 - 1800	6				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
1800 - 1900	7				1.59E-03	1.59E-03	1.59E-03				0.03	0.03	0.03
1900 - 2000	4				1.59E-03	1.59E-03	1.59E-03				0.02	0.02	0.02
2000 - 2100	3				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
2100 - 2200	2				1.59E-03	1.59E-03	1.59E-03				0.01	0.01	0.01
2200 - 2300	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	1				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	75	m
Average Spread Distance outside bus terminus =	625	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00
0700 - 0800				0.01	0.01	0.01				0.00	0.00	0.00
0800 - 0900				0.03	0.03	0.03				0.01	0.01	0.01
0900 - 1000				0.03	0.03	0.03				0.01	0.01	0.01
1000 - 1100				0.03	0.03	0.03				0.01	0.01	0.01
1100 - 1200				0.03	0.03	0.03				0.01	0.01	0.01
1200 - 1300				0.03	0.03	0.03				0.01	0.01	0.01
1300 - 1400				0.03	0.03	0.03				0.01	0.01	0.01
1400 - 1500				0.03	0.03	0.03				0.01	0.01	0.01
1500 - 1600				0.03	0.03	0.03				0.01	0.01	0.01
1600 - 1700				0.03	0.03	0.03				0.01	0.01	0.01
1700 - 1800				0.03	0.03	0.03				0.01	0.01	0.01
1800 - 1900				0.03	0.03	0.03				0.01	0.01	0.01
1900 - 2000				0.02	0.02	0.02				0.01	0.01	0.01
2000 - 2100				0.01	0.01	0.01				0.00	0.00	0.00
2100 - 2200				0.01	0.01	0.01				0.00	0.00	0.00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00

Hour	Adjusted Start Emission within Loading and Unloading Area (g)						Adjusted Start Emission outside Loading and Unloading Area (g)						Start Emission Rate outside bus terminus (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	FBSD											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0100 - 0200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0200 - 0300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0300 - 0400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0400 - 0500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0500 - 0600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0600 - 0700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0700 - 0800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0800 - 0900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
0900 - 1000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1000 - 1100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1100 - 1200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1200 - 1300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1300 - 1400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1400 - 1500	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1500 - 1600	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1600 - 1700	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1700 - 1800	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1800 - 1900	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
1900 - 2000	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2000 - 2100	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2100 - 2200	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2200 - 2300	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00
2300 - 2400	0				1.59E-03	1.59E-03	1.59E-03				0.00	0.00	0.00

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	150	m
Average Travelling Speed =	5	km/h

Hour	Frequency	FBSD											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0100 - 0200	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0200 - 0300	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0300 - 0400	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0400 - 0500	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0500 - 0600	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0600 - 0700	0				0.2265	0.2265	0.2084				0.000	0.000	0.000
0700 - 0800	2				0.2265	0.2265	0.2084				0.068	0.068	0.063
0800 - 0900	6				0.2265	0.2265	0.2084				0.204	0.204	0.188
0900 - 1000	6				0.2265	0.2265	0.2084				0.204	0.204	0.188
1000 - 1100	6				0.2265	0.2265	0.2084				0.204	0.204	0.188
1100 - 1200	6				0.2265	0.2265	0.2084				0.204	0.204	0.188
1200 - 1300	7				0.2265	0.2265	0.2084				0.238	0.238	0.219
1300 - 1400	7				0.2265	0.2265	0.2084				0.238	0.238	0.219
1400 - 1500	7				0.2265	0.2265	0.2084				0.238	0.238	0.219
1500 - 1600	6				0.2265	0.2265	0.2084				0.204	0.204	0.188
1600 - 1700	7				0.2265	0.2265	0.2084				0.238	0.238	0.219
1700 - 1800	6				0.2265	0.2265	0.2084				0.204	0.204	0.188
1800 - 1900	7				0.2265	0.2265	0.2084				0.238	0.238	0.219
1900 - 2000	4				0.2265	0.2265	0.2084				0.136	0.136	0.125
2000 - 2100	3				0.2265	0.2265	0.2084				0.102	0.102	0.094
2100 - 2200	2				0.2265	0.2265	0.2084				0.068	0.068	0.063
2200 - 2300	1				0.2265	0.2265	0.2084				0.034	0.034	0.031
2300 - 2400	1				0.2265	0.2265	0.2084				0.034	0.034	0.031

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0100 - 0200				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.077	0.077	0.072				2.15E-05	2.15E-05	2.00E-05
0800 - 0900				0.232	0.232	0.216				6.46E-05	6.46E-05	6.00E-05
0900 - 1000				0.232	0.232	0.216				6.46E-05	6.46E-05	6.00E-05
1000 - 1100				0.232	0.232	0.216				6.46E-05	6.46E-05	6.00E-05
1100 - 1200				0.232	0.232	0.216				6.46E-05	6.46E-05	6.00E-05
1200 - 1300				0.271	0.271	0.252				7.53E-05	7.53E-05	7.00E-05
1300 - 1400				0.271	0.271	0.252				7.53E-05	7.53E-05	7.00E-05
1400 - 1500				0.271	0.271	0.252				7.53E-05	7.53E-05	7.00E-05
1500 - 1600				0.232	0.232	0.216				6.46E-05	6.46E-05	6.00E-05
1600 - 1700				0.271	0.271	0.252				7.53E-05	7.53E-05	7.00E-05
1700 - 1800				0.232	0.232	0.216				6.46E-05	6.46E-05	6.00E-05
1800 - 1900				0.271	0.271	0.252				7.53E-05	7.53E-05	7.00E-05
1900 - 2000				0.155	0.155	0.144				4.30E-05	4.30E-05	4.00E-05
2000 - 2100				0.116	0.116	0.108				3.23E-05	3.23E-05	3.00E-05
2100 - 2200				0.077	0.077	0.072				2.15E-05	2.15E-05	2.00E-05
2200 - 2300				0.039	0.039	0.036				1.08E-05	1.08E-05	1.00E-05
2300 - 2400				0.039	0.039	0.036				1.08E-05	1.08E-05	1.00E-05
					total					9.04E-04	9.04E-04	8.40E-04

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.

Tung Chung Temporary Bus Terminus

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.77	1.39	1.85	2.62	3.23	4.31	6.32	7.86	11.55	15.09	16.94	20.02	22.03	23.10	23.72	24.34	24.64	24.64
NO	0.72	1.30	1.74	2.46	3.04	4.06	5.94	7.39	10.87	14.21	15.95	18.85	20.73	21.75	22.33	22.91	23.20	23.20
NO2	0.05	0.08	0.11	0.15	0.19	0.25	0.37	0.46	0.68	0.89	1.00	1.18	1.29	1.36	1.39	1.43	1.45	1.45
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of FBDD																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBSD & FBDD (g)					
NOx	NO	NO2	TSP	RSP	FSP
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBDD												FBDD											
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0100 - 0200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0200 - 0300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0400 - 0500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0500 - 0600	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0600 - 0700	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0700 - 0800	1				1.97E-03	1.97E-03	1.97E-03				0.006	0.006	0.006	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0800 - 0900	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0900 - 1000	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1000 - 1100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1100 - 1200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1200 - 1300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1300 - 1400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1400 - 1500	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1500 - 1600	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1600 - 1700	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1700 - 1800	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1800 - 1900	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
1900 - 2000	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
2000 - 2100	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
2100 - 2200	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
2200 - 2300	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
2300 - 2400	0				1.97E-03	1.97E-03	1.97E-03				0.000	0.000	0.000	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00

Average Distance from Starting Place to Egress =	75	m
Average Spread Distance outside bus terminus =	625	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.00	0.00	0.00				0.00	0.00	0.00
0100 - 0200				0.00	0.00	0.00				0.00	0.00	0.00
0200 - 0300				0.00	0.00	0.00				0.00	0.00	0.00
0300 - 0400				0.00	0.00	0.00				0.00	0.00	0.00
0400 - 0500				0.00	0.00	0.00				0.00	0.00	0.00
0500 - 0600				0.00	0.00	0.00				0.00	0.00	0.00
0600 - 0700				0.00	0.00	0.00				0.00	0.00	0.00
0700 - 0800				0.01	0.01	0.01				0.00	0.00	0.00
0800 - 0900				0.00	0.00	0.00				0.00	0.00	0.00
0900 - 1000				0.00	0.00	0.00				0.00	0.00	0.00
1000 - 1100				0.00	0.00	0.00				0.00	0.00	0.00
1100 - 1200				0.00	0.00	0.00				0.00	0.00	0.00
1200 - 1300				0.00	0.00	0.00				0.00	0.00	0.00
1300 - 1400				0.00	0.00	0.00				0.00	0.00	0.00
1400 - 1500				0.00	0.00	0.00				0.00	0.00	0.00
1500 - 1600				0.00	0.00	0.00				0.00	0.00	0.00
1600 - 1700				0.00	0.00	0.00				0.00	0.00	0.00
1700 - 1800				0.00	0.00	0.00				0.00	0.00	0.00
1800 - 1900				0.00	0.00	0.00				0.00	0.00	0.00
1900 - 2000				0.00	0.00	0.00				0.00	0.00	0.00
2000 - 2100				0.00	0.00	0.00				0.00	0.00	0.00
2100 - 2200				0.00	0.00	0.00				0.00	0.00	0.00
2200 - 2300				0.00	0.00	0.00				0.00	0.00	0.00
2300 - 2400				0.00	0.00	0.00				0.00	0.00	0.00

Adjusted Start Emission within Loading and Unloading Area (g)						Adjusted Start Emission outside Loading and Unloading Area (g)						Start Emission Rate outside bus terminus (g/s)					
NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00
			0.00	0.00	0.00				0.00	0.00	0.00				0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	FBDD											
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0100 - 0200	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0200 - 0300	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0300 - 0400	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0400 - 0500	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0500 - 0600	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0600 - 0700	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00
0700 - 0800	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0800 - 0900	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
0900 - 1000	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1000 - 1100	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1100 - 1200	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1200 - 1300	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1300 - 1400	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1400 - 1500	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1500 - 1600	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1600 - 1700	4				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1700 - 1800	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
1800 - 1900	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
1900 - 2000	3				1.97E-03	1.97E-03	1.97E-03				0.02	0.02	0.02
2000 - 2100	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
2100 - 2200	2				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
2200 - 2300	1				1.97E-03	1.97E-03	1.97E-03				0.01	0.01	0.01
2300 - 2400	0				1.97E-03	1.97E-03	1.97E-03				0.00	0.00	0.00

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	150	m
Average Travelling Speed =	5	km/h

Hour	FBDD											
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	1				0.4467	0.4467	0.4109				0.067	0.067	0.062
0100 - 0200	0				0.4467	0.4467	0.4109				0.000	0.000	0.000
0200 - 0300	0				0.4467	0.4467	0.4109				0.000	0.000	0.000
0300 - 0400	0				0.4467	0.4467	0.4109				0.000	0.000	0.000
0400 - 0500	0				0.4467	0.4467	0.4109				0.000	0.000	0.000
0500 - 0600	0				0.4467	0.4467	0.4109				0.000	0.000	0.000
0600 - 0700	0				0.4467	0.4467	0.4109				0.000	0.000	0.000
0700 - 0800	2				0.4467	0.4467	0.4109				0.134	0.134	0.123
0800 - 0900	1				0.4467	0.4467	0.4109				0.067	0.067	0.062
0900 - 1000	1				0.4467	0.4467	0.4109				0.067	0.067	0.062
1000 - 1100	2				0.4467	0.4467	0.4109				0.134	0.134	0.123
1100 - 1200	3				0.4467	0.4467	0.4109				0.201	0.201	0.185
1200 - 1300	2				0.4467	0.4467	0.4109				0.134	0.134	0.123
1300 - 1400	2				0.4467	0.4467	0.4109				0.134	0.134	0.123
1400 - 1500	3				0.4467	0.4467	0.4109				0.201	0.201	0.185
1500 - 1600	2				0.4467	0.4467	0.4109				0.134	0.134	0.123
1600 - 1700	4				0.4467	0.4467	0.4109				0.268	0.268	0.247
1700 - 1800	2				0.4467	0.4467	0.4109				0.134	0.134	0.123
1800 - 1900	3				0.4467	0.4467	0.4109				0.201	0.201	0.185
1900 - 2000	3				0.4467	0.4467	0.4109				0.201	0.201	0.185
2000 - 2100	2				0.4467	0.4467	0.4109				0.134	0.134	0.123
2100 - 2200	2				0.4467	0.4467	0.4109				0.134	0.134	0.123
2200 - 2300	1				0.4467	0.4467	0.4109				0.067	0.067	0.062
2300 - 2400	0				0.4467	0.4467	0.4109				0.000	0.000	0.000

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100				0.073	0.073	0.068				2.03E-05	2.03E-05	1.88E-05
0100 - 0200				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0200 - 0300				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0300 - 0400				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0400 - 0500				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0500 - 0600				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0600 - 0700				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
0700 - 0800				0.146	0.146	0.135				4.05E-05	4.05E-05	3.75E-05
0800 - 0900				0.073	0.073	0.068				2.03E-05	2.03E-05	1.88E-05
0900 - 1000				0.073	0.073	0.068				2.03E-05	2.03E-05	1.88E-05
1000 - 1100				0.146	0.146	0.135				4.05E-05	4.05E-05	3.75E-05
1100 - 1200				0.219	0.219	0.203				6.08E-05	6.08E-05	5.63E-05
1200 - 1300				0.146	0.146	0.135				4.05E-05	4.05E-05	3.75E-05
1300 - 1400				0.146	0.146	0.135				4.05E-05	4.05E-05	3.75E-05
1400 - 1500				0.219	0.219	0.203				6.08E-05	6.08E-05	5.63E-05
1500 - 1600				0.146	0.146	0.135				4.05E-05	4.05E-05	3.75E-05
1600 - 1700				0.292	0.292	0.270				8.10E-05	8.10E-05	7.51E-05
1700 - 1800				0.146	0.146	0.135				4.05E-05	4.05E-05	3.75E-05
1800 - 1900				0.219	0.219	0.203				6.08E-05	6.08E-05	5.63E-05
1900 - 2000				0.219	0.219	0.203				6.08E-05	6.08E-05	5.63E-05
2000 - 2100				0.146	0.146	0.135				4.05E-05	4.05E-05	3.75E-05
2100 - 2200				0.146	0.146	0.135				4.05E-05	4.05E-05	3.75E-05
2200 - 2300				0.073	0.073	0.068				2.03E-05	2.03E-05	1.88E-05
2300 - 2400				0.000	0.000	0.000				0.00E+00	0.00E+00	0.00E+00
						total				7.29E-04	7.29E-04	6.76E-04

Daily Emission Distribution

Hour	TSP	RSP	FSP
00 - 01	1%	1%	1%
01 - 02	0%	0%	0%
02 - 03	0%	0%	0%
03 - 04	0%	0%	0%
04 - 05	0%	0%	0%
05 - 06	0%	0%	0%
06 - 07	0%	0%	0%
07 - 08	4%	4%	4%
08 - 09	5%	5%	5%
09 - 10	5%	5%	5%
10 - 11	6%	6%	6%
11 - 12	8%	8%	8%
12 - 13	7%	7%	7%
13 - 14	7%	7%	7%
14 - 15	8%	8%	8%
15 - 16	6%	6%	6%
16 - 17	10%	10%	10%
17 - 18	6%	6%	6%
18 - 19	8%	8%	8%
19 - 20	6%	6%	6%
20 - 21	4%	4%	4%
21 - 22	4%	4%	4%
22 - 23	2%	2%	2%
23 - 24	1%	1%	1%
Total	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.

Emission Sources (Tung Chung) Listing in AERMOD

Location	Source ID	Type	Coordinates		Base Elevation	Release Height	Length X	Length Y	Area	Angle	Szinit	Exit Temperature	Exit Velocity	Stack Diameter	Daily Emission Rate		
			X	Y	mPD	mAG	m	m	m^2	degree	m	(K)	(m/s)	(m)	TSP	RSP	FSP
															g/s or $g/m^2/s$		
Tung Chung Station Bus Terminus[1]	PTI_TCS01	POINT	811908	816853	6.0	8	-	-	-	-	-	0	3.5	2.8	6.63E-03	6.63E-03	6.12E-03
	PTI_TCS02	POINT	811794	816801	6.0	12	-	-	-	-	-	0	3.5	5.6	6.63E-03	6.63E-03	6.12E-03
	PTI_TCS03	POINT	811831	816833	6.0	13	-	-	-	-	-	0	3.5	3.9	6.63E-03	6.63E-03	6.12E-03
	PTI_TCS04	POINT	811837	816837	6.0	13	-	-	-	-	-	0	3.5	3.9	6.63E-03	6.63E-03	6.12E-03
	PTI_TCS05	POINT	811844	816840	6.0	13	-	-	-	-	-	0	3.5	2.3	6.63E-03	6.63E-03	6.12E-03
	PTI_TCS06	POINT	811884	816801	6.0	15	-	-	-	-	-	0	3.5	4	6.63E-03	6.63E-03	6.12E-03
Tung Chung Temporary Bus Terminus[2]	PTI_TCT01	AREA	811791	816919	6.0	0	60	60	3600	136	-	-	-	-	4.54E-07	4.54E-07	4.21E-07

Remark:

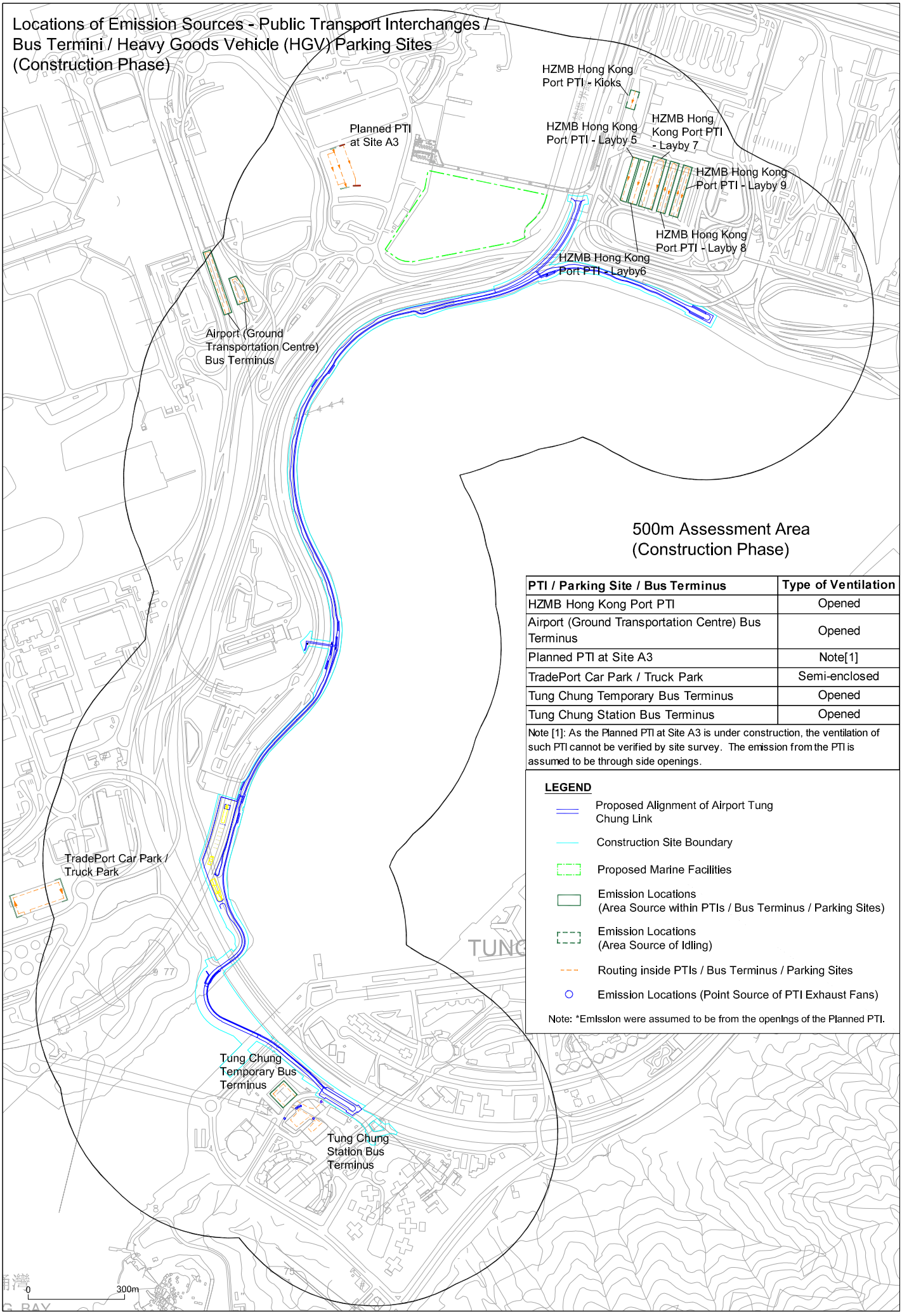
[1] The PTI exhaust parameters including coordinates, perimeters, rotation angle, exit velocity, stack diameter and exit temperature are made reference to the approved EIA Report (AEIAR-235/2022) for Tung Chung Line Extension.

[2] Release height for emission inside bus terminus were made reference to Appendix 3.8 of the approved EIA Report AEIAR-237/2022 for Tung Chung Line Extension.

Hourly Emission Profile

	TSP		RSP		FSP	
Hour	**PTI_TCS**	**PTI_TCT**	**PTI_TCS**	**PTI_TCT**	**PTI_TCS**	**PTI_TCT**
00 - 01	2%	1%	2%	1%	2%	1%
01 - 02	1%	0%	1%	0%	1%	0%
02 - 03	0%	0%	0%	0%	0%	0%
03 - 04	0%	0%	0%	0%	0%	0%
04 - 05	0%	0%	0%	0%	0%	0%
05 - 06	2%	0%	2%	0%	2%	0%
06 - 07	4%	0%	4%	0%	4%	0%
07 - 08	7%	4%	7%	4%	7%	4%
08 - 09	8%	5%	8%	5%	8%	5%
09 - 10	6%	5%	6%	5%	6%	5%
10 - 11	5%	6%	5%	6%	5%	6%
11 - 12	5%	8%	5%	8%	5%	8%
12 - 13	5%	7%	5%	7%	5%	7%
13 - 14	5%	7%	5%	7%	5%	7%
14 - 15	5%	8%	5%	8%	5%	8%
15 - 16	5%	6%	5%	6%	5%	6%
16 - 17	5%	10%	5%	10%	5%	10%
17 - 18	6%	6%	6%	6%	6%	6%
18 - 19	6%	8%	6%	8%	6%	8%
19 - 20	5%	6%	5%	6%	5%	6%
20 - 21	5%	4%	5%	4%	5%	4%
21 - 22	4%	4%	4%	4%	4%	4%
22 - 23	4%	2%	4%	2%	4%	2%
23 - 24	4%	1%	4%	1%	4%	1%

Locations of Emission Sources - Public Transport Interchanges / Bus Termini / Heavy Goods Vehicle (HGV) Parking Sites (Construction Phase)



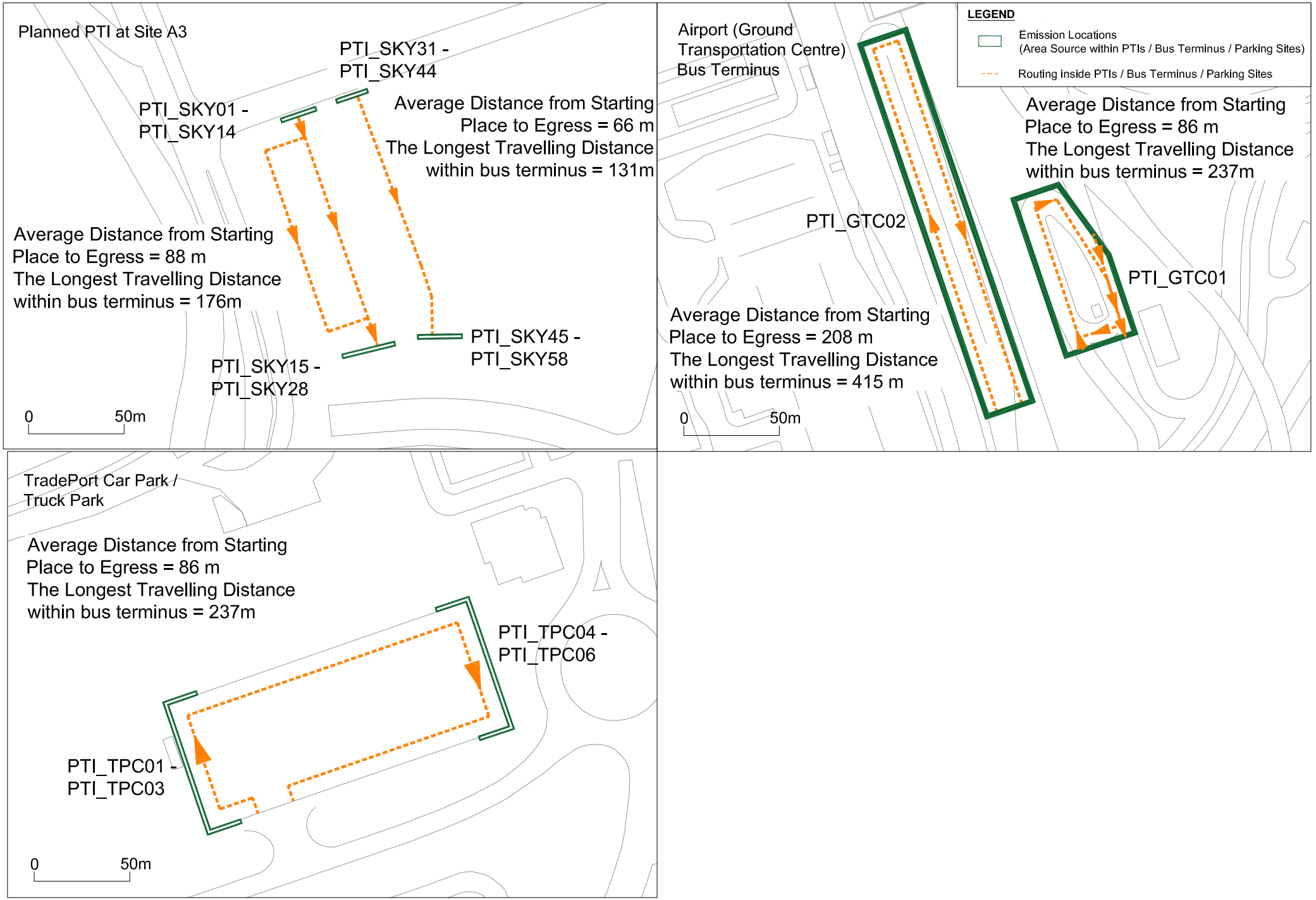
PTI / Parking Site / Bus Terminus	Type of Ventilation
HZMB Hong Kong Port PTI	Opened
Airport (Ground Transportation Centre) Bus Terminus	Opened
Planned PTI at Site A3	Note[1]
TradePort Car Park / Truck Park	Semi-enclosed
Tung Chung Temporary Bus Terminus	Opened
Tung Chung Station Bus Terminus	Opened

Note [1]: As the Planned PTI at Site A3 is under construction, the ventilation of such PTI cannot be verified by site survey. The emission from the PTI is assumed to be through side openings.

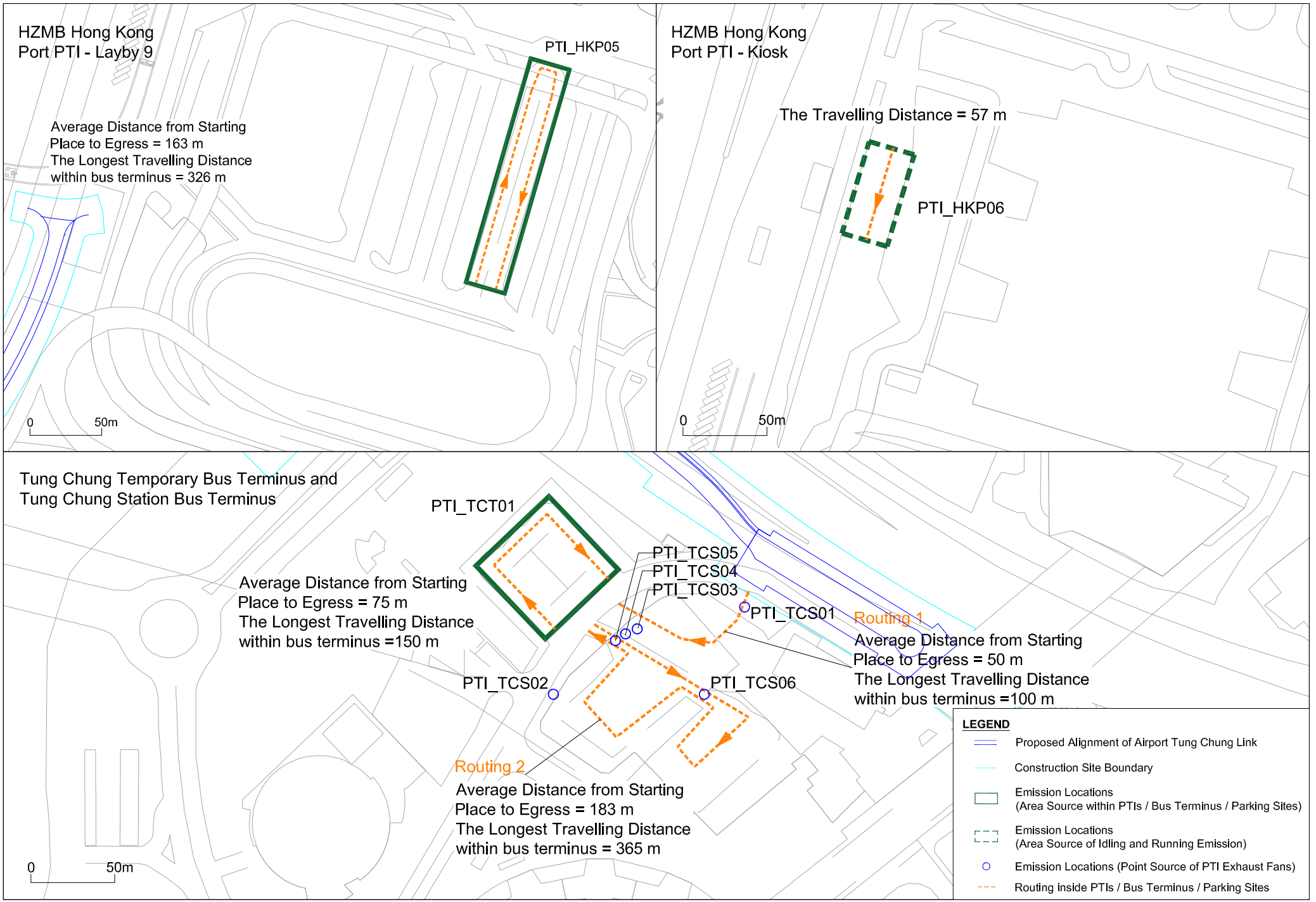
LEGEND

- Proposed Alignment of Airport Tung Chung Link
- Construction Site Boundary
- Proposed Marine Facilities
- Emission Locations (Area Source within PTIs / Bus Terminus / Parking Sites)
- Emission Locations (Area Source of Idling)
- Routing inside PTIs / Bus Terminus / Parking Sites
- Emission Locations (Point Source of PTI Exhaust Fans)

Note: *Emission were assumed to be from the openings of the Planned PTI.


Planned PTI at Site A3
PTI_SKY31 -
PTI_SKY44
PTI_SKY01 -
PTI_SKY14
Average Distance from Starting
Place to Egress = 66 m
The Longest Travelling Distance
within bus terminus = 131m
Average Distance from Starting
Place to Egress = 88 m
The Longest Travelling Distance
within bus terminus = 176m
PTI_SKY45 -
PTI_SKY58
PTI_SKY15 -
PTI_SKY28
0
50m
Airport (Ground
Transportation Centre)
Bus Terminus
LEGEND
Emission Locations
(Area Source within PTIs / Bus Terminus / Parking Sites)
Routing inside PTIs / Bus Terminus / Parking Sites
Average Distance from Starting
Place to Egress = 86 m
The Longest Travelling Distance
within bus terminus = 237m
PTI_GTC02
PTI_GTC01
Average Distance from Starting
Place to Egress = 208 m
The Longest Travelling Distance
within bus terminus = 415 m
0
50m
TradePort Car Park /
Truck Park
Average Distance from Starting
Place to Egress = 86 m
The Longest Travelling Distance
within bus terminus = 237m
PTI_TPC04 -
PTI_TPC06
PTI_TPC01 -
PTI_TPC03
0
50m


HZMB Hong Kong
Port PTI - Layby 5
PTI_HKP01
Average Distance from Starting
Place to Egress = 70 m
The Longest Travelling Distance
within bus terminus = 140m
0
50m
HZMB Hong Kong
Port PTI - Layby 6
PTI_HKP02
Average Distance from Starting
Place to Egress = 70 m
The Longest Travelling Distance
within bus terminus = 140m
0
50m
HZMB Hong Kong
Port PTI - Layby 7
PTI_HKP03
Average Distance from Starting
Place to Egress = 163 m
The Longest Travelling Distance
within bus terminus = 326 m
0
50m
HZMB Hong Kong
Port PTI - Layby 8
PTI_HKP04
Average Distance from Starting
Place to Egress = 163 m
The Longest Travelling Distance
within bus terminus = 326 m
0
50m
LEGEND
Proposed Alignment of Airport Tung Chung Link
Construciton Site Boundary
Emission Locations
(Area Source within PTIs / Bus Terminus / Parking Sites)
Routing inside PTIs / Bus Terminus / Parking Sites


HZMB Hong Kong
Port PTI - Layby 9
PTI_HKP05
Average Distance from Starting
Place to Egress = 163 m
The Longest Travelling Distance
within bus terminus = 326 m
0
50m
HZMB Hong Kong
Port PTI - Kiosk
The Travelling Distance = 57 m
PTI_HKP06
0
50m
Tung Chung Temporary Bus Terminus and
Tung Chung Station Bus Terminus
PTI_TCT01
PTI_TCS05
PTI_TCS04
PTI_TCS03
PTI_TCS01
Routing 1
Average Distance from Starting
Place to Egress = 50 m
The Longest Travelling Distance
within bus terminus =100 m
Average Distance from Starting
Place to Egress = 75 m
The Longest Travelling Distance
within bus terminus =150 m
PTI_TCS02
PTI_TCS06
Routing 2
Average Distance from Starting
Place to Egress = 183 m
The Longest Travelling Distance
within bus terminus = 365 m
0
50m
LEGEND
Proposed Alignment of Airport Tung Chung Link
Construction Site Boundary
Emission Locations
(Area Source within PTIs / Bus Terminus / Parking Sites)
Emission Locations
(Area Source of Idling and Running Emission)
Emission Locations (Point Source of PTI Exhaust Fans)
Routing inside PTIs / Bus Terminus / Parking Sites

Running Emission Factor

Vehicel Class	Fuel Type	Running EmFactor (g/km·vehicle at 5 km/hr)					
		NOx	NO	NO_2	TSP	RSP	FSP
FBSD	DSL	7.105	6.692	0.413	0.227	0.227	0.208
FBDD	DSL	14.621	13.893	0.728	0.447	0.447	0.411
NFB6	DSL	2.771	1.995	0.776	0.096	0.096	0.089
NFB7	DSL	3.835	2.569	1.265	0.069	0.069	0.063
NFB8	DSL	8.736	7.318	1.418	0.297	0.297	0.274
NFB9	DSL	4.264	2.857	1.407	0.092	0.092	0.084
PLB	DSL	1.428	1.028	0.400	0.075	0.075	0.069
PLB	LPG	1.981	1.970	0.010	0.000	0.000	0.000
HGV7	DSL	4.158	2.890	1.268	0.140	0.140	0.128
HGV8	DSL	6.876	5.485	1.392	0.267	0.267	0.246
HGV9	DSL	8.217	6.716	1.501	0.317	0.317	0.292

[1] Running Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

Idling Emission Factors

FBSD

NO2/NOx Ratio [1] = 0.06 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor [13]	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2]	PM (g/hr) [4]	NOx (g/hr) [11]	PM (g/hr) [12]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro V	56.7	0.0474	0.10	11.71	0.10	1.20	1.30	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.92E-01	1.81E-01	1.12E-02	1.59E-03
Euro VI	43.3	0.0077	0.01	1.75	0.01										

FBDD

NO2/NOx Ratio [1] = 0.05 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor [13]	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2]	PM (g/hr) [4]	NOx (g/hr) [11]	PM (g/hr) [12]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro IV	0.2	0.1535	0.20	7.51	0.20	1.20	1.30	7.09E+00	6.73E+00	3.53E-01	1.97E-03	2.34E-01	2.23E-01	1.17E-02	1.97E-03
Euro V	72.8	0.1535	0.10	11.71	0.10										
Euro VI	27.0	0.0225	0.01	1.75	0.01										

NFB6

NO2/NOx Ratio [1] = 0.28 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor [13]	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2][14]	PM (g/hr) [4]	NOx (g/hr) [11]	PM (g/hr) [12]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro IV	0.0	0.0573	0.2000	7.51	0.20	0.90	1.30	8.14E-01	5.86E-01	2.28E-01	6.70E-04	8.67E-02	6.24E-02	2.43E-02	6.70E-04
Euro V	27.0	0.0474	0.1000	11.71	0.10										
Euro VI	72.9	0.0010	0.0100	1.75	0.01										

NFB7

NO2/NOx Ratio [1] = 0.33 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor [13]	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2][15]	PM (g/hr) [4]	NOx (g/hr) [11]	PM (g/hr) [12]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro IV	0.0	0.0573	0.2000	7.51	0.20	0.90	1.30	1.04E+00	6.98E-01	3.44E-01	6.23E-04	8.14E-02	5.45E-02	2.69E-02	6.23E-04
Euro V	24.3	0.0474	0.1000	11.71	0.10										
Euro VI	75.7	0.0077	0.0100	1.75	0.01										

NFB8

NO2/NOx Ratio [1] = 0.16 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor [13]	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2][16]	PM (g/hr) [4]	NOx (g/hr) [11]	PM (g/hr) [12]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro II	0.0	0.0113	1.43	40.58	1.43	1.0	1.3	1.15E+00	9.67E-01	1.87E-01	7.85E-04	1.01E-01	8.43E-02	1.63E-02	7.85E-04
Euro III	0.0	0.0117	1.29	42.08	1.29										
Euro IV	0.0	0.0573	0.20	7.51	0.20										
Euro V	29.0	0.0474	0.10	11.71	0.10										
Euro VI	70.9	0.0077	0.01	1.75	0.01										

NFB9

NO2/NOx Ratio [1] = 0.33 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor [13]	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2]	PM (g/hr) [4]	NOx (g/hr) [11]	PM (g/hr) [12]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro VI	100	0.0077	0.0100	1.75	0.01	1.0	1.3	4.62E-01	3.10E-01	1.52E-01	2.17E-04	3.79E-02	2.54E-02	1.25E-02	2.17E-04

PLB (Diesel)

NO2/NOx Ratio [1] = 0.28 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2][3]	PM (g/hr) [4]	NOx (g/hr) [5]	PM (g/hr) [6]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro V	20.6	0.0010	0.02	3.60	0.02	-	1.3	6.00E-02	4.32E-02	1.68E-02	4.33E-04	3.81E-02	2.74E-02	1.07E-02	4.33E-04
Euro VI	79.4	0.0010	0.02	1.28	0.02										

PLB (LPG)

NO2/NOx Ratio [1] = 0.01 From EMFAC

Vehicle Emission Standard	Population	EmFactor Cold Idling		EmFactor Hot Idling		Mass Factor	A/C Factor [7]	Weighted Average Emission Factor (g/min)							
								Cold Idling				Hot Idling			
	%	NOx (g/s) [2]	PM (g/hr) [4]	NOx (g/hr) [9]	PM (g/hr) [10]			NOx	NO	NO2	PM[8]	NOx	NO	NO2	PM[8]
Euro III	5.9	0.0092	0.10	33.12	0.10	-	1.3	2.53E-01	2.51E-01	1.33E-03	6.82E-04	3.28E-01	3.27E-01	1.72E-03	6.82E-04
Euro IV	4.9	0.0039	0.16	14.04	0.16										
Euro V	89.3	0.0039	0.02	14.04	0.02										

Remark:
[1] NO/NO2 ratio was calculated based on emission factors at running speed of 5kph from EMFAC-HK.
[2] NOx cold idling emission factors was referenced to "Calculation of Start Emissions in Air Quality Impact Assessment" published by EPD.
[3] Due to lack of information, NOx cold idling emission factor for Euro V PLB(Diesel) was referenced to the corresponding hot idling emission factor.
[4] Due to lack of information, RSP cold idling emission factor was referenced to the corresponding hot idling emission factor.
[5] Reference was made to Table 42 of VEADV.
[6] Reference was made to Table 43 of VEADV.
[7] Reference was made to the approved EIA Report (AEIAR-161/2011) for "Liantang / Heung Yuen Wai Boundary Control Point and Associated Works".
[8] As a conservative approach, Emission Factor of RSP and FSP were assumed to be equal to Emission Factor of PM.
[9] Due to lack of information, NOx hot idling emission factor was referenced to the corresponding cold idling emission factor from "Calculation of Start Emissions in Air Quality Impact Assessment" published by EPD.
[10] Due to lack of information, RSP hot idling emission factor for PLB(LPG) was referenced to hot idling emission factor for PLB(Diesel).
[11] Reference was made to Table 45 of VEADV.
[12] Reference was made to Table 46 of VEADV.
[13] Reference was made to Table 27 of VEADV.
[14] Due to lack of information, NOx cold idling emission factor for Euro IV NFB6 and Euro V NFB6 were referenced to the corresponding cold idling emission factor for Euro IV NFB7 and Euro V NFB8, respectively.
[15] Due to lack of information, NOx cold idling emission factor for Euro V NFB7 was referenced to the corresponding cold idling emission factor for Euro V NFB8.
[16] Due to lack of information, NOx cold idling emission factor for Euro II NFB8 and Euro III NFB8 were referenced to the corresponding hot idling emission factor.
[17] Due to lack of information, NOx cold idling emission factor for Euro IV HGV7 was referenced to the corresponding cold idling emission factor for Euro IV HGV9.
[18] Due to lack of information, NOx cold idling emission factor for Euro II HGV8 was referenced to the corresponding hot idling emission factor.

Planned PTI at Site A3

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.35	0.63	0.84	1.19	1.47	1.96	2.87	3.57	5.24	6.85	7.69	9.09	10.00	10.49	10.77	11.05	11.19	11.19
NO	0.33	0.59	0.78	1.11	1.37	1.83	2.68	3.33	4.90	6.40	7.19	8.49	9.34	9.80	10.06	10.32	10.45	10.45
NO2	0.02	0.04	0.06	0.08	0.10	0.13	0.19	0.23	0.34	0.45	0.51	0.60	0.66	0.69	0.71	0.73	0.74	0.74
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of FBSD																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0800 - 0900	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBSD (g)					
NOx	NO	NO2	TSP	RSP	FSP
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
11	10	1	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
1	1	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD													FBSD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	1	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	5.44	5.12	0.32	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
0900 - 1000	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
1000 - 1100	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
1100 - 1200	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
1200 - 1300	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
1300 - 1400	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
1400 - 1500	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
1500 - 1600	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
1600 - 1700	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
1700 - 1800	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
1800 - 1900	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
1900 - 2000	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
2000 - 2100	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
2100 - 2200	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
2200 - 2300	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00

Average Distance from Starting Place to Egress =	88	m
Average Spread Distance outside bus terminus =	612	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)						Adjusted Start Emission within PTI Area (g)						Adjusted Start Emission outside PTI Area (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0200 - 0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0500 - 0600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0700 - 0800	5.44	5.12	0.32	0.00	0.00	0.00	1.81	1.71	0.11	0.00	0.00	0.00	1.18	1.10	0.08	0.00	0.00	0.00	8.20	7.65	0.55	0.00	0.00	0.00	2.28E-03	2.12E-03	1.53E-04	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
0900 - 1000	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
1900 - 2000	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.13	0.12	0.01	0.00	0.00	0.00	0.87	0.81	0.06	0.00	0.00	0.00	2.42E-04	2.26E-04	1.63E-05	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
																								total	5.67E-03	5.28E-03	3.81E-04	0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	FBSD											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.50	0.47	0.03	0.00	0.00	0.00
0100 - 0200	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.28	0.27	0.02	0.00	0.00	0.00
0200 - 0300	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.14	0.13	0.01	0.00	0.00	0.00
0300 - 0400	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.12	0.11	0.01	0.00	0.00	0.00
0400 - 0500	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.14	0.13	0.01	0.00	0.00	0.00
0500 - 0600	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.33	0.31	0.02	0.00	0.00	0.00
0600 - 0700	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.73	0.68	0.04	0.01	0.01	0.01
0700 - 0800	2	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.95	0.90	0.06	0.01	0.01	0.01
0800 - 0900	2	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.98	0.92	0.06	0.01	0.01	0.01
0900 - 1000	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.74	0.70	0.04	0.01	0.01	0.01
1000 - 1100	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.62	0.59	0.04	0.01	0.01	0.01
1100 - 1200	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.69	0.65	0.04	0.01	0.01	0.01
1200 - 1300	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.76	0.72	0.04	0.01	0.01	0.01
1300 - 1400	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.76	0.72	0.04	0.01	0.01	0.01
1400 - 1500	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.74	0.70	0.04	0.01	0.01	0.01
1500 - 1600	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.76	0.72	0.04	0.01	0.01	0.01
1600 - 1700	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.85	0.80	0.05	0.01	0.01	0.01
1700 - 1800	2	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.98	0.92	0.06	0.01	0.01	0.01
1800 - 1900	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.83	0.78	0.05	0.01	0.01	0.01
1900 - 2000	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.50	0.47	0.03	0.00	0.00	0.00
2000 - 2100	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.36	0.34	0.02	0.00	0.00	0.00
2100 - 2200	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.36	0.34	0.02	0.00	0.00	0.00
2200 - 2300	2	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.89	0.84	0.05	0.01	0.01	0.01
2300 - 2400	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.73	0.68	0.04	0.01	0.01	0.01

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	176	m
Average Travelling Speed =	5	km/h

Hour	Frequency	FBSD											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	1.075	1.013	0.062	0.034	0.034	0.032
0100 - 0200	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.613	0.577	0.036	0.020	0.020	0.018
0200 - 0300	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.300	0.283	0.017	0.010	0.010	0.009
0300 - 0400	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.250	0.236	0.015	0.008	0.008	0.007
0400 - 0500	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.300	0.283	0.017	0.010	0.010	0.009
0500 - 0600	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.713	0.671	0.041	0.023	0.023	0.021
0600 - 0700	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	1.576	1.484	0.091	0.050	0.050	0.046
0700 - 0800	3	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	3.314	3.121	0.192	0.106	0.106	0.097
0800 - 0900	3	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	3.376	3.180	0.196	0.108	0.108	0.099
0900 - 1000	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.851	2.685	0.166	0.091	0.091	0.084
1000 - 1100	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.601	2.450	0.151	0.083	0.083	0.076
1100 - 1200	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.751	2.591	0.160	0.088	0.088	0.081
1200 - 1300	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.901	2.733	0.168	0.092	0.092	0.085
1300 - 1400	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.901	2.733	0.168	0.092	0.092	0.085
1400 - 1500	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.851	2.685	0.166	0.091	0.091	0.084
1500 - 1600	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.901	2.733	0.168	0.092	0.092	0.085
1600 - 1700	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	3.101	2.921	0.180	0.099	0.099	0.091
1700 - 1800	3	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	3.376	3.180	0.196	0.108	0.108	0.099
1800 - 1900	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	3.051	2.874	0.177	0.097	0.097	0.089
1900 - 2000	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.338	2.203	0.136	0.075	0.075	0.069
2000 - 2100	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.038	1.920	0.118	0.065	0.065	0.060
2100 - 2200	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.038	1.920	0.118	0.065	0.065	0.060
2200 - 2300	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	1.938	1.826	0.113	0.062	0.062	0.057
2300 - 2400	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	1.576	1.484	0.091	0.050	0.050	0.046

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start) [6]						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	1.572	1.480	0.091	0.038	0.038	0.036	4.37E-04	4.11E-04	2.54E-05	1.07E-05	1.07E-05	9.90E-06
0100 - 0200	0.895	0.843	0.052	0.022	0.022	0.020	2.49E-04	2.34E-04	1.44E-05	6.07E-06	6.07E-06	5.64E-06
0200 - 0300	0.439	0.413	0.025	0.011	0.011	0.010	1.22E-04	1.15E-04	7.08E-06	2.97E-06	2.97E-06	2.76E-06
0300 - 0400	0.365	0.344	0.021	0.009	0.009	0.008	1.02E-04	9.56E-05	5.90E-06	2.48E-06	2.48E-06	2.30E-06
0400 - 0500	0.439	0.413	0.025	0.011	0.011	0.010	1.22E-04	1.15E-04	7.08E-06	2.97E-06	2.97E-06	2.76E-06
0500 - 0600	1.042	0.981	0.060	0.025	0.025	0.024	2.89E-04	2.73E-04	1.68E-05	7.07E-06	7.07E-06	6.56E-06
0600 - 0700	2.303	2.169	0.134	0.056	0.056	0.052	6.40E-04	6.02E-04	3.71E-05	1.56E-05	1.56E-05	1.45E-05
0700 - 0800	10.882	10.240	0.643	0.118	0.118	0.110	3.02E-03	2.84E-03	1.79E-04	3.28E-05	3.28E-05	3.05E-05
0800 - 0900	5.059	4.764	0.295	0.120	0.120	0.112	1.41E-03	1.32E-03	8.19E-05	3.35E-05	3.35E-05	3.11E-05
0900 - 1000	4.292	4.041	0.250	0.102	0.102	0.094	1.19E-03	1.12E-03	6.96E-05	2.83E-05	2.83E-05	2.62E-05
1000 - 1100	3.926	3.697	0.229	0.093	0.093	0.086	1.09E-03	1.03E-03	6.37E-05	2.58E-05	2.58E-05	2.39E-05
1100 - 1200	4.146	3.904	0.242	0.098	0.098	0.091	1.15E-03	1.08E-03	6.72E-05	2.73E-05	2.73E-05	2.53E-05
1200 - 1300	4.365	4.110	0.255	0.104	0.104	0.096	1.21E-03	1.14E-03	7.07E-05	2.88E-05	2.88E-05	2.67E-05
1300 - 1400	4.365	4.110	0.255	0.104	0.104	0.096	1.21E-03	1.14E-03	7.07E-05	2.88E-05	2.88E-05	2.67E-05
1400 - 1500	4.292	4.041	0.250	0.102	0.102	0.094	1.19E-03	1.12E-03	6.96E-05	2.83E-05	2.83E-05	2.62E-05
1500 - 1600	4.365	4.110	0.255	0.104	0.104	0.096	1.21E-03	1.14E-03	7.07E-05	2.88E-05	2.88E-05	2.67E-05
1600 - 1700	4.657	4.386	0.272	0.111	0.111	0.103	1.29E-03	1.22E-03	7.54E-05	3.07E-05	3.07E-05	2.85E-05
1700 - 1800	5.059	4.764	0.295	0.120	0.120	0.112	1.41E-03	1.32E-03	8.19E-05	3.35E-05	3.35E-05	3.11E-05
1800 - 1900	4.584	4.317	0.267	0.109	0.109	0.101	1.27E-03	1.20E-03	7.43E-05	3.02E-05	3.02E-05	2.81E-05
1900 - 2000	3.543	3.336	0.207	0.083	0.083	0.077	9.84E-04	9.27E-04	5.75E-05	2.32E-05	2.32E-05	2.15E-05
2000 - 2100	3.104	2.923	0.181	0.073	0.073	0.068	8.62E-04	8.12E-04	5.04E-05	2.02E-05	2.02E-05	1.88E-05
2100 - 2200	3.104	2.923	0.181	0.073	0.073	0.068	8.62E-04	8.12E-04	5.04E-05	2.02E-05	2.02E-05	1.88E-05
2200 - 2300	2.833	2.668	0.164	0.069	0.069	0.064	7.87E-04	7.41E-04	4.57E-05	1.92E-05	1.92E-05	1.78E-05
2300 - 2400	2.303	2.169	0.134	0.056	0.056	0.052	6.40E-04	6.02E-04	3.71E-05	1.56E-05	1.56E-05	1.45E-05
						total	2.28E-02	2.14E-02	1.33E-03	5.03E-04	5.03E-04	4.67E-04

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

[2] Number of cold starts were provided by the traffic consultant.

Planned PTI at Site A3

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.77	1.39	1.85	2.62	3.23	4.31	6.32	7.86	11.55	15.09	16.94	20.02	22.03	23.10	23.72	24.34	24.64	24.64
NO	0.72	1.30	1.74	2.46	3.04	4.06	5.94	7.39	10.87	14.21	15.95	18.85	20.73	21.75	22.33	22.91	23.20	23.20
NO2	0.05	0.08	0.11	0.15	0.19	0.25	0.37	0.46	0.68	0.89	1.00	1.18	1.29	1.36	1.39	1.43	1.45	1.45
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of FBDD																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0600 - 0700	0	0	0	11	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0700 - 0800	0	0	0	25	0	0	0	0	0	0	0	0	0	0	3	0	0	0
0800 - 0900	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBSD & FBDD (g)					
NOx	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
24	22	1	0	0	0
13	12	1	0	0	0
8	7	0	0	0	0
5	5	0	0	0	0
8	7	0	0	0	0
37	35	2	0	0	0
53	49	3	0	0	0
137	129	8	0	0	0
68	64	4	0	0	0
60	57	4	0	0	0
45	42	3	0	0	0
50	47	3	0	0	0
50	47	3	0	0	0
52	49	3	0	0	0
50	47	3	0	0	0
52	49	3	0	0	0
68	64	4	0	0	0
73	69	4	0	0	0
63	59	4	0	0	0
47	44	3	0	0	0
37	35	2	0	0	0
37	35	2	0	0	0
34	32	2	0	0	0
24	22	1	0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBDD												FBDD											
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	9	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	6.33	6.01	0.32	0.05	0.05	0.05
0100 - 0200	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	5	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	3.51	3.34	0.18	0.03	0.03	0.03
0200 - 0300	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
0300 - 0400	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.41	1.34	0.07	0.01	0.01	0.01
0400 - 0500	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
0500 - 0600	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006	5	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	3.51	3.34	0.18	0.03	0.03	0.03
0600 - 0700	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006	11	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	7.73	7.35	0.39	0.07	0.07	0.07
0700 - 0800	3	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	63.790	60.614	3.176	0.018	0.018	0.018	25	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	17.57	16.70	0.88	0.15	0.15	0.15
0800 - 0900	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	26	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	18.28	17.37	0.91	0.15	0.15	0.15
0900 - 1000	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	23	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	16.17	15.36	0.81	0.14	0.14	0.14
1000 - 1100	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	17	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	11.95	11.36	0.60	0.10	0.10	0.10
1100 - 1200	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	19	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	13.36	12.69	0.67	0.11	0.11	0.11
1200 - 1300	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	19	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	13.36	12.69	0.67	0.11	0.11	0.11
1300 - 1400	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	20	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	14.06	13.36	0.70	0.12	0.12	0.12
1400 - 1500	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	19	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	13.36	12.69	0.67	0.11	0.11	0.11
1500 - 1600	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	20	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	14.06	13.36	0.70	0.12	0.12	0.12
1600 - 1700	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	26	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	18.28	17.37	0.91	0.15	0.15	0.15
1700 - 1800	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	28	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	19.68	18.70	0.98	0.17	0.17	0.17
1800 - 1900	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	24	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	16.87	16.03	0.84	0.14	0.14	0.14
1900 - 2000	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	18	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	12.65	12.02	0.63	0.11	0.11	0.11
2000 - 2100	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	14	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.84	9.35	0.49	0.08	0.08	0.08
2100 - 2200	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	14	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.84	9.35	0.49	0.08	0.08	0.08
2200 - 2300	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	13	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.14	8.68	0.46	0.08	0.08	0.08
2300 - 2400	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000	9	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	6.33	6.01	0.32	0.05	0.05	0.05

Average Distance from Starting Place to Egress =	88	m
Average Spread Distance outside bus terminus =	612	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	6.33	6.01	0.32	0.05	0.05	0.05	2.11	2.00	0.11	0.02	0.02	0.02
0100 - 0200	3.51	3.34	0.18	0.03	0.03	0.03	1.17	1.11	0.06	0.01	0.01	0.01
0200 - 0300	2.11	2.00	0.11	0.02	0.02	0.02	0.70	0.67	0.04	0.01	0.01	0.01
0300 - 0400	1.41	1.34	0.07	0.01	0.01	0.01	0.47	0.45	0.02	0.00	0.00	0.00
0400 - 0500	2.11	2.00	0.11	0.02	0.02	0.02	0.70	0.67	0.04	0.01	0.01	0.01
0500 - 0600	24.78	23.54	1.23	0.04	0.04	0.04	8.26	7.85	0.41	0.01	0.01	0.01
0600 - 0700	29.00	27.55	1.44	0.07	0.07	0.07	9.67	9.18	0.48	0.02	0.02	0.02
0700 - 0800	81.36	77.31	4.05	0.17	0.17	0.17	27.12	25.77	1.35	0.06	0.06	0.06
0800 - 0900	18.28	17.37	0.91	0.15	0.15	0.15	6.09	5.79	0.30	0.05	0.05	0.05
0900 - 1000	16.17	15.36	0.81	0.14	0.14	0.14	5.39	5.12	0.27	0.05	0.05	0.05
1000 - 1100	11.95	11.36	0.60	0.10	0.10	0.10	3.98	3.79	0.20	0.03	0.03	0.03
1100 - 1200	13.36	12.69	0.67	0.11	0.11	0.11	4.45	4.23	0.22	0.04	0.04	0.04
1200 - 1300	13.36	12.69	0.67	0.11	0.11	0.11	4.45	4.23	0.22	0.04	0.04	0.04
1300 - 1400	14.06	13.36	0.70	0.12	0.12	0.12	4.69	4.45	0.23	0.04	0.04	0.04
1400 - 1500	13.36	12.69	0.67	0.11	0.11	0.11	4.45	4.23	0.22	0.04	0.04	0.04
1500 - 1600	14.06	13.36	0.70	0.12	0.12	0.12	4.69	4.45	0.23	0.04	0.04	0.04
1600 - 1700	18.28	17.37	0.91	0.15	0.15	0.15	6.09	5.79	0.30	0.05	0.05	0.05
1700 - 1800	19.68	18.70	0.98	0.17	0.17	0.17	6.56	6.23	0.33	0.06	0.06	0.06
1800 - 1900	16.87	16.03	0.84	0.14	0.14	0.14	5.62	5.34	0.28	0.05	0.05	0.05
1900 - 2000	12.65	12.02	0.63	0.11	0.11	0.11	4.22	4.01	0.21	0.04	0.04	0.04
2000 - 2100	9.84	9.35	0.49	0.08	0.08	0.08	3.28	3.12	0.16	0.03	0.03	0.03
2100 - 2200	9.84	9.35	0.49	0.08	0.08	0.08	3.28	3.12	0.16	0.03	0.03	0.03
2200 - 2300	9.14	8.68	0.46	0.08	0.08	0.08	3.05	2.89	0.15	0.03	0.03	0.03
2300 - 2400	6.33	6.01	0.32	0.05	0.05	0.05	2.11	2.00	0.11	0.02	0.02	0.02

Hour	Adjusted Start Emission within PTI Area (g)						Adjusted Start Emission outside PTI Area (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2.70	2.54	0.16	0.00	0.00	0.00	18.76	17.64	1.12	0.00	0.00	0.00	5.21E-03	4.90E-03	3.11E-04	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	1.50	1.41	0.09	0.00	0.00	0.00	10.42	9.80	0.62	0.00	0.00	0.00	2.90E-03	2.72E-03	1.73E-04	0.00E+00	0.00E+00	0.00E+00
0200 - 0300	0.90	0.85	0.05	0.00	0.00	0.00	6.25	5.88	0.37	0.00	0.00	0.00	1.74E-03	1.63E-03	1.04E-04	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	0.60	0.56	0.04	0.00	0.00	0.00	4.17	3.92	0.25	0.00	0.00	0.00	1.16E-03	1.09E-03	6.90E-05	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	0.90	0.85	0.05	0.00	0.00	0.00	6.25	5.88	0.37	0.00	0.00	0.00	1.74E-03	1.63E-03	1.04E-04	0.00E+00	0.00E+00	0.00E+00
0500 - 0600	3.59	3.37	0.22	0.00	0.00	0.00	24.96	23.43	1.53	0.00	0.00	0.00	6.93E-03	6.51E-03	4.25E-04	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	5.39	5.06	0.33	0.00	0.00	0.00	37.47	35.19	2.28	0.00	0.00	0.00	1.04E-02	9.78E-03	6.32E-04	0.00E+00	0.00E+00	0.00E+00
0700 - 0800	13.77	12.93	0.84	0.00	0.00	0.00	95.74	89.90	5.84	0.00	0.00	0.00	2.66E-02	2.50E-02	1.62E-03	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	7.79	7.33	0.46	0.00	0.00	0.00	54.20	50.96	3.23	0.00	0.00	0.00	1.51E-02	1.42E-02	8.97E-04	0.00E+00	0.00E+00	0.00E+00
0900 - 1000	6.89	6.48	0.41	0.00	0.00	0.00	47.94	45.08	2.86	0.00	0.00	0.00	1.33E-02	1.25E-02	7.94E-04	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	5.10	4.79	0.30	0.00	0.00	0.00	35.44	33.32	2.11	0.00	0.00	0.00	9.84E-03	9.26E-03	5.87E-04	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	5.69	5.36	0.34	0.00	0.00	0.00	39.60	37.24	2.36	0.00	0.00	0.00	1.10E-02	1.03E-02	6.56E-04	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	5.69	5.36	0.34	0.00	0.00	0.00	39.60	37.24	2.36	0.00	0.00	0.00	1.10E-02	1.03E-02	6.56E-04	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	5.99	5.64	0.36	0.00	0.00	0.00	41.69	39.20	2.49	0.00	0.00	0.00	1.16E-02	1.09E-02	6.90E-04	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	5.69	5.36	0.34	0.00	0.00	0.00	39.60	37.24	2.36	0.00	0.00	0.00	1.10E-02	1.03E-02	6.56E-04	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	5.99	5.64	0.36	0.00	0.00	0.00	41.69	39.20	2.49	0.00	0.00	0.00	1.16E-02	1.09E-02	6.90E-04	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	7.79	7.33	0.46	0.00	0.00	0.00	54.20	50.96	3.23	0.00	0.00	0.00	1.51E-02	1.42E-02	8.97E-04	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	8.39	7.89	0.50	0.00	0.00	0.00	58.36	54.89	3.48	0.00	0.00	0.00	1.62E-02	1.52E-02	9.67E-04	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	7.19	6.76	0.43	0.00	0.00	0.00	50.03	47.04	2.98	0.00	0.00	0.00	1.39E-02	1.31E-02	8.28E-04	0.00E+00	0.00E+00	0.00E+00
1900 - 2000	5.40	5.07	0.32	0.00	0.00	0.00	37.52	35.28	2.24	0.00	0.00	0.00	1.04E-02	9.80E-03	6.21E-04	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	4.20	3.95	0.25	0.00	0.00	0.00	29.18	27.44	1.74	0.00	0.00	0.00	8.11E-03	7.62E-03	4.83E-04	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	4.20	3.95	0.25	0.00	0.00	0.00	29.18	27.44	1.74	0.00	0.00	0.00	8.11E-03	7.62E-03	4.83E-04	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	3.90	3.66	0.23	0.00	0.00	0.00	27.10	25.48	1.62	0.00	0.00	0.00	7.53E-03	7.08E-03	4.49E-04	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	2.70	2.54	0.16	0.00	0.00	0.00	18.76	17.64	1.12	0.00	0.00	0.00	5.21E-03	4.90E-03	3.11E-04	0.00E+00	0.00E+00	0.00E+00
										total			2.36E-01	2.21E-01	1.41E-02	0.00E+00	0.00E+00	0.00E+00

Daily Emission Distribution (FBSD + FBDD)

Hour	NO	NO_2
00 - 01	2%	2%
01 - 02	1%	1%
02 - 03	1%	1%
03 - 04	0%	0%
04 - 05	1%	1%
05 - 06	3%	3%
06 - 07	4%	4%
07 - 08	12%	12%
08 - 09	6%	6%
09 - 10	6%	6%
10 - 11	4%	4%
11 - 12	5%	5%
12 - 13	5%	5%
13 - 14	5%	5%
14 - 15	5%	5%
15 - 16	5%	5%
16 - 17	6%	6%
17 - 18	7%	7%
18 - 19	6%	6%
19 - 20	4%	4%
20 - 21	3%	3%
21 - 22	3%	3%
22 - 23	3%	3%
23 - 24	2%	2%
Total	100%	100%

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	FBDD											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	9	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	6.45	6.13	0.32	0.05	0.05	0.05
0100 - 0200	5	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	3.78	3.59	0.19	0.03	0.03	0.03
0200 - 0300	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.54	1.46	0.08	0.01	0.01	0.01
0300 - 0400	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.64	1.56	0.08	0.01	0.01	0.01
0400 - 0500	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.54	1.46	0.08	0.01	0.01	0.01
0500 - 0600	6	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	4.30	4.08	0.21	0.04	0.04	0.04
0600 - 0700	15	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	10.42	9.90	0.52	0.09	0.09	0.09
0700 - 0800	28	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	19.85	18.86	0.99	0.17	0.17	0.17
0800 - 0900	31	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	22.00	20.91	1.10	0.19	0.19	0.19
0900 - 1000	25	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	17.90	17.01	0.89	0.15	0.15	0.15
1000 - 1100	27	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	19.07	18.12	0.95	0.16	0.16	0.16
1100 - 1200	28	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	19.49	18.52	0.97	0.16	0.16	0.16
1200 - 1300	30	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	21.31	20.25	1.06	0.18	0.18	0.18
1300 - 1400	29	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	20.61	19.58	1.03	0.17	0.17	0.17
1400 - 1500	29	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	20.71	19.68	1.03	0.17	0.17	0.17
1500 - 1600	29	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	20.61	19.58	1.03	0.17	0.17	0.17
1600 - 1700	27	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	18.83	17.89	0.94	0.16	0.16	0.16
1700 - 1800	29	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	20.60	19.57	1.03	0.17	0.17	0.17
1800 - 1900	28	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	19.63	18.65	0.98	0.17	0.17	0.17
1900 - 2000	22	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	15.32	14.56	0.76	0.13	0.13	0.13
2000 - 2100	21	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	14.49	13.77	0.72	0.12	0.12	0.12
2100 - 2200	21	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	14.49	13.77	0.72	0.12	0.12	0.12
2200 - 2300	20	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	13.97	13.28	0.70	0.12	0.12	0.12
2300 - 2400	18	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	12.53	11.90	0.62	0.11	0.11	0.11

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	176	m
Average Travelling Speed =	5	km/h

Hour	Frequency	FBDD											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	18	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	46.756	44.427	2.328	1.429	1.429	1.314
0100 - 0200	10	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	26.710	25.380	1.330	0.816	0.816	0.751
0200 - 0300	5	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	13.355	12.690	0.665	0.408	0.408	0.375
0300 - 0400	4	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	11.142	10.587	0.555	0.340	0.340	0.313
0400 - 0500	5	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	13.355	12.690	0.665	0.408	0.408	0.375
0500 - 0600	12	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	31.162	29.610	1.552	0.952	0.952	0.876
0600 - 0700	27	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	69.014	65.578	3.436	2.109	2.109	1.940
0700 - 0800	56	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	144.718	137.512	7.206	4.422	4.422	4.067
0800 - 0900	57	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	147.446	140.104	7.342	4.505	4.505	4.144
0900 - 1000	48	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	124.699	118.489	6.209	3.810	3.810	3.505
1000 - 1100	44	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	113.556	107.902	5.654	3.469	3.469	3.191
1100 - 1200	47	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	120.247	114.259	5.987	3.674	3.674	3.379
1200 - 1300	49	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	126.911	120.592	6.319	3.877	3.877	3.567
1300 - 1400	49	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	126.911	120.592	6.319	3.877	3.877	3.567
1400 - 1500	48	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	124.699	118.489	6.209	3.810	3.810	3.505
1500 - 1600	49	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	126.911	120.592	6.319	3.877	3.877	3.567
1600 - 1700	53	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	135.815	129.052	6.763	4.150	4.150	3.817
1700 - 1800	57	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	147.446	140.104	7.342	4.505	4.505	4.144
1800 - 1900	52	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	133.602	126.949	6.652	4.082	4.082	3.755
1900 - 2000	40	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	102.414	97.315	5.099	3.129	3.129	2.878
2000 - 2100	35	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	89.059	84.625	4.435	2.721	2.721	2.503
2100 - 2200	35	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	89.059	84.625	4.435	2.721	2.721	2.503
2200 - 2300	33	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	84.608	80.395	4.213	2.585	2.585	2.378
2300 - 2400	27	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	69.014	65.578	3.436	2.109	2.109	1.940

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start) [6]						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	62.226	59.101	3.125	1.536	1.536	1.422	1.73E-02	1.64E-02	8.68E-04	4.27E-04	4.27E-04	3.95E-04
0100 - 0200	35.506	33.723	1.783	0.878	0.878	0.812	9.86E-03	9.37E-03	4.95E-04	2.44E-04	2.44E-04	2.26E-04
0200 - 0300	17.903	17.002	0.900	0.439	0.439	0.406	4.97E-03	4.72E-03	2.50E-04	1.22E-04	1.22E-04	1.13E-04
0300 - 0400	14.785	14.043	0.742	0.366	0.366	0.339	4.11E-03	3.90E-03	2.06E-04	1.02E-04	1.02E-04	9.41E-05
0400 - 0500	17.903	17.002	0.900	0.439	0.439	0.406	4.97E-03	4.72E-03	2.50E-04	1.22E-04	1.22E-04	1.13E-04
0500 - 0600	63.825	60.605	3.219	1.024	1.024	0.947	1.77E-02	1.68E-02	8.94E-04	2.84E-04	2.84E-04	2.63E-04
0600 - 0700	113.816	108.090	5.726	2.267	2.267	2.098	3.16E-02	3.00E-02	1.59E-03	6.30E-04	6.30E-04	5.83E-04
0700 - 0800	259.700	246.616	13.085	4.754	4.754	4.400	7.21E-02	6.85E-02	3.63E-03	1.32E-03	1.32E-03	1.22E-03
0800 - 0900	195.519	185.707	9.812	4.844	4.844	4.483	5.43E-02	5.16E-02	2.73E-03	1.35E-03	1.35E-03	1.25E-03
0900 - 1000	165.658	157.342	8.316	4.097	4.097	3.791	4.60E-02	4.37E-02	2.31E-03	1.14E-03	1.14E-03	1.05E-03
1000 - 1100	149.674	142.171	7.503	3.731	3.731	3.453	4.16E-02	3.95E-02	2.08E-03	1.04E-03	1.04E-03	9.59E-04
1100 - 1200	158.791	150.829	7.963	3.951	3.951	3.656	4.41E-02	4.19E-02	2.21E-03	1.10E-03	1.10E-03	1.02E-03
1200 - 1300	167.277	158.892	8.385	4.169	4.169	3.859	4.65E-02	4.41E-02	2.33E-03	1.16E-03	1.16E-03	1.07E-03
1300 - 1400	167.576	159.173	8.403	4.169	4.169	3.859	4.65E-02	4.42E-02	2.33E-03	1.16E-03	1.16E-03	1.07E-03
1400 - 1500	164.459	156.214	8.245	4.097	4.097	3.791	4.57E-02	4.34E-02	2.29E-03	1.14E-03	1.14E-03	1.05E-03
1500 - 1600	167.576	159.173	8.403	4.169	4.169	3.859	4.65E-02	4.42E-02	2.33E-03	1.16E-03	1.16E-03	1.07E-03
1600 - 1700	180.710	171.636	9.075	4.462	4.462	4.129	5.02E-02	4.77E-02	2.52E-03	1.24E-03	1.24E-03	1.15E-03
1700 - 1800	196.118	186.270	9.848	4.844	4.844	4.483	5.45E-02	5.17E-02	2.74E-03	1.35E-03	1.35E-03	1.25E-03
1800 - 1900	177.293	168.395	8.899	4.389	4.389	4.062	4.92E-02	4.68E-02	2.47E-03	1.22E-03	1.22E-03	1.13E-03
1900 - 2000	135.788	128.973	6.814	3.365	3.365	3.114	3.77E-02	3.58E-02	1.89E-03	9.35E-04	9.35E-04	8.65E-04
2000 - 2100	117.585	111.689	5.896	2.926	2.926	2.708	3.27E-02	3.10E-02	1.64E-03	8.13E-04	8.13E-04	7.52E-04
2100 - 2200	117.585	111.689	5.896	2.926	2.926	2.708	3.27E-02	3.10E-02	1.64E-03	8.13E-04	8.13E-04	7.52E-04
2200 - 2300	111.618	106.022	5.596	2.780	2.780	2.572	3.10E-02	2.95E-02	1.55E-03	7.72E-04	7.72E-04	7.15E-04
2300 - 2400	90.565	86.029	4.536	2.267	2.267	2.098	2.52E-02	2.39E-02	1.26E-03	6.30E-04	6.30E-04	5.83E-04
						total	8.47E-01	8.05E-01	4.25E-02	2.02E-02	2.02E-02	1.87E-02

Daily Emission Distribution (FBSD + FBDD)

Hour	NOx	NO	NO_2	TSP	RSP	FSP
00 - 01	2%	2%	2%	2%	2%	2%
01 - 02	1%	1%	1%	1%	1%	1%
02 - 03	1%	1%	1%	1%	1%	1%
03 - 04	0%	0%	0%	1%	1%	1%
04 - 05	1%	1%	1%	1%	1%	1%
05 - 06	2%	2%	2%	1%	1%	1%
06 - 07	4%	4%	4%	3%	3%	3%
07 - 08	9%	9%	9%	7%	7%	7%
08 - 09	6%	6%	6%	7%	7%	7%
09 - 10	5%	5%	5%	6%	6%	6%
10 - 11	5%	5%	5%	5%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%
12 - 13	5%	5%	5%	6%	6%	6%
13 - 14	5%	5%	5%	6%	6%	6%
14 - 15	5%	5%	5%	6%	6%	6%
15 - 16	5%	5%	5%	6%	6%	6%
16 - 17	6%	6%	6%	6%	6%	6%
17 - 18	6%	6%	6%	7%	7%	7%
18 - 19	6%	6%	6%	6%	6%	6%
19 - 20	4%	4%	4%	5%	5%	5%
20 - 21	4%	4%	4%	4%	4%	4%
21 - 22	4%	4%	4%	4%	4%	4%
22 - 23	4%	4%	4%	4%	4%	4%
23 - 24	3%	3%	3%	3%	3%	3%
Total	100%	100%	100%	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

[2] Number of cold starts were provided by the traffic consultant.

Planned PTI at Site A3

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Non-franchised Buses 15-24t (NFB8) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.22	0.40	0.54	0.76	0.94	1.25	1.83	2.28	3.36	4.38	4.92	5.82	6.40	6.71	6.89	7.07	7.16	7.16
NO	0.19	0.34	0.46	0.65	0.80	1.07	1.56	1.94	2.86	3.74	4.19	4.96	5.45	5.72	5.87	6.02	6.10	6.10
NO2	0.03	0.06	0.08	0.11	0.14	0.19	0.27	0.34	0.50	0.65	0.73	0.86	0.95	0.99	1.02	1.05	1.06	1.06
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of NFB8																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of NFB8 (g)					
NOx	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
8	7	1	0	0	0
4	4	1	0	0	0
2	2	0	0	0	0
2	2	0	0	0	0
2	2	0	0	0	0
5	4	1	0	0	0
11	10	2	0	0	0
24	20	4	0	0	0
24	21	4	0	0	0
20	17	3	0	0	0
19	16	3	0	0	0
20	17	3	0	0	0
21	18	3	0	0	0
21	18	3	0	0	0
20	17	3	0	0	0
21	18	3	0	0	0
22	19	3	0	0	0
24	21	4	0	0	0
22	19	3	0	0	0
17	14	2	0	0	0
15	12	2	0	0	0
15	12	2	0	0	0
14	12	2	0	0	0
11	10	2	0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	NFB8												NFB8											
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	19	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	5.74	4.81	0.93	0.04	0.04	0.04
0100 - 0200	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	11	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	3.28	2.75	0.53	0.03	0.03	0.03
0200 - 0300	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	5	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	1.64	1.37	0.27	0.01	0.01	0.01
0300 - 0400	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	5	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	1.37	1.15	0.22	0.01	0.01	0.01
0400 - 0500	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	5	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	1.64	1.37	0.27	0.01	0.01	0.01
0500 - 0600	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	13	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	3.83	3.21	0.62	0.03	0.03	0.03
0600 - 0700	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	28	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	8.48	7.10	1.38	0.07	0.07	0.07
0700 - 0800	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	59	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	17.78	14.89	2.89	0.14	0.14	0.14
0800 - 0900	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	60	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	18.12	15.18	2.94	0.14	0.14	0.14
0900 - 1000	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	51	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	15.32	12.83	2.49	0.12	0.12	0.12
1000 - 1100	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	46	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	13.95	11.68	2.26	0.11	0.11	0.11
1100 - 1200	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	49	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	14.77	12.37	2.40	0.12	0.12	0.12
1200 - 1300	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	52	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	15.59	13.06	2.53	0.12	0.12	0.12
1300 - 1400	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	52	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	15.59	13.06	2.53	0.12	0.12	0.12
1400 - 1500	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	51	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	15.32	12.83	2.49	0.12	0.12	0.12
1500 - 1600	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	52	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	15.59	13.06	2.53	0.12	0.12	0.12
1600 - 1700	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	55	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	16.69	13.98	2.71	0.13	0.13	0.13
1700 - 1800	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	60	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	18.12	15.18	2.94	0.14	0.14	0.14
1800 - 1900	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	54	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	16.41	13.75	2.66	0.13	0.13	0.13
1900 - 2000	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	42	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	12.58	10.54	2.04	0.10	0.10	0.10
2000 - 2100	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	36	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.94	9.16	1.78	0.09	0.09	0.09
2100 - 2200	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	36	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.94	9.16	1.78	0.09	0.09	0.09
2200 - 2300	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	34	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.39	8.71	1.69	0.08	0.08	0.08
2300 - 2400	0	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	0.000	0.000	0.000	0.000	0.000	0.000	28	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	8.48	7.10	1.38	0.07	0.07	0.07

Average Distance from Starting Place to Egress =	66	m
Average Spread Distance outside bus terminus =	634	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	5.74	4.81	0.93	0.04	0.04	0.04	1.91	1.60	0.31	0.01	0.01	0.01
0100 - 0200	3.28	2.75	0.53	0.03	0.03	0.03	1.09	0.92	0.18	0.01	0.01	0.01
0200 - 0300	1.64	1.37	0.27	0.01	0.01	0.01	0.55	0.46	0.09	0.00	0.00	0.00
0300 - 0400	1.37	1.15	0.22	0.01	0.01	0.01	0.46	0.38	0.07	0.00	0.00	0.00
0400 - 0500	1.64	1.37	0.27	0.01	0.01	0.01	0.55	0.46	0.09	0.00	0.00	0.00
0500 - 0600	3.83	3.21	0.62	0.03	0.03	0.03	1.28	1.07	0.21	0.01	0.01	0.01
0600 - 0700	8.48	7.10	1.38	0.07	0.07	0.07	2.83	2.37	0.46	0.02	0.02	0.02
0700 - 0800	17.78	14.89	2.89	0.14	0.14	0.14	5.93	4.96	0.96	0.05	0.05	0.05
0800 - 0900	18.12	15.18	2.94	0.14	0.14	0.14	6.04	5.06	0.98	0.05	0.05	0.05
0900 - 1000	15.32	12.83	2.49	0.12	0.12	0.12	5.11	4.28	0.83	0.04	0.04	0.04
1000 - 1100	13.95	11.68	2.26	0.11	0.11	0.11	4.65	3.89	0.75	0.04	0.04	0.04
1100 - 1200	14.77	12.37	2.40	0.12	0.12	0.12	4.92	4.12	0.80	0.04	0.04	0.04
1200 - 1300	15.59	13.06	2.53	0.12	0.12	0.12	5.20	4.35	0.84	0.04	0.04	0.04
1300 - 1400	15.59	13.06	2.53	0.12	0.12	0.12	5.20	4.35	0.84	0.04	0.04	0.04
1400 - 1500	15.32	12.83	2.49	0.12	0.12	0.12	5.11	4.28	0.83	0.04	0.04	0.04
1500 - 1600	15.59	13.06	2.53	0.12	0.12	0.12	5.20	4.35	0.84	0.04	0.04	0.04
1600 - 1700	16.69	13.98	2.71	0.13	0.13	0.13	5.56	4.66	0.90	0.04	0.04	0.04
1700 - 1800	18.12	15.18	2.94	0.14	0.14	0.14	6.04	5.06	0.98	0.05	0.05	0.05
1800 - 1900	16.41	13.75	2.66	0.13	0.13	0.13	5.47	4.58	0.89	0.04	0.04	0.04
1900 - 2000	12.58	10.54	2.04	0.10	0.10	0.10	4.19	3.51	0.68	0.03	0.03	0.03
2000 - 2100	10.94	9.16	1.78	0.09	0.09	0.09	3.65	3.05	0.59	0.03	0.03	0.03
2100 - 2200	10.94	9.16	1.78	0.09	0.09	0.09	3.65	3.05	0.59	0.03	0.03	0.03
2200 - 2300	10.39	8.71	1.69	0.08	0.08	0.08	3.46	2.90	0.56	0.03	0.03	0.03
2300 - 2400	8.48	7.10	1.38	0.07	0.07	0.07	2.83	2.37	0.46	0.02	0.02	0.02

Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0.54	0.46	0.08	0.00	0.00	0.00	5.20	4.46	0.75	0.00	0.00	0.00	1.45E-03	1.24E-03	2.07E-04	0.00E+00	0.00E+00	0.00E+00
0.31	0.27	0.04	0.00	0.00	0.00	2.97	2.55	0.43	0.00	0.00	0.00	8.26E-04	7.08E-04	1.18E-04	0.00E+00	0.00E+00	0.00E+00
0.15	0.13	0.02	0.00	0.00	0.00	1.49	1.27	0.21	0.00	0.00	0.00	4.13E-04	3.54E-04	5.91E-05	0.00E+00	0.00E+00	0.00E+00
0.13	0.11	0.02	0.00	0.00	0.00	1.24	1.06	0.18	0.00	0.00	0.00	3.44E-04	2.95E-04	4.93E-05	0.00E+00	0.00E+00	0.00E+00
0.15	0.13	0.02	0.00	0.00	0.00	1.49	1.27	0.21	0.00	0.00	0.00	4.13E-04	3.54E-04	5.91E-05	0.00E+00	0.00E+00	0.00E+00
0.36	0.31	0.05	0.00	0.00	0.00	3.47	2.97	0.50	0.00	0.00	0.00	9.63E-04	8.25E-04	1.38E-04	0.00E+00	0.00E+00	0.00E+00
0.80	0.69	0.11	0.00	0.00	0.00	7.68	6.58	1.10	0.00	0.00	0.00	2.13E-03	1.83E-03	3.06E-04	0.00E+00	0.00E+00	0.00E+00
1.68	1.44	0.24	0.00	0.00	0.00	16.11	13.80	2.31	0.00	0.00	0.00	4.47E-03	3.83E-03	6.41E-04	0.00E+00	0.00E+00	0.00E+00
1.71	1.46	0.24	0.00	0.00	0.00	16.41	14.06	2.35	0.00	0.00	0.00	4.56E-03	3.91E-03	6.53E-04	0.00E+00	0.00E+00	0.00E+00
1.44	1.24	0.21	0.00	0.00	0.00	13.88	11.89	1.99	0.00	0.00	0.00	3.85E-03	3.30E-03	5.52E-04	0.00E+00	0.00E+00	0.00E+00
1.32	1.13	0.19	0.00	0.00	0.00	12.64	10.83	1.81	0.00	0.00	0.00	3.51E-03	3.01E-03	5.03E-04	0.00E+00	0.00E+00	0.00E+00
1.39	1.19	0.20	0.00	0.00	0.00	13.38	11.47	1.92	0.00	0.00	0.00	3.72E-03	3.18E-03	5.32E-04	0.00E+00	0.00E+00	0.00E+00
1.47	1.26	0.21	0.00	0.00	0.00	14.12	12.10	2.02	0.00	0.00	0.00	3.92E-03	3.36E-03	5.62E-04	0.00E+00	0.00E+00	0.00E+00
1.47	1.26	0.21	0.00	0.00	0.00	14.12	12.10	2.02	0.00	0.00	0.00	3.92E-03	3.36E-03	5.62E-04	0.00E+00	0.00E+00	0.00E+00
1.44	1.24	0.21	0.00	0.00	0.00	13.88	11.89	1.99	0.00	0.00	0.00	3.85E-03	3.30E-03	5.52E-04	0.00E+00	0.00E+00	0.00E+00
1.47	1.26	0.21	0.00	0.00	0.00	14.12	12.10	2.02	0.00	0.00	0.00	3.92E-03	3.36E-03	5.62E-04	0.00E+00	0.00E+00	0.00E+00
1.57	1.35	0.23	0.00	0.00	0.00	15.12	12.95	2.17	0.00	0.00	0.00	4.20E-03	3.60E-03	6.01E-04	0.00E+00	0.00E+00	0.00E+00
1.71	1.46	0.24	0.00	0.00	0.00	16.41	14.06	2.35	0.00	0.00	0.00	4.56E-03	3.91E-03	6.53E-04	0.00E+00	0.00E+00	0.00E+00
1.55	1.33	0.22	0.00	0.00	0.00	14.87	12.74	2.13	0.00	0.00	0.00	4.13E-03	3.54E-03	5.92E-04	0.00E+00	0.00E+00	0.00E+00
1.19	1.02	0.17	0.00	0.00	0.00	11.40	9.77	1.63	0.00	0.00	0.00	3.17E-03	2.71E-03	4.54E-04	0.00E+00	0.00E+00	0.00E+00
1.03	0.88	0.15	0.00	0.00	0.00	9.91	8.49	1.42	0.00	0.00	0.00	2.75E-03	2.36E-03	3.94E-04	0.00E+00	0.00E+00	0.00E+00
1.03	0.88	0.15	0.00	0.00	0.00	9.91	8.49	1.42	0.00	0.00	0.00	2.75E-03	2.36E-03	3.94E-04	0.00E+00	0.00E+00	0.00E+00
0.98	0.84	0.14	0.00	0.00	0.00	9.42	8.07	1.35	0.00	0.00	0.00	2.62E-03	2.24E-03	3.75E-04	0.00E+00	0.00E+00	0.00E+00
0.80	0.69	0.11	0.00	0.00	0.00	7.68	6.58	1.10	0.00	0.00	0.00	2.13E-03	1.83E-03	3.06E-04	0.00E+00	0.00E+00	0.00E+00
											total	6.86E-02	5.88E-02	9.82E-03	0.00E+00	0.00E+00	0.00E+00

Daily Emission Distribution

Hour	NO	NO_2
00 - 01	2%	2%
01 - 02	1%	1%
02 - 03	1%	1%
03 - 04	1%	1%
04 - 05	1%	1%
05 - 06	1%	1%
06 - 07	3%	3%
07 - 08	7%	7%
08 - 09	7%	7%
09 - 10	6%	6%
10 - 11	5%	5%
11 - 12	5%	5%
12 - 13	6%	6%
13 - 14	6%	6%
14 - 15	6%	6%
15 - 16	6%	6%
16 - 17	6%	6%
17 - 18	7%	7%
18 - 19	6%	6%
19 - 20	5%	5%
20 - 21	4%	4%
21 - 22	4%	4%
22 - 23	4%	4%
23 - 24	3%	3%
Total	100%	100%

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	NFB8											
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	131	m
Average Travelling Speed =	5	km/h

Hour	NFB8											
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	19	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	21.767	18.234	3.534	0.741	0.741	0.681
0100 - 0200	11	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	12.440	10.421	2.019	0.423	0.423	0.389
0200 - 0300	5	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	6.214	5.206	1.009	0.211	0.211	0.195
0300 - 0400	5	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	5.184	4.343	0.842	0.176	0.176	0.162
0400 - 0500	5	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	6.214	5.206	1.009	0.211	0.211	0.195
0500 - 0600	13	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	14.500	12.146	2.354	0.493	0.493	0.454
0600 - 0700	28	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	32.136	26.919	5.217	1.093	1.093	1.006
0700 - 0800	59	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	67.385	56.446	10.939	2.292	2.292	2.110
0800 - 0900	60	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	68.655	57.510	11.145	2.336	2.336	2.149
0900 - 1000	51	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	58.058	48.633	9.425	1.975	1.975	1.818
1000 - 1100	46	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	52.862	44.280	8.581	1.798	1.798	1.655
1100 - 1200	49	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	55.986	46.898	9.089	1.905	1.905	1.753
1200 - 1300	52	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	59.088	49.496	9.592	2.010	2.010	1.850
1300 - 1400	52	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	59.088	49.496	9.592	2.010	2.010	1.850
1400 - 1500	51	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	58.058	48.633	9.425	1.975	1.975	1.818
1500 - 1600	52	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	59.088	49.496	9.592	2.010	2.010	1.850
1600 - 1700	55	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	63.242	52.975	10.266	2.151	2.151	1.980
1700 - 1800	60	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	68.655	57.510	11.145	2.336	2.336	2.149
1800 - 1900	54	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	62.200	52.103	10.097	2.116	2.116	1.947
1900 - 2000	42	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	47.689	39.947	7.742	1.622	1.622	1.493
2000 - 2100	36	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	41.452	34.723	6.729	1.410	1.410	1.298
2100 - 2200	36	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	41.452	34.723	6.729	1.410	1.410	1.298
2200 - 2300	34	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	39.392	32.997	6.395	1.340	1.340	1.233
2300 - 2400	28	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	32.136	26.919	5.217	1.093	1.093	1.006

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	28.053	23.509	4.544	0.785	0.785	0.726	7.79E-03	6.53E-03	1.26E-03	2.18E-04	2.18E-04	2.02E-04
0100 - 0200	16.032	13.436	2.597	0.449	0.449	0.415	4.45E-03	3.73E-03	7.21E-04	1.25E-04	1.25E-04	1.15E-04
0200 - 0300	8.009	6.712	1.297	0.224	0.224	0.207	2.22E-03	1.86E-03	3.60E-04	6.23E-05	6.23E-05	5.76E-05
0300 - 0400	6.681	5.599	1.082	0.187	0.187	0.173	1.86E-03	1.56E-03	3.01E-04	5.20E-05	5.20E-05	4.80E-05
0400 - 0500	8.009	6.712	1.297	0.224	0.224	0.207	2.22E-03	1.86E-03	3.60E-04	6.23E-05	6.23E-05	5.76E-05
0500 - 0600	18.687	15.660	3.027	0.523	0.523	0.484	5.19E-03	4.35E-03	8.41E-04	1.45E-04	1.45E-04	1.34E-04
0600 - 0700	41.415	34.707	6.708	1.159	1.159	1.072	1.15E-02	9.64E-03	1.86E-03	3.22E-04	3.22E-04	2.98E-04
0700 - 0800	86.842	72.777	14.066	2.431	2.431	2.248	2.41E-02	2.02E-02	3.91E-03	6.75E-04	6.75E-04	6.25E-04
0800 - 0900	88.479	74.149	14.331	2.477	2.477	2.291	2.46E-02	2.06E-02	3.98E-03	6.88E-04	6.88E-04	6.36E-04
0900 - 1000	74.822	62.703	12.119	2.095	2.095	1.937	2.08E-02	1.74E-02	3.37E-03	5.82E-04	5.82E-04	5.38E-04
1000 - 1100	68.126	57.092	11.034	1.907	1.907	1.764	1.89E-02	1.59E-02	3.07E-03	5.30E-04	5.30E-04	4.90E-04
1100 - 1200	72.152	60.466	11.686	2.020	2.020	1.868	2.00E-02	1.68E-02	3.25E-03	5.61E-04	5.61E-04	5.19E-04
1200 - 1300	76.149	63.816	12.334	2.132	2.132	1.971	2.12E-02	1.77E-02	3.43E-03	5.92E-04	5.92E-04	5.48E-04
1300 - 1400	76.149	63.816	12.334	2.132	2.132	1.971	2.12E-02	1.77E-02	3.43E-03	5.92E-04	5.92E-04	5.48E-04
1400 - 1500	74.822	62.703	12.119	2.095	2.095	1.937	2.08E-02	1.74E-02	3.37E-03	5.82E-04	5.82E-04	5.38E-04
1500 - 1600	76.149	63.816	12.334	2.132	2.132	1.971	2.12E-02	1.77E-02	3.43E-03	5.92E-04	5.92E-04	5.48E-04
1600 - 1700	81.503	68.302	13.201	2.282	2.282	2.110	2.26E-02	1.90E-02	3.67E-03	6.34E-04	6.34E-04	5.86E-04
1700 - 1800	88.479	74.149	14.331	2.477	2.477	2.291	2.46E-02	2.06E-02	3.98E-03	6.88E-04	6.88E-04	6.36E-04
1800 - 1900	80.161	67.178	12.983	2.244	2.244	2.075	2.23E-02	1.87E-02	3.61E-03	6.23E-04	6.23E-04	5.76E-04
1900 - 2000	61.459	51.505	9.954	1.721	1.721	1.591	1.71E-02	1.43E-02	2.77E-03	4.78E-04	4.78E-04	4.42E-04
2000 - 2100	53.421	44.769	8.652	1.495	1.495	1.383	1.48E-02	1.24E-02	2.40E-03	4.15E-04	4.15E-04	3.84E-04
2100 - 2200	53.421	44.769	8.652	1.495	1.495	1.383	1.48E-02	1.24E-02	2.40E-03	4.15E-04	4.15E-04	3.84E-04
2200 - 2300	50.766	42.544	8.222	1.421	1.421	1.314	1.41E-02	1.18E-02	2.28E-03	3.95E-04	3.95E-04	3.65E-04
2300 - 2400	41.415	34.707	6.708	1.159	1.159	1.072	1.15E-02	9.64E-03	1.86E-03	3.22E-04	3.22E-04	2.98E-04
						total	3.70E-01	3.10E-01	5.99E-02	1.04E-02	1.04E-02	9.57E-03

Daily Emission Distribution

Hour	NOx	NO	NO_2	TSP	RSP	FSP
00 - 01	2%	2%	2%	2%	2%	2%
01 - 02	1%	1%	1%	1%	1%	1%
02 - 03	1%	1%	1%	1%	1%	1%
03 - 04	1%	1%	1%	1%	1%	1%
04 - 05	1%	1%	1%	1%	1%	1%
05 - 06	1%	1%	1%	1%	1%	1%
06 - 07	3%	3%	3%	3%	3%	3%
07 - 08	7%	7%	7%	7%	7%	7%
08 - 09	7%	7%	7%	7%	7%	7%
09 - 10	6%	6%	6%	6%	6%	6%
10 - 11	5%	5%	5%	5%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%
12 - 13	6%	6%	6%	6%	6%	6%
13 - 14	6%	6%	6%	6%	6%	6%
14 - 15	6%	6%	6%	6%	6%	6%
15 - 16	6%	6%	6%	6%	6%	6%
16 - 17	6%	6%	6%	6%	6%	6%
17 - 18	7%	7%	7%	7%	7%	7%
18 - 19	6%	6%	6%	6%	6%	6%
19 - 20	5%	5%	5%	5%	5%	5%
20 - 21	4%	4%	4%	4%	4%	4%
21 - 22	4%	4%	4%	4%	4%	4%
22 - 23	4%	4%	4%	4%	4%	4%
23 - 24	3%	3%	3%	3%	3%	3%
Total	100%	100%	100%	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for all Non-Franchised Bus as conservative approach.

Airport (Ground Transportation Centre) Bus Terminus - PTI GTC01

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.77	1.39	1.85	2.62	3.23	4.31	6.32	7.86	11.55	15.09	16.94	20.02	22.03	23.10	23.72	24.34	24.64	24.64
NO	0.72	1.30	1.74	2.46	3.04	4.06	5.94	7.39	10.87	14.21	15.95	18.85	20.73	21.75	22.33	22.91	23.20	23.20
NO2	0.05	0.08	0.11	0.15	0.19	0.25	0.37	0.46	0.68	0.89	1.00	1.18	1.29	1.36	1.39	1.43	1.45	1.45
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of FBDD																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0600 - 0700	0	0	13	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0700 - 0800	0	0	24	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
0800 - 0900	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBSD & FBDD (g)						
NOx	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
32	30	2	0	0	0
47	44	3	0	0	0
114	107	7	0	0	0
54	51	3	0	0	0
43	41	3	0	0	0
39	37	2	0	0	0
42	39	2	0	0	0
44	42	3	0	0	0
44	42	3	0	0	0
43	41	3	0	0	0
44	42	3	0	0	0
47	44	3	0	0	0
49	46	3	0	0	0
46	44	3	0	0	0
36	34	2	0	0	0
31	29	2	0	0	0
31	29	2	0	0	0
29	28	2	0	0	0
24	23	1	0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBDD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0100 - 0200	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0200 - 0300	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0300 - 0400	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0400 - 0500	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0500 - 0600	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
0600 - 0700	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
0700 - 0800	3	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	63.790	60.614	3.176	0.018	0.018	0.018
0800 - 0900	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0900 - 1000	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
1000 - 1100	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
1100 - 1200	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
1200 - 1300	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
1300 - 1400	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
1400 - 1500	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
1500 - 1600	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
1600 - 1700	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
1700 - 1800	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
1800 - 1900	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
1900 - 2000	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
2000 - 2100	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
2100 - 2200	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
2200 - 2300	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
2300 - 2400	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	5	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	3.51	3.34	0.18	0.03	0.03	0.03
0600 - 0700	13	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.14	8.68	0.46	0.08	0.08	0.08
0700 - 0800	24	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	16.87	16.03	0.84	0.14	0.14	0.14
0800 - 0900	29	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	20.56	19.54	1.02	0.17	0.17	0.17
0900 - 1000	23	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	16.49	15.67	0.82	0.14	0.14	0.14
1000 - 1100	21	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	15.02	14.27	0.75	0.13	0.13	0.13
1100 - 1200	23	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	15.90	15.11	0.79	0.13	0.13	0.13
1200 - 1300	24	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	16.78	15.95	0.84	0.14	0.14	0.14
1300 - 1400	24	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	16.78	15.95	0.84	0.14	0.14	0.14
1400 - 1500	23	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	16.49	15.67	0.82	0.14	0.14	0.14
1500 - 1600	24	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	16.78	15.95	0.84	0.14	0.14	0.14
1600 - 1700	26	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	17.96	17.07	0.89	0.15	0.15	0.15
1700 - 1800	27	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	18.79	17.85	0.94	0.16	0.16	0.16
1800 - 1900	25	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	17.67	16.79	0.88	0.15	0.15	0.15
1900 - 2000	19	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	13.54	12.87	0.67	0.11	0.11	0.11
2000 - 2100	17	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	11.78	11.19	0.59	0.10	0.10	0.10
2100 - 2200	17	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	11.78	11.19	0.59	0.10	0.10	0.10
2200 - 2300	16	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	11.19	10.63	0.56	0.09	0.09	0.09
2300 - 2400	13	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.13	8.67	0.45	0.08	0.08	0.08

Average Distance from Starting Place to Egress =	86	m
Average Spread Distance outside bus terminus =	614	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	24.78	23.54	1.23	0.04	0.04	0.04	8.26	7.85	0.41	0.01	0.01	0.01
0600 - 0700	30.40	28.89	1.51	0.08	0.08	0.08	10.13	9.63	0.50	0.03	0.03	0.03
0700 - 0800	80.66	76.65	4.02	0.16	0.16	0.16	26.89	25.55	1.34	0.05	0.05	0.05
0800 - 0900	20.56	19.54	1.02	0.17	0.17	0.17	6.85	6.51	0.34	0.06	0.06	0.06
0900 - 1000	16.49	15.67	0.82	0.14	0.14	0.14	5.50	5.22	0.27	0.05	0.05	0.05
1000 - 1100	15.02	14.27	0.75	0.13	0.13	0.13	5.01	4.76	0.25	0.04	0.04	0.04
1100 - 1200	15.90	15.11	0.79	0.13	0.13	0.13	5.30	5.04	0.26	0.04	0.04	0.04
1200 - 1300	16.78	15.95	0.84	0.14	0.14	0.14	5.59	5.32	0.28	0.05	0.05	0.05
1300 - 1400	16.78	15.95	0.84	0.14	0.14	0.14	5.59	5.32	0.28	0.05	0.05	0.05
1400 - 1500	16.49	15.67	0.82	0.14	0.14	0.14	5.50	5.22	0.27	0.05	0.05	0.05
1500 - 1600	16.78	15.95	0.84	0.14	0.14	0.14	5.59	5.32	0.28	0.05	0.05	0.05
1600 - 1700	17.96	17.07	0.89	0.15	0.15	0.15	5.99	5.69	0.30	0.05	0.05	0.05
1700 - 1800	18.79	17.85	0.94	0.16	0.16	0.16	6.26	5.95	0.31	0.05	0.05	0.05
1800 - 1900	17.67	16.79	0.88	0.15	0.15	0.15	5.89	5.60	0.29	0.05	0.05	0.05
1900 - 2000	13.54	12.87	0.67	0.11	0.11	0.11	4.51	4.29	0.22	0.04	0.04	0.04
2000 - 2100	11.78	11.19	0.59	0.10	0.10	0.10	3.93	3.73	0.20	0.03	0.03	0.03
2100 - 2200	11.78	11.19	0.59	0.10	0.10	0.10	3.93	3.73	0.20	0.03	0.03	0.03
2200 - 2300	11.19	10.63	0.56	0.09	0.09	0.09	3.73	3.54	0.19	0.03	0.03	0.03
2300 - 2400	9.13	8.67	0.45	0.08	0.08	0.08	3.04	2.89	0.15	0.03	0.03	0.03

Hour	Adjusted Start Emission within Loading and Unloading Area (g)						Adjusted Start Emission outside Loading and Unloading Area (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	2.96	2.78	0.18	0.00	0.00	0.00	21.13	19.82	1.31	0.00	0.00	0.00
0600 - 0700	4.55	4.27	0.28	0.00	0.00	0.00	32.45	30.47	1.99	0.00	0.00	0.00
0700 - 0800	10.66	10.01	0.66	0.00	0.00	0.00	76.12	71.44	4.68	0.00	0.00	0.00
0800 - 0900	5.80	5.45	0.35	0.00	0.00	0.00	41.40	38.92	2.49	0.00	0.00	0.00
0900 - 1000	4.65	4.37	0.28	0.00	0.00	0.00	33.20	31.21	1.99	0.00	0.00	0.00
1000 - 1100	4.24	3.98	0.25	0.00	0.00	0.00	30.24	28.42	1.82	0.00	0.00	0.00
1100 - 1200	4.48	4.22	0.27	0.00	0.00	0.00	32.02	30.10	1.92	0.00	0.00	0.00
1200 - 1300	4.73	4.45	0.28	0.00	0.00	0.00	33.80	31.77	2.03	0.00	0.00	0.00
1300 - 1400	4.73	4.45	0.28	0.00	0.00	0.00	33.80	31.77	2.03	0.00	0.00	0.00
1400 - 1500	4.65	4.37	0.28	0.00	0.00	0.00	33.20	31.21	1.99	0.00	0.00	0.00
1500 - 1600	4.73	4.45	0.28	0.00	0.00	0.00	33.80	31.77	2.03	0.00	0.00	0.00
1600 - 1700	5.07	4.76	0.30	0.00	0.00	0.00	36.17	34.00	2.17	0.00	0.00	0.00
1700 - 1800	5.30	4.98	0.32	0.00	0.00	0.00	37.84	35.56	2.27	0.00	0.00	0.00
1800 - 1900	4.98	4.68	0.30	0.00	0.00	0.00	35.58	33.44	2.14	0.00	0.00	0.00
1900 - 2000	3.82	3.59	0.23	0.00	0.00	0.00	27.27	25.64	1.64	0.00	0.00	0.00
2000 - 2100	3.32	3.12	0.20	0.00	0.00	0.00	23.72	22.29	1.42	0.00	0.00	0.00
2100 - 2200	3.32	3.12	0.20	0.00	0.00	0.00	23.72	22.29	1.42	0.00	0.00	0.00
2200 - 2300	3.16	2.97	0.19	0.00	0.00	0.00	22.53	21.18	1.35	0.00	0.00	0.00
2300 - 2400	2.57	2.42	0.15	0.00	0.00	0.00	18.38	17.28	1.10	0.00	0.00	0.00

Hour	Start Emission Rate outside bus terminus (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0200 - 0300	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0500 - 0600	5.87E-03	5.51E-03	3.63E-04	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	9.01E-03	8.46E-03	5.52E-04	0.00E+00	0.00E+00	0.00E+00
0700 - 0800	2.11E-02	1.98E-02	1.30E-03	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	1.15E-02	1.08E-02	6.91E-04	0.00E+00	0.00E+00	0.00E+00
0900 - 1000	9.22E-03	8.67E-03	5.54E-04	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	8.40E-03	7.90E-03	5.04E-04	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	8.89E-03	8.36E-03	5.34E-04	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	9.39E-03	8.82E-03	5.64E-04	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	9.39E-03	8.82E-03	5.64E-04	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	9.22E-03	8.67E-03	5.54E-04	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	9.39E-03	8.82E-03	5.64E-04	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	1.00E-02	9.44E-03	6.03E-04	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	1.05E-02	9.88E-03	6.31E-04	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	9.88E-03	9.29E-03	5.94E-04	0.00E+00	0.00E+00	0.00E+00
1900 - 2000	7.58E-03	7.12E-03	4.55E-04	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	6.59E-03	6.19E-03	3.96E-04	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	6.59E-03	6.19E-03	3.96E-04	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	6.26E-03	5.88E-03	3.76E-04	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	5.11E-03	4.80E-03	3.07E-04	0.00E+00	0.00E+00	0.00E+00
total	1.74E-01	1.63E-01	1.05E-02	0.00E+00	0.00E+00	0.00E+00

Daily Emission Distribution

Hour	NO	NO_2
00 - 01	0%	0%
01 - 02	0%	0%
02 - 03	0%	0%
03 - 04	0%	0%
04 - 05	0%	0%
05 - 06	3%	3%
06 - 07	5%	5%
07 - 08	12%	12%
08 - 09	7%	7%
09 - 10	5%	5%
10 - 11	5%	5%
11 - 12	5%	5%
12 - 13	5%	5%
13 - 14	5%	5%
14 - 15	5%	5%
15 - 16	5%	5%
16 - 17	6%	6%
17 - 18	6%	6%
18 - 19	6%	6%
19 - 20	4%	4%
20 - 21	4%	4%
21 - 22	4%	4%
22 - 23	4%	4%
23 - 24	3%	3%
Total	100%	100%

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	FBDD											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	8	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	5.29	5.03	0.26	0.04	0.04	0.04
0100 - 0200	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	3.02	2.87	0.15	0.03	0.03	0.03
0200 - 0300	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.51	1.44	0.08	0.01	0.01	0.01
0300 - 0400	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.26	1.20	0.06	0.01	0.01	0.01
0400 - 0500	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.51	1.44	0.08	0.01	0.01	0.01
0500 - 0600	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	237	m
Average Travelling Speed =	5	km/h

Hour	Frequency	FBDD											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	8	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	26.089	24.790	1.299	0.797	0.797	0.733
0100 - 0200	4	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	14.907	14.165	0.742	0.455	0.455	0.419
0200 - 0300	2	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	7.453	7.082	0.371	0.228	0.228	0.209
0300 - 0400	2	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	6.209	5.900	0.309	0.190	0.190	0.175
0400 - 0500	2	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	7.453	7.082	0.371	0.228	0.228	0.209
0500 - 0600	6	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	20.790	19.755	1.035	0.635	0.635	0.584
0600 - 0700	14	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	48.511	46.096	2.416	1.482	1.482	1.363
0700 - 0800	27	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	93.557	88.899	4.658	2.858	2.858	2.629
0800 - 0900	29	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	101.341	96.295	5.046	3.096	3.096	2.848
0900 - 1000	23	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	81.270	77.223	4.047	2.483	2.483	2.284
1000 - 1100	21	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	74.014	70.329	3.685	2.261	2.261	2.080
1100 - 1200	23	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	78.373	74.470	3.902	2.395	2.395	2.203
1200 - 1300	24	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	82.723	78.604	4.119	2.527	2.527	2.325
1300 - 1400	24	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	82.723	78.604	4.119	2.527	2.527	2.325
1400 - 1500	23	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	81.270	77.223	4.047	2.483	2.483	2.284
1500 - 1600	24	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	82.723	78.604	4.119	2.527	2.527	2.325
1600 - 1700	26	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	88.526	84.118	4.408	2.705	2.705	2.488
1700 - 1800	27	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	92.607	87.996	4.611	2.829	2.829	2.603
1800 - 1900	25	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	87.082	82.746	4.336	2.661	2.661	2.447
1900 - 2000	19	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	66.758	63.434	3.324	2.040	2.040	1.876
2000 - 2100	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	58.049	55.159	2.890	1.774	1.774	1.631
2100 - 2200	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	58.049	55.159	2.890	1.774	1.774	1.631
2200 - 2300	16	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	55.151	52.405	2.746	1.685	1.685	1.550
2300 - 2400	13	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	44.990	42.749	2.240	1.375	1.375	1.264

Total Hourly Emission

Hour	Total Emission inside bus terminus (g) (Running + Idling + Start) [6]						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	31.381	29.819	1.563	0.842	0.842	0.778	8.72E-03	8.28E-03	4.34E-04	2.34E-04	2.34E-04	2.16E-04
0100 - 0200	17.931	17.038	0.893	0.481	0.481	0.444	4.98E-03	4.73E-03	2.48E-04	1.34E-04	1.34E-04	1.23E-04
0200 - 0300	8.965	8.519	0.446	0.240	0.240	0.222	2.49E-03	2.37E-03	1.24E-04	6.68E-05	6.68E-05	6.17E-05
0300 - 0400	7.469	7.097	0.372	0.200	0.200	0.185	2.07E-03	1.97E-03	1.03E-04	5.56E-05	5.56E-05	5.14E-05
0400 - 0500	8.965	8.519	0.446	0.240	0.240	0.222	2.49E-03	2.37E-03	1.24E-04	6.68E-05	6.68E-05	6.17E-05
0500 - 0600	48.528	46.076	2.452	0.671	0.671	0.620	1.35E-02	1.28E-02	6.81E-04	1.86E-04	1.86E-04	1.72E-04
0600 - 0700	83.459	79.251	4.207	1.565	1.565	1.446	2.32E-02	2.20E-02	1.17E-03	4.35E-04	4.35E-04	4.02E-04
0700 - 0800	184.881	175.550	9.331	3.018	3.018	2.789	5.14E-02	4.88E-02	2.59E-03	8.38E-04	8.38E-04	7.75E-04
0800 - 0900	127.699	121.281	6.418	3.269	3.269	3.021	3.55E-02	3.37E-02	1.78E-03	9.08E-04	9.08E-04	8.39E-04
0900 - 1000	102.408	97.261	5.147	2.622	2.622	2.423	2.84E-02	2.70E-02	1.43E-03	7.28E-04	7.28E-04	6.73E-04
1000 - 1100	93.265	88.577	4.687	2.388	2.388	2.207	2.59E-02	2.46E-02	1.30E-03	6.63E-04	6.63E-04	6.13E-04
1100 - 1200	98.757	93.794	4.963	2.528	2.528	2.336	2.74E-02	2.61E-02	1.38E-03	7.02E-04	7.02E-04	6.49E-04
1200 - 1300	104.239	99.000	5.239	2.669	2.669	2.466	2.90E-02	2.75E-02	1.46E-03	7.41E-04	7.41E-04	6.85E-04
1300 - 1400	104.239	99.000	5.239	2.669	2.669	2.466	2.90E-02	2.75E-02	1.46E-03	7.41E-04	7.41E-04	6.85E-04
1400 - 1500	102.408	97.261	5.147	2.622	2.622	2.423	2.84E-02	2.70E-02	1.43E-03	7.28E-04	7.28E-04	6.73E-04
1500 - 1600	104.239	99.000	5.239	2.669	2.669	2.466	2.90E-02	2.75E-02	1.46E-03	7.41E-04	7.41E-04	6.85E-04
1600 - 1700	111.552	105.945	5.606	2.856	2.856	2.639	3.10E-02	2.94E-02	1.56E-03	7.93E-04	7.93E-04	7.33E-04
1700 - 1800	116.694	110.829	5.865	2.988	2.988	2.761	3.24E-02	3.08E-02	1.63E-03	8.30E-04	8.30E-04	7.67E-04
1800 - 1900	109.731	104.216	5.515	2.809	2.809	2.596	3.05E-02	2.89E-02	1.53E-03	7.80E-04	7.80E-04	7.21E-04
1900 - 2000	84.121	79.894	4.228	2.154	2.154	1.990	2.34E-02	2.22E-02	1.17E-03	5.98E-04	5.98E-04	5.53E-04
2000 - 2100	73.147	69.471	3.676	1.873	1.873	1.731	2.03E-02	1.93E-02	1.02E-03	5.20E-04	5.20E-04	4.81E-04
2100 - 2200	73.147	69.471	3.676	1.873	1.873	1.731	2.03E-02	1.93E-02	1.02E-03	5.20E-04	5.20E-04	4.81E-04
2200 - 2300	69.496	66.003	3.493	1.779	1.779	1.644	1.93E-02	1.83E-02	9.70E-04	4.94E-04	4.94E-04	4.57E-04
2300 - 2400	56.691	53.842	2.849	1.451	1.451	1.341	1.57E-02	1.50E-02	7.91E-04	4.03E-04	4.03E-04	3.73E-04
						total	5.34E-01	5.07E-01	2.69E-02	1.29E-02	1.29E-02	1.19E-02

Daily Emission Distribution

Hour	NOx	NO	NO_2	TSP	RSP	FSP
00 - 01	2%	2%	2%	2%	2%	2%
01 - 02	1%	1%	1%	1%	1%	1%
02 - 03	0%	0%	0%	1%	1%	1%
03 - 04	0%	0%	0%	0%	0%	0%
04 - 05	0%	0%	0%	1%	1%	1%
05 - 06	3%	3%	3%	1%	1%	1%
06 - 07	4%	4%	4%	3%	3%	3%
07 - 08	10%	10%	10%	6%	6%	6%
08 - 09	7%	7%	7%	7%	7%	7%
09 - 10	5%	5%	5%	6%	6%	6%
10 - 11	5%	5%	5%	5%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%
12 - 13	5%	5%	5%	6%	6%	6%
13 - 14	5%	5%	5%	6%	6%	6%
14 - 15	5%	5%	5%	6%	6%	6%
15 - 16	5%	5%	5%	6%	6%	6%
16 - 17	6%	6%	6%	6%	6%	6%
17 - 18	6%	6%	6%	6%	6%	6%
18 - 19	6%	6%	6%	6%	6%	6%
19 - 20	4%	4%	4%	5%	5%	5%
20 - 21	4%	4%	4%	4%	4%	4%
21 - 22	4%	4%	4%	4%	4%	4%
22 - 23	4%	4%	4%	4%	4%	4%
23 - 24	3%	3%	3%	3%	3%	3%
Total	100%	100%	100%	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

[2] Number of cold starts were provided by the traffic consultant.

Emission Sources (Airport Island) Listing in AERMOD

Location	Source ID	Type	Coordinates		Base Elevation	Release Height [1][2]	Length X	Length Y	Area	Angle	Szinit [3]	Daily Emission Rate			
			X	Y	mPD	mAG	m	m	m^2	degree	m	NO	NO_2	RSP	FSP
												g/s or $g/m^2/s$			
Vehicular Emission inside Bus Terminus															
Planned PTI at Site A3 (FBSD & FBDD)	PTI_SKY01	AREA	811954	819822	7.0	0.25	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY02	AREA	811954	819822	7.0	0.75	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY03	AREA	811954	819822	7.0	1.25	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY04	AREA	811954	819822	7.0	1.75	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY05	AREA	811954	819822	7.0	2.25	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY06	AREA	811954	819822	7.0	2.75	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY07	AREA	811954	819822	7.0	3.25	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY08	AREA	811954	819822	7.0	3.75	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY09	AREA	811954	819822	7.0	4.25	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY10	AREA	811954	819822	7.0	4.75	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY11	AREA	811954	819822	7.0	5.25	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY12	AREA	811954	819822	7.0	5.75	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY13	AREA	811954	819822	7.0	6.25	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY14	AREA	811954	819822	7.0	6.75	19	2	38	161	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY15	AREA	811995	819699	7.0	0.25	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY16	AREA	811995	819699	7.0	0.75	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY17	AREA	811995	819699	7.0	1.25	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY18	AREA	811995	819699	7.0	1.75	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY19	AREA	811995	819699	7.0	2.25	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY20	AREA	811995	819699	7.0	2.75	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY21	AREA	811995	819699	7.0	3.25	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY22	AREA	811995	819699	7.0	3.75	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY23	AREA	811995	819699	7.0	4.25	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY24	AREA	811995	819699	7.0	4.75	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY25	AREA	811995	819699	7.0	5.25	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY26	AREA	811995	819699	7.0	5.75	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY27	AREA	811995	819699	7.0	6.25	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
	PTI_SKY28	AREA	811995	819699	7.0	6.75	28	2	56	166	-	6.28E-04	3.33E-05	1.58E-05	1.46E-05
Planned PTI at Site A3 (NFB)	PTI_SKY31	AREA	811981	819832	7.0	0.25	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY32	AREA	811981	819832	7.0	0.75	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY33	AREA	811981	819832	7.0	1.25	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY34	AREA	811981	819832	7.0	1.75	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY35	AREA	811981	819832	7.0	2.25	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY36	AREA	811981	819832	7.0	2.75	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY37	AREA	811981	819832	7.0	3.25	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY38	AREA	811981	819832	7.0	3.75	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY39	AREA	811981	819832	7.0	4.25	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY40	AREA	811981	819832	7.0	4.75	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY41	AREA	811981	819832	7.0	5.25	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY42	AREA	811981	819832	7.0	5.75	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY43	AREA	811981	819832	7.0	6.25	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY44	AREA	811981	819832	7.0	6.75	17	2	34	161	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY45	AREA	812030	819703	7.0	0.25	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY46	AREA	812030	819703	7.0	0.75	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY47	AREA	812030	819703	7.0	1.25	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY48	AREA	812030	819703	7.0	1.75	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY49	AREA	812030	819703	7.0	2.25	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY50	AREA	812030	819703	7.0	2.75	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY51	AREA	812030	819703	7.0	3.25	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY52	AREA	812030	819703	7.0	3.75	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY53	AREA	812030	819703	7.0	4.25	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY54	AREA	812030	819703	7.0	4.75	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY55	AREA	812030	819703	7.0	5.25	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY56	AREA	812030	819703	7.0	5.75	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY57	AREA	812030	819703	7.0	6.25	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
	PTI_SKY58	AREA	812030	819703	7.0	6.75	23	2	46	179	-	2.77E-04	5.35E-05	9.24E-06	8.55E-06
Airport (Ground Transportation Centre) Bus Terminus	PTI_GTC01	AREA_POLY	811643	819421	5.3	0	-	-	2980	-	-	1.70E-04	9.01E-06	4.33E-06	4.00E-06
Start Emission outside Bus Terminus															
Planned PTI at Site A3 (FBSD & FBDD)	SE_SKY01	AREA_POLY	811982	819658	7	3.87	-	-	9051	-	3.60	2.51E-05	1.60E-06	0.00E+00	0.00E+00
Planned PTI at Site A3 (NFB)	SE_SKY02	AREA_POLY	812008	819703	7	2.98	-	-	9552	-	2.77	6.15E-06	1.03E-06	0.00E+00	0.00E+00
Airport (Ground Transportation Centre) Bus Terminus	SE_GTC01	AREA_POLY	811794	819282	5.3	3.91	-	-	9069	-	3.64	1.80E-05	1.16E-06	0.00E+00	0.00E+00

Remarks:

[1] Release height for emission inside bus terminus were made reference to Appendix 3.8 of the approved EIA Report AEIAR-237/2022 for Tung Chung Line Extension.

[2] Release height for emission outside bus terminus were made reference to Appendix C of Modeling Guidelines for Air Quality Impact Assessment issued by Santa Barbara County APCD in June 2020.

Average Vehicle Height for FBDD, FBSD, PLB and NFB are 4.6, 3.5, 3 and 3.5 m, respectively.

Release height = 0.5 x 1.7 x vehicle height. Daily traffic volume weighted average was applied to the vehicle height.

[3] Initial vertical dimension Szinit = 1.7 x vehicle height/ 2.15. Daily traffic volume weighted average was applied to the vehicle height.

Emission Sources (Airport Island) Listing in AERMOD

No. of Coordinate	Source ID							
	PTI_GTC01		SE_SKY01		SE_SKY02		SE_GTC01	
	X	Y	X	Y	X	Y	X	Y
1	811643	819421	811982	819658	812008	819703	811794	819282
2	811620	819413	811979	819695	812024	819703	811783	819289
3	811647	819332	811995	819699	812026	819670	811805	819318
4	811665	819338	811998	819669	812050	819668	811826	819348
5	811683	819344	812026	819670	812090	819658	811856	819408
6	811670	819385	812050	819668	812136	819643	811868	819424
7			812088	819659	812107	819567	811879	819429
8			812112	819651	812087	819520	811887	819438
9			812136	819643	812089	819503	811891	819451
10			812107	819567	812094	819490	811891	819463
11			812087	819520	812099	819477	811885	819476
12			812089	819503	812109	819464	811878	819483
13			812094	819490	812130	819452	811868	819488
14			812099	819477	812155	819440	811855	819489
15			812109	819464	812171	819436	811843	819486
16			812130	819452	812200	819433	811816	819462
17			812155	819440	812237	819438	811778	819454
18			812171	819436	812357	819464	811761	819442
19			812200	819433	812401	819479	811748	819422
20			812237	819438	812406	819462	811742	819385
21			812357	819464	812363	819449	811739	819333
22			812363	819449	812239	819423	811730	819307
23			812301	819435	812199	819416	811707	819295
24			812239	819423	812159	819422	811689	819303
25			812199	819416	812137	819427	811672	819340
26			812180	819418	812120	819434	811683	819344
27			812159	819422	812098	819446	811699	819314
28			812137	819427	812089	819452	811707	819310
29			812120	819434	812075	819468	811718	819315
30			812098	819446	812075	819507	811724	819334
31			812089	819452	812077	819516	811728	819388
32			812075	819468	812098	819569	811736	819427
33			812075	819507	812122	819634	811752	819451
34			812077	819516	812108	819641	811772	819466
35			812098	819569	812086	819649	811810	819478
36			812122	819634	812051	819658	811822	819491
37			812108	819641	812026	819660	811837	819502
38			812086	819649	812011	819659	811852	819507
39			812051	819658			811870	819507
40			812026	819660			811889	819500
41			811982	819658			811904	819483
42							811908	819460
43							811906	819441
44							811899	819426
45							811888	819415
46							811877	819409
47							811865	819396
48							811838	819342

Hourly Emission Profile

	NO						NO2					
Hour	**PTI_SKY_FB**	**PTI_SKY_NFB**	**PTI_GTC**	**SE_SKY_FB**	**SE_SKY_NFB**	**SE_GTC**	**PTI_SKY_FB**	**PTI_SKY_NFB**	**PTI_GTC**	**SE_SKY_FB**	**SE_SKY_NFB**	**SE_GTC**
00 - 01	2%	2%	2%	2%	2%	0%	2%	2%	2%	2%	2%	0%
01 - 02	1%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	0%
02 - 03	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	1%	0%
03 - 04	0%	1%	0%	0%	1%	0%	0%	1%	0%	0%	1%	0%
04 - 05	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	1%	0%
05 - 06	2%	1%	3%	3%	1%	3%	2%	1%	3%	3%	1%	3%
06 - 07	4%	3%	4%	4%	3%	5%	4%	3%	4%	4%	3%	5%
07 - 08	9%	7%	10%	12%	7%	12%	9%	7%	10%	12%	7%	12%
08 - 09	6%	7%	7%	6%	7%	7%	6%	7%	7%	6%	7%	7%
09 - 10	5%	6%	5%	6%	6%	5%	5%	6%	5%	6%	6%	5%
10 - 11	5%	5%	5%	4%	5%	5%	5%	5%	5%	4%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
12 - 13	5%	6%	5%	5%	6%	5%	5%	6%	5%	5%	6%	5%
13 - 14	5%	6%	5%	5%	6%	5%	5%	6%	5%	5%	6%	5%
14 - 15	5%	6%	5%	5%	6%	5%	5%	6%	5%	5%	6%	5%
15 - 16	5%	6%	5%	5%	6%	5%	5%	6%	5%	5%	6%	5%
16 - 17	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
17 - 18	6%	7%	6%	7%	7%	6%	6%	7%	6%	7%	7%	6%
18 - 19	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
19 - 20	4%	5%	4%	4%	5%	4%	4%	5%	4%	4%	5%	4%
20 - 21	4%	4%	4%	3%	4%	4%	4%	4%	4%	3%	4%	4%
21 - 22	4%	4%	4%	3%	4%	4%	4%	4%	4%	3%	4%	4%
22 - 23	4%	4%	4%	3%	4%	4%	4%	4%	4%	3%	4%	4%
23 - 24	3%	3%	3%	2%	3%	3%	3%	3%	3%	2%	3%	3%

	RSP			FSP		
Hour	**PTI_SKY_FB**	**PTI_SKY_NFB**	**PTI_GTC**	**PTI_SKY_FB**	**PTI_SKY_NFB**	**PTI_GTC**
00 - 01	2%	2%	2%	2%	2%	2%
01 - 02	1%	1%	1%	1%	1%	1%
02 - 03	1%	1%	1%	1%	1%	1%
03 - 04	1%	1%	0%	1%	1%	0%
04 - 05	1%	1%	1%	1%	1%	1%
05 - 06	1%	1%	1%	1%	1%	1%
06 - 07	3%	3%	3%	3%	3%	3%
07 - 08	7%	7%	6%	7%	7%	6%
08 - 09	7%	7%	7%	7%	7%	7%
09 - 10	6%	6%	6%	6%	6%	6%
10 - 11	5%	5%	5%	5%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%
12 - 13	6%	6%	6%	6%	6%	6%
13 - 14	6%	6%	6%	6%	6%	6%
14 - 15	6%	6%	6%	6%	6%	6%
15 - 16	6%	6%	6%	6%	6%	6%
16 - 17	6%	6%	6%	6%	6%	6%
17 - 18	7%	7%	6%	7%	7%	6%
18 - 19	6%	6%	6%	6%	6%	6%
19 - 20	5%	5%	5%	5%	5%	5%
20 - 21	4%	4%	4%	4%	4%	4%
21 - 22	4%	4%	4%	4%	4%	4%
22 - 23	4%	4%	4%	4%	4%	4%
23 - 24	3%	3%	3%	3%	3%	3%

HZMB Hong Kong Port PTI - Layby 5

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Non-franchised Buses 15-24t (NFB8) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.22	0.40	0.54	0.76	0.94	1.25	1.83	2.28	3.36	4.38	4.92	5.82	6.40	6.71	6.89	7.07	7.16	7.16
NO	0.19	0.34	0.46	0.65	0.80	1.07	1.56	1.94	2.86	3.74	4.19	4.96	5.45	5.72	5.87	6.02	6.10	6.10
NO2	0.03	0.06	0.08	0.11	0.14	0.19	0.27	0.34	0.50	0.65	0.73	0.86	0.95	0.99	1.02	1.05	1.06	1.06
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of NFB8																		Total Start Emission of NFB8 (g)					
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	NOx	NO	NO2	TSP	RSP	FSP
0000 - 0100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0100 - 0200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0200 - 0300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0300 - 0400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0400 - 0500	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0500 - 0600	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0600 - 0700	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0700 - 0800	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0800 - 0900	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0900 - 1000	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1000 - 1100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1100 - 1200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1200 - 1300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1300 - 1400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1400 - 1500	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1500 - 1600	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1600 - 1700	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1700 - 1800	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1800 - 1900	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1900 - 2000	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
2000 - 2100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
2100 - 2200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
2200 - 2300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
2300 - 2400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	NFB8																									
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00

Average Distance from Starting Place to Egress =	70	m
Average Spread Distance outside bus terminus =	630	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
0100 - 0200	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
0200 - 0300	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
0300 - 0400	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
0400 - 0500	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
0500 - 0600	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
0600 - 0700	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
0700 - 0800	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
0800 - 0900	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
0900 - 1000	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
1000 - 1100	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
1100 - 1200	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
1200 - 1300	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
1300 - 1400	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
1400 - 1500	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
1500 - 1600	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
1600 - 1700	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
1700 - 1800	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
1800 - 1900	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
1900 - 2000	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
2000 - 2100	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
2100 - 2200	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
2200 - 2300	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00
2300 - 2400	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00

Hour	Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0200 - 0300	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0500 - 0600	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0700 - 0800	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0900 - 1000	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1900 - 2000	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
												total	8.16E-03	7.15E-03	1.01E-03	0.00E+00	0.00E+00	0.00E+00

Daily Emission Distribution

Hour	NO	NO_2
00 - 01	4%	4%
01 - 02	4%	4%
02 - 03	4%	4%
03 - 04	4%	4%
04 - 05	4%	4%
05 - 06	4%	4%
06 - 07	4%	4%
07 - 08	4%	4%
08 - 09	4%	4%
09 - 10	4%	4%
10 - 11	4%	4%
11 - 12	4%	4%
12 - 13	4%	4%
13 - 14	4%	4%
14 - 15	4%	4%
15 - 16	4%	4%
16 - 17	4%	4%
17 - 18	4%	4%
18 - 19	4%	4%
19 - 20	4%	4%
20 - 21	4%	4%
21 - 22	4%	4%
22 - 23	4%	4%
23 - 24	4%	4%
Total	100%	100%

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	NFB8											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	16	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	4.83	4.05	0.78	0.04	0.04	0.04
0100 - 0200	9	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	2.72	2.28	0.44	0.02	0.02	0.02
0200 - 0300	5	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	1.51	1.26	0.25	0.01	0.01	0.01
0300 - 0400	5	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	1.51	1.26	0.25	0.01	0.01	0.01
0400 - 0500	7	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	2.11	1.77	0.34	0.02	0.02	0.02
0500 - 0600	12	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	3.62	3.04	0.59	0.03	0.03	0.03
0600 - 0700	21	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	6.34	5.31	1.03	0.05	0.05	0.05
0700 - 0800	36	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.87	9.11	1.76	0.08	0.08	0.08
0800 - 0900	43	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	12.99	10.88	2.11	0.10	0.10	0.10
0900 - 1000	34	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.27	8.60	1.67	0.08	0.08	0.08
1000 - 1100	30	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.06	7.59	1.47	0.07	0.07	0.07
1100 - 1200	31	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.36	7.84	1.52	0.07	0.07	0.07
1200 - 1300	35	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.57	8.85	1.72	0.08	0.08	0.08
1300 - 1400	35	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.57	8.85	1.72	0.08	0.08	0.08
1400 - 1500	35	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.57	8.85	1.72	0.08	0.08	0.08
1500 - 1600	31	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.36	7.84	1.52	0.07	0.07	0.07
1600 - 1700	32	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.66	8.09	1.57	0.08	0.08	0.08
1700 - 1800	34	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.27	8.60	1.67	0.08	0.08	0.08
1800 - 1900	33	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.97	8.35	1.62	0.08	0.08	0.08
1900 - 2000	29	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	8.76	7.34	1.42	0.07	0.07	0.07
2000 - 2100	25	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	7.55	6.32	1.23	0.06	0.06	0.06
2100 - 2200	25	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	7.55	6.32	1.23	0.06	0.06	0.06
2200 - 2300	25	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	7.55	6.32	1.23	0.06	0.06	0.06
2300 - 2400	22	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	6.64	5.57	1.08	0.05	0.05	0.05

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	140	m
Average Travelling Speed =	5	km/h

Hour	Frequency	NFB8											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	18	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	22.015	18.441	3.574	0.749	0.749	0.689
0100 - 0200	11	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	13.454	11.270	2.184	0.458	0.458	0.421
0200 - 0300	7	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	8.561	7.172	1.390	0.291	0.291	0.268
0300 - 0400	7	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	8.561	7.172	1.390	0.291	0.291	0.268
0400 - 0500	9	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	11.008	9.221	1.787	0.374	0.374	0.345
0500 - 0600	14	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	17.123	14.343	2.780	0.583	0.583	0.536
0600 - 0700	23	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	28.131	23.564	4.567	0.957	0.957	0.881
0700 - 0800	38	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	46.477	38.932	7.545	1.581	1.581	1.455
0800 - 0900	45	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	55.038	46.103	8.935	1.872	1.872	1.723
0900 - 1000	36	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	44.030	36.883	7.148	1.498	1.498	1.378
1000 - 1100	32	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	39.138	32.785	6.354	1.331	1.331	1.225
1100 - 1200	33	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	40.361	33.809	6.552	1.373	1.373	1.264
1200 - 1300	37	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	45.254	37.907	7.346	1.539	1.539	1.417
1300 - 1400	37	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	45.254	37.907	7.346	1.539	1.539	1.417
1400 - 1500	37	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	45.254	37.907	7.346	1.539	1.539	1.417
1500 - 1600	33	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	40.361	33.809	6.552	1.373	1.373	1.264
1600 - 1700	34	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	41.584	34.834	6.751	1.415	1.415	1.302
1700 - 1800	36	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	44.030	36.883	7.148	1.498	1.498	1.378
1800 - 1900	35	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	42.807	35.858	6.949	1.456	1.456	1.340
1900 - 2000	31	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	37.915	31.760	6.155	1.290	1.290	1.187
2000 - 2100	27	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	33.023	27.662	5.361	1.123	1.123	1.034
2100 - 2200	27	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	33.023	27.662	5.361	1.123	1.123	1.034
2200 - 2300	27	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	33.023	27.662	5.361	1.123	1.123	1.034
2300 - 2400	24	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	29.354	24.588	4.765	0.999	0.999	0.919

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	33.909	28.409	5.499	0.791	0.791	0.732	9.42E-03	7.89E-03	1.53E-03	2.20E-04	2.20E-04	2.03E-04
0100 - 0200	23.233	19.467	3.766	0.484	0.484	0.447	6.45E-03	5.41E-03	1.05E-03	1.34E-04	1.34E-04	1.24E-04
0200 - 0300	17.133	14.357	2.776	0.308	0.308	0.285	4.76E-03	3.99E-03	7.71E-04	8.55E-05	8.55E-05	7.90E-05
0300 - 0400	17.133	14.357	2.776	0.308	0.308	0.285	4.76E-03	3.99E-03	7.71E-04	8.55E-05	8.55E-05	7.90E-05
0400 - 0500	20.183	16.912	3.271	0.396	0.396	0.366	5.61E-03	4.70E-03	9.09E-04	1.10E-04	1.10E-04	1.02E-04
0500 - 0600	27.809	23.299	4.509	0.615	0.615	0.569	7.72E-03	6.47E-03	1.25E-03	1.71E-04	1.71E-04	1.58E-04
0600 - 0700	41.534	34.797	6.737	1.011	1.011	0.935	1.15E-02	9.67E-03	1.87E-03	2.81E-04	2.81E-04	2.60E-04
0700 - 0800	64.410	53.959	10.451	1.671	1.671	1.545	1.79E-02	1.50E-02	2.90E-03	4.64E-04	4.64E-04	4.29E-04
0800 - 0900	75.085	62.901	12.184	1.978	1.978	1.829	2.09E-02	1.75E-02	3.38E-03	5.50E-04	5.50E-04	5.08E-04
0900 - 1000	61.360	51.404	9.956	1.583	1.583	1.463	1.70E-02	1.43E-02	2.77E-03	4.40E-04	4.40E-04	4.06E-04
1000 - 1100	55.259	46.294	8.965	1.407	1.407	1.301	1.53E-02	1.29E-02	2.49E-03	3.91E-04	3.91E-04	3.61E-04
1100 - 1200	56.784	47.572	9.213	1.451	1.451	1.341	1.58E-02	1.32E-02	2.56E-03	4.03E-04	4.03E-04	3.73E-04
1200 - 1300	62.885	52.682	10.203	1.627	1.627	1.504	1.75E-02	1.46E-02	2.83E-03	4.52E-04	4.52E-04	4.18E-04
1300 - 1400	62.885	52.682	10.203	1.627	1.627	1.504	1.75E-02	1.46E-02	2.83E-03	4.52E-04	4.52E-04	4.18E-04
1400 - 1500	62.885	52.682	10.203	1.627	1.627	1.504	1.75E-02	1.46E-02	2.83E-03	4.52E-04	4.52E-04	4.18E-04
1500 - 1600	56.784	47.572	9.213	1.451	1.451	1.341	1.58E-02	1.32E-02	2.56E-03	4.03E-04	4.03E-04	3.73E-04
1600 - 1700	58.310	48.849	9.460	1.495	1.495	1.382	1.62E-02	1.36E-02	2.63E-03	4.15E-04	4.15E-04	3.84E-04
1700 - 1800	61.360	51.404	9.956	1.583	1.583	1.463	1.70E-02	1.43E-02	2.77E-03	4.40E-04	4.40E-04	4.06E-04
1800 - 1900	59.835	50.127	9.708	1.539	1.539	1.423	1.66E-02	1.39E-02	2.70E-03	4.27E-04	4.27E-04	3.95E-04
1900 - 2000	53.734	45.017	8.718	1.363	1.363	1.260	1.49E-02	1.25E-02	2.42E-03	3.79E-04	3.79E-04	3.50E-04
2000 - 2100	47.634	39.907	7.727	1.187	1.187	1.097	1.32E-02	1.11E-02	2.15E-03	3.30E-04	3.30E-04	3.05E-04
2100 - 2200	47.634	39.907	7.727	1.187	1.187	1.097	1.32E-02	1.11E-02	2.15E-03	3.30E-04	3.30E-04	3.05E-04
2200 - 2300	47.634	39.907	7.727	1.187	1.187	1.097	1.32E-02	1.11E-02	2.15E-03	3.30E-04	3.30E-04	3.05E-04
2300 - 2400	43.059	36.074	6.985	1.055	1.055	0.976	1.20E-02	1.00E-02	1.94E-03	2.93E-04	2.93E-04	2.71E-04
						total	3.22E-01	2.70E-01	5.22E-02	8.04E-03	8.04E-03	7.43E-03

Daily Emission Distribution

Hour	NOx	NO	NO_2	TSP	RSP	FSP
00 - 01	3%	3%	3%	3%	3%	3%
01 - 02	2%	2%	2%	2%	2%	2%
02 - 03	1%	1%	1%	1%	1%	1%
03 - 04	1%	1%	1%	1%	1%	1%
04 - 05	2%	2%	2%	1%	1%	1%
05 - 06	2%	2%	2%	2%	2%	2%
06 - 07	4%	4%	4%	3%	3%	3%
07 - 08	6%	6%	6%	6%	6%	6%
08 - 09	6%	6%	6%	7%	7%	7%
09 - 10	5%	5%	5%	5%	5%	5%
10 - 11	5%	5%	5%	5%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%
12 - 13	5%	5%	5%	6%	6%	6%
13 - 14	5%	5%	5%	6%	6%	6%
14 - 15	5%	5%	5%	6%	6%	6%
15 - 16	5%	5%	5%	5%	5%	5%
16 - 17	5%	5%	5%	5%	5%	5%
17 - 18	5%	5%	5%	5%	5%	5%
18 - 19	5%	5%	5%	5%	5%	5%
19 - 20	5%	5%	5%	5%	5%	5%
20 - 21	4%	4%	4%	4%	4%	4%
21 - 22	4%	4%	4%	4%	4%	4%
22 - 23	4%	4%	4%	4%	4%	4%
23 - 24	4%	4%	4%	4%	4%	4%
Total	100%	100%	100%	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for all Non-Franchised Bus as conservative approach.

HZMB Hong Kong Port PTI - Layby 6

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

	Non-franchised Buses 15-24t (NFB8) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.22	0.40	0.54	0.76	0.94	1.25	1.83	2.28	3.36	4.38	4.92	5.82	6.40	6.71	6.89	7.07	7.16	7.16
NO	0.19	0.34	0.46	0.65	0.80	1.07	1.56	1.94	2.86	3.74	4.19	4.96	5.45	5.72	5.87	6.02	6.10	6.10
NO2	0.03	0.06	0.08	0.11	0.14	0.19	0.27	0.34	0.50	0.65	0.73	0.86	0.95	0.99	1.02	1.05	1.06	1.06
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of NFB8																		Total Start Emission of NFB8 (g)					
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	NOx	NO	NO2	TSP	RSP	FSP
0000 - 0100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0100 - 0200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0200 - 0300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0300 - 0400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0400 - 0500	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0500 - 0600	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0600 - 0700	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0700 - 0800	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0800 - 0900	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0900 - 1000	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1000 - 1100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1100 - 1200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1200 - 1300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1300 - 1400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1400 - 1500	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1500 - 1600	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1600 - 1700	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1700 - 1800	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1800 - 1900	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1900 - 2000	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
2000 - 2100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
2100 - 2200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
2200 - 2300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
2300 - 2400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	NFB8																									
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00

Average Distance from Starting Place to Egress =	70	m
Average Spread Distance outside bus terminus =	630	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)						Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0200 - 0300	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0500 - 0600	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0700 - 0800	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
0900 - 1000	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
1900 - 2000	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.14	0.12	0.02	0.00	0.00	0.00	1.22	1.07	0.15	0.00	0.00	0.00	3.40E-04	2.98E-04	4.21E-05	0.00E+00	0.00E+00	0.00E+00
																								total	8.16E-03	7.15E-03	1.01E-03	0.00E+00	0.00E+00	0.00E+00

Daily Emission Distribution

Hour	NO	NO_2
00 - 01	4%	4%
01 - 02	4%	4%
02 - 03	4%	4%
03 - 04	4%	4%
04 - 05	4%	4%
05 - 06	4%	4%
06 - 07	4%	4%
07 - 08	4%	4%
08 - 09	4%	4%
09 - 10	4%	4%
10 - 11	4%	4%
11 - 12	4%	4%
12 - 13	4%	4%
13 - 14	4%	4%
14 - 15	4%	4%
15 - 16	4%	4%
16 - 17	4%	4%
17 - 18	4%	4%
18 - 19	4%	4%
19 - 20	4%	4%
20 - 21	4%	4%
21 - 22	4%	4%
22 - 23	4%	4%
23 - 24	4%	4%
Total	100%	100%

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	NFB8												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	16	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	4.83	4.05	0.78	0.04	0.04	0.04
0100 - 0200	9	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	2.72	2.28	0.44	0.02	0.02	0.02
0200 - 0300	5	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	1.51	1.26	0.25	0.01	0.01	0.01
0300 - 0400	5	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	1.51	1.26	0.25	0.01	0.01	0.01
0400 - 0500	7	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	2.11	1.77	0.34	0.02	0.02	0.02
0500 - 0600	12	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	3.62	3.04	0.59	0.03	0.03	0.03
0600 - 0700	21	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	6.34	5.31	1.03	0.05	0.05	0.05
0700 - 0800	36	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.87	9.11	1.76	0.08	0.08	0.08
0800 - 0900	43	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	12.99	10.88	2.11	0.10	0.10	0.10
0900 - 1000	34	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.27	8.60	1.67	0.08	0.08	0.08
1000 - 1100	30	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.06	7.59	1.47	0.07	0.07	0.07
1100 - 1200	31	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.36	7.84	1.52	0.07	0.07	0.07
1200 - 1300	35	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.57	8.85	1.72	0.08	0.08	0.08
1300 - 1400	35	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.57	8.85	1.72	0.08	0.08	0.08
1400 - 1500	35	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.57	8.85	1.72	0.08	0.08	0.08
1500 - 1600	31	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.36	7.84	1.52	0.07	0.07	0.07
1600 - 1700	32	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.66	8.09	1.57	0.08	0.08	0.08
1700 - 1800	34	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.27	8.60	1.67	0.08	0.08	0.08
1800 - 1900	33	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.97	8.35	1.62	0.08	0.08	0.08
1900 - 2000	29	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	8.76	7.34	1.42	0.07	0.07	0.07
2000 - 2100	25	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	7.55	6.32	1.23	0.06	0.06	0.06
2100 - 2200	25	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	7.55	6.32	1.23	0.06	0.06	0.06
2200 - 2300	25	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	7.55	6.32	1.23	0.06	0.06	0.06
2300 - 2400	22	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	6.64	5.57	1.08	0.05	0.05	0.05

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	140	m
Average Travelling Speed =	5	km/h

Hour	NFB8												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	18	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	22.015	18.441	3.574	0.749	0.749	0.689
0100 - 0200	11	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	13.454	11.270	2.184	0.458	0.458	0.421
0200 - 0300	7	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	8.561	7.172	1.390	0.291	0.291	0.268
0300 - 0400	7	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	8.561	7.172	1.390	0.291	0.291	0.268
0400 - 0500	9	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	11.008	9.221	1.787	0.374	0.374	0.345
0500 - 0600	14	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	17.123	14.343	2.780	0.583	0.583	0.536
0600 - 0700	23	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	28.131	23.564	4.567	0.957	0.957	0.881
0700 - 0800	38	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	46.477	38.932	7.545	1.581	1.581	1.455
0800 - 0900	45	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	55.038	46.103	8.935	1.872	1.872	1.723
0900 - 1000	36	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	44.030	36.883	7.148	1.498	1.498	1.378
1000 - 1100	32	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	39.138	32.785	6.354	1.331	1.331	1.225
1100 - 1200	33	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	40.361	33.809	6.552	1.373	1.373	1.264
1200 - 1300	37	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	45.254	37.907	7.346	1.539	1.539	1.417
1300 - 1400	37	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	45.254	37.907	7.346	1.539	1.539	1.417
1400 - 1500	37	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	45.254	37.907	7.346	1.539	1.539	1.417
1500 - 1600	33	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	40.361	33.809	6.552	1.373	1.373	1.264
1600 - 1700	34	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	41.584	34.834	6.751	1.415	1.415	1.302
1700 - 1800	36	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	44.030	36.883	7.148	1.498	1.498	1.378
1800 - 1900	35	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	42.807	35.858	6.949	1.456	1.456	1.340
1900 - 2000	31	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	37.915	31.760	6.155	1.290	1.290	1.187
2000 - 2100	27	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	33.023	27.662	5.361	1.123	1.123	1.034
2100 - 2200	27	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	33.023	27.662	5.361	1.123	1.123	1.034
2200 - 2300	27	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	33.023	27.662	5.361	1.123	1.123	1.034
2300 - 2400	24	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	29.354	24.588	4.765	0.999	0.999	0.919

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	33.909	28.409	5.499	0.791	0.791	0.732	9.42E-03	7.89E-03	1.53E-03	2.20E-04	2.20E-04	2.03E-04
0100 - 0200	23.233	19.467	3.766	0.484	0.484	0.447	6.45E-03	5.41E-03	1.05E-03	1.34E-04	1.34E-04	1.24E-04
0200 - 0300	17.133	14.357	2.776	0.308	0.308	0.285	4.76E-03	3.99E-03	7.71E-04	8.55E-05	8.55E-05	7.90E-05
0300 - 0400	17.133	14.357	2.776	0.308	0.308	0.285	4.76E-03	3.99E-03	7.71E-04	8.55E-05	8.55E-05	7.90E-05
0400 - 0500	20.183	16.912	3.271	0.396	0.396	0.366	5.61E-03	4.70E-03	9.09E-04	1.10E-04	1.10E-04	1.02E-04
0500 - 0600	27.809	23.299	4.509	0.615	0.615	0.569	7.72E-03	6.47E-03	1.25E-03	1.71E-04	1.71E-04	1.58E-04
0600 - 0700	41.534	34.797	6.737	1.011	1.011	0.935	1.15E-02	9.67E-03	1.87E-03	2.81E-04	2.81E-04	2.60E-04
0700 - 0800	64.410	53.959	10.451	1.671	1.671	1.545	1.79E-02	1.50E-02	2.90E-03	4.64E-04	4.64E-04	4.29E-04
0800 - 0900	75.085	62.901	12.184	1.978	1.978	1.829	2.09E-02	1.75E-02	3.38E-03	5.50E-04	5.50E-04	5.08E-04
0900 - 1000	61.360	51.404	9.956	1.583	1.583	1.463	1.70E-02	1.43E-02	2.77E-03	4.40E-04	4.40E-04	4.06E-04
1000 - 1100	55.259	46.294	8.965	1.407	1.407	1.301	1.53E-02	1.29E-02	2.49E-03	3.91E-04	3.91E-04	3.61E-04
1100 - 1200	56.784	47.572	9.213	1.451	1.451	1.341	1.58E-02	1.32E-02	2.56E-03	4.03E-04	4.03E-04	3.73E-04
1200 - 1300	62.885	52.682	10.203	1.627	1.627	1.504	1.75E-02	1.46E-02	2.83E-03	4.52E-04	4.52E-04	4.18E-04
1300 - 1400	62.885	52.682	10.203	1.627	1.627	1.504	1.75E-02	1.46E-02	2.83E-03	4.52E-04	4.52E-04	4.18E-04
1400 - 1500	62.885	52.682	10.203	1.627	1.627	1.504	1.75E-02	1.46E-02	2.83E-03	4.52E-04	4.52E-04	4.18E-04
1500 - 1600	56.784	47.572	9.213	1.451	1.451	1.341	1.58E-02	1.32E-02	2.56E-03	4.03E-04	4.03E-04	3.73E-04
1600 - 1700	58.310	48.849	9.460	1.495	1.495	1.382	1.62E-02	1.36E-02	2.63E-03	4.15E-04	4.15E-04	3.84E-04
1700 - 1800	61.360	51.404	9.956	1.583	1.583	1.463	1.70E-02	1.43E-02	2.77E-03	4.40E-04	4.40E-04	4.06E-04
1800 - 1900	59.835	50.127	9.708	1.539	1.539	1.423	1.66E-02	1.39E-02	2.70E-03	4.27E-04	4.27E-04	3.95E-04
1900 - 2000	53.734	45.017	8.718	1.363	1.363	1.260	1.49E-02	1.25E-02	2.42E-03	3.79E-04	3.79E-04	3.50E-04
2000 - 2100	47.634	39.907	7.727	1.187	1.187	1.097	1.32E-02	1.11E-02	2.15E-03	3.30E-04	3.30E-04	3.05E-04
2100 - 2200	47.634	39.907	7.727	1.187	1.187	1.097	1.32E-02	1.11E-02	2.15E-03	3.30E-04	3.30E-04	3.05E-04
2200 - 2300	47.634	39.907	7.727	1.187	1.187	1.097	1.32E-02	1.11E-02	2.15E-03	3.30E-04	3.30E-04	3.05E-04
2300 - 2400	43.059	36.074	6.985	1.055	1.055	0.976	1.20E-02	1.00E-02	1.94E-03	2.93E-04	2.93E-04	2.71E-04
						total	3.22E-01	2.70E-01	5.22E-02	8.04E-03	8.04E-03	7.43E-03

Daily Emission Distribution

Hour	NOx	NO	NO_2	TSP	RSP	FSP
00 - 01	3%	3%	3%	3%	3%	3%
01 - 02	2%	2%	2%	2%	2%	2%
02 - 03	1%	1%	1%	1%	1%	1%
03 - 04	1%	1%	1%	1%	1%	1%
04 - 05	2%	2%	2%	1%	1%	1%
05 - 06	2%	2%	2%	2%	2%	2%
06 - 07	4%	4%	4%	3%	3%	3%
07 - 08	6%	6%	6%	6%	6%	6%
08 - 09	6%	6%	6%	7%	7%	7%
09 - 10	5%	5%	5%	5%	5%	5%
10 - 11	5%	5%	5%	5%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%
12 - 13	5%	5%	5%	6%	6%	6%
13 - 14	5%	5%	5%	6%	6%	6%
14 - 15	5%	5%	5%	6%	6%	6%
15 - 16	5%	5%	5%	5%	5%	5%
16 - 17	5%	5%	5%	5%	5%	5%
17 - 18	5%	5%	5%	5%	5%	5%
18 - 19	5%	5%	5%	5%	5%	5%
19 - 20	5%	5%	5%	5%	5%	5%
20 - 21	4%	4%	4%	4%	4%	4%
21 - 22	4%	4%	4%	4%	4%	4%
22 - 23	4%	4%	4%	4%	4%	4%
23 - 24	4%	4%	4%	4%	4%	4%
Total	100%	100%	100%	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

HZMB Hong Kong Port PTI - Layby 7

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.35	0.63	0.84	1.19	1.47	1.96	2.87	3.57	5.24	6.85	7.69	9.09	10.00	10.49	10.77	11.05	11.19	11.19
NO	0.33	0.59	0.78	1.11	1.37	1.83	2.68	3.33	4.90	6.40	7.19	8.49	9.34	9.80	10.06	10.32	10.45	10.45
NO2	0.02	0.04	0.06	0.08	0.10	0.13	0.19	0.23	0.34	0.45	0.51	0.60	0.66	0.69	0.71	0.73	0.74	0.74
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of FBSD																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBSD (g)					
NOx	NO	NO2	TSP	RSP	FSP
0	0	0	0	0	0
1	1	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
1	1	0	0	0	0
0	0	0	0	0	0
12	11	1	0	0	0
0	0	0	0	0	0
1	1	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
1	1	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
1	1	0	0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD													FBSD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
0200 - 0300	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
0500 - 0600	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	1	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	5.44	5.12	0.32	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
0700 - 0800	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
0900 - 1000	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
1900 - 2000	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00

Average Distance from Starting Place to Egress =	163	m
Average Spread Distance outside bus terminus =	537	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)						Adjusted Start Emission within Loading and Unloading Area (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.15	0.14	0.01	0.00	0.00	0.00	0.50	0.46	0.03	0.00	0.00	0.00	1.38E-04	1.28E-04	9.36E-06	0.00E+00	0.00E+00	0.00E+00
0200 - 0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.15	0.14	0.01	0.00	0.00	0.00	0.50	0.46	0.03	0.00	0.00	0.00	1.38E-04	1.28E-04	9.36E-06	0.00E+00	0.00E+00	0.00E+00
0500 - 0600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	6.01	5.67	0.35	0.01	0.01	0.01	2.00	1.89	0.12	0.00	0.00	0.00	2.33	2.18	0.16	0.00	0.00	0.00	7.69	7.17	0.52	0.00	0.00	0.00	2.14E-03	1.99E-03	1.44E-04	0.00E+00	0.00E+00	0.00E+00
0700 - 0800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.15	0.14	0.01	0.00	0.00	0.00	0.50	0.46	0.03	0.00	0.00	0.00	1.38E-04	1.28E-04	9.36E-06	0.00E+00	0.00E+00	0.00E+00
0900 - 1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.15	0.14	0.01	0.00	0.00	0.00	0.50	0.46	0.03	0.00	0.00	0.00	1.38E-04	1.28E-04	9.36E-06	0.00E+00	0.00E+00	0.00E+00
1900 - 2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00	0.15	0.14	0.01	0.00	0.00	0.00	0.50	0.46	0.03	0.00	0.00	0.00	1.38E-04	1.28E-04	9.36E-06	0.00E+00	0.00E+00	0.00E+00
																								total	2.83E-03	2.63E-03	1.90E-04	0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	FBSD											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

Hour	Frequency	FBSD											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
0100 - 0200	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.316	2.182	0.135	0.074	0.074	0.068
0200 - 0300	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
0300 - 0400	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
0400 - 0500	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.316	2.182	0.135	0.074	0.074	0.068
0500 - 0600	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
0600 - 0700	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	4.632	4.363	0.269	0.148	0.148	0.136
0700 - 0800	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
0800 - 0900	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.316	2.182	0.135	0.074	0.074	0.068
0900 - 1000	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1000 - 1100	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1100 - 1200	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1200 - 1300	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1300 - 1400	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1400 - 1500	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1500 - 1600	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1600 - 1700	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1700 - 1800	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1800 - 1900	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.316	2.182	0.135	0.074	0.074	0.068
1900 - 2000	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
2000 - 2100	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
2100 - 2200	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
2200 - 2300	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
2300 - 2400	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.316	2.182	0.135	0.074	0.074	0.068

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	3.044	2.866	0.178	0.079	0.079	0.073	8.45E-04	7.96E-04	4.95E-05	2.18E-05	2.18E-05	2.02E-05
0200 - 0300	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	3.044	2.866	0.178	0.079	0.079	0.073	8.45E-04	7.96E-04	4.95E-05	2.18E-05	2.18E-05	2.02E-05
0500 - 0600	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	12.981	12.206	0.775	0.157	0.157	0.145	3.61E-03	3.39E-03	2.15E-04	4.37E-05	4.37E-05	4.04E-05
0700 - 0800	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	3.044	2.866	0.178	0.079	0.079	0.073	8.45E-04	7.96E-04	4.95E-05	2.18E-05	2.18E-05	2.02E-05
0900 - 1000	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	3.044	2.866	0.178	0.079	0.079	0.073	8.45E-04	7.96E-04	4.95E-05	2.18E-05	2.18E-05	2.02E-05
1900 - 2000	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	3.044	2.866	0.178	0.079	0.079	0.073	8.45E-04	7.96E-04	4.95E-05	2.18E-05	2.18E-05	2.02E-05
						total	7.83E-03	7.37E-03	4.63E-04	1.53E-04	1.53E-04	1.41E-04

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

[2] Number of cold starts were provided by the traffic consultant.

HZMB Hong Kong Port PTI - Layby 7

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.77	1.39	1.85	2.62	3.23	4.31	6.32	7.86	11.55	15.09	16.94	20.02	22.03	23.10	23.72	24.34	24.64	24.64
NO	0.72	1.30	1.74	2.46	3.04	4.06	5.94	7.39	10.87	14.21	15.95	18.85	20.73	21.75	22.33	22.91	23.20	23.20
NO2	0.05	0.08	0.11	0.15	0.19	0.25	0.37	0.46	0.68	0.89	1.00	1.18	1.29	1.36	1.39	1.43	1.45	1.45
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of FBDD																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0700 - 0800	0	2	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
0800 - 0900	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBDD (g)					
NOx	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
8	7	0	0	0	0
4	4	0	0	0	0
4	4	0	0	0	0
0	0	0	0	0	0
7	7	0	0	0	0
24	23	1	0	0	0
24	23	1	0	0	0
34	32	2	0	0	0
6	6	0	0	0	0
6	6	0	0	0	0
12	12	1	0	0	0
11	10	1	0	0	0
12	12	1	0	0	0
12	12	1	0	0	0
12	12	1	0	0	0
12	12	1	0	0	0
12	12	1	0	0	0
12	12	1	0	0	0
12	12	1	0	0	0
11	10	1	0	0	0
12	12	1	0	0	0
6	6	0	0	0	0
5	4	0	0	0	0
9	9	1	0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBDD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0100 - 0200	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0200 - 0300	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0300 - 0400	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0400 - 0500	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0500 - 0600	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
0600 - 0700	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
0700 - 0800	2	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	42.527	40.409	2.118	0.012	0.012	0.012
0800 - 0900	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0900 - 1000	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
1000 - 1100	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1100 - 1200	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1200 - 1300	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1300 - 1400	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1400 - 1500	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1500 - 1600	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1600 - 1700	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1700 - 1800	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1800 - 1900	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1900 - 2000	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
2000 - 2100	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
2100 - 2200	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
2200 - 2300	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
2300 - 2400	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
0100 - 0200	1	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.70	0.67	0.04	0.01	0.01	0.01
0200 - 0300	1	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.70	0.67	0.04	0.01	0.01	0.01
0300 - 0400	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
0500 - 0600	1	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.70	0.67	0.04	0.01	0.01	0.01
0600 - 0700	1	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.70	0.67	0.04	0.01	0.01	0.01
0700 - 0800	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
0800 - 0900	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
0900 - 1000	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1000 - 1100	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1100 - 1200	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
1200 - 1300	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1300 - 1400	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1400 - 1500	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1500 - 1600	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1600 - 1700	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1700 - 1800	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1800 - 1900	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1900 - 2000	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
2000 - 2100	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
2100 - 2200	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
2200 - 2300	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
2300 - 2400	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.41	1.34	0.07	0.01	0.01	0.01

Average Distance from Starting Place to Egress =	163	m
Average Spread Distance outside bus terminus =	537	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2.11	2.00	0.11	0.02	0.02	0.02	0.70	0.67	0.04	0.01	0.01	0.01
0100 - 0200	0.70	0.67	0.04	0.01	0.01	0.01	0.23	0.22	0.01	0.00	0.00	0.00
0200 - 0300	0.70	0.67	0.04	0.01	0.01	0.01	0.23	0.22	0.01	0.00	0.00	0.00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	2.81	2.67	0.14	0.02	0.02	0.02	0.94	0.89	0.05	0.01	0.01	0.01
0500 - 0600	21.97	20.87	1.09	0.01	0.01	0.01	7.32	6.96	0.36	0.00	0.00	0.00
0600 - 0700	21.97	20.87	1.09	0.01	0.01	0.01	7.32	6.96	0.36	0.00	0.00	0.00
0700 - 0800	44.64	42.41	2.22	0.03	0.03	0.03	14.88	14.14	0.74	0.01	0.01	0.01
0800 - 0900	2.81	2.67	0.14	0.02	0.02	0.02	0.94	0.89	0.05	0.01	0.01	0.01
0900 - 1000	2.81	2.67	0.14	0.02	0.02	0.02	0.94	0.89	0.05	0.01	0.01	0.01
1000 - 1100	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1100 - 1200	23.37	22.21	1.16	0.02	0.02	0.02	7.79	7.40	0.39	0.01	0.01	0.01
1200 - 1300	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1300 - 1400	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1400 - 1500	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1500 - 1600	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1600 - 1700	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1700 - 1800	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1800 - 1900	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1900 - 2000	23.37	22.21	1.16	0.02	0.02	0.02	7.79	7.40	0.39	0.01	0.01	0.01
2000 - 2100	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
2100 - 2200	2.81	2.67	0.14	0.02	0.02	0.02	0.94	0.89	0.05	0.01	0.01	0.01
2200 - 2300	2.11	2.00	0.11	0.02	0.02	0.02	0.70	0.67	0.04	0.01	0.01	0.01
2300 - 2400	22.67	21.54	1.13	0.02	0.02	0.02	7.56	7.18	0.38	0.01	0.01	0.01

Hour	Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	1.59	1.50	0.10	0.00	0.00	0.00	5.25	4.94	0.31	0.00	0.00	0.00	1.46E-03	1.37E-03	8.70E-05	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	0.95	0.89	0.06	0.00	0.00	0.00	3.13	2.94	0.19	0.00	0.00	0.00	8.69E-04	8.18E-04	5.15E-05	0.00E+00	0.00E+00	0.00E+00
0200 - 0300	0.95	0.89	0.06	0.00	0.00	0.00	3.13	2.94	0.19	0.00	0.00	0.00	8.69E-04	8.18E-04	5.15E-05	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	1.50	1.41	0.09	0.00	0.00	0.00	4.95	4.66	0.30	0.00	0.00	0.00	1.38E-03	1.29E-03	8.26E-05	0.00E+00	0.00E+00	0.00E+00
0500 - 0600	4.00	3.75	0.25	0.00	0.00	0.00	13.17	12.35	0.82	0.00	0.00	0.00	3.66E-03	3.43E-03	2.29E-04	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	4.00	3.75	0.25	0.00	0.00	0.00	13.17	12.35	0.82	0.00	0.00	0.00	3.66E-03	3.43E-03	2.29E-04	0.00E+00	0.00E+00	0.00E+00
0700 - 0800	4.46	4.17	0.29	0.00	0.00	0.00	14.70	13.73	0.97	0.00	0.00	0.00	4.08E-03	3.82E-03	2.68E-04	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	1.18	1.11	0.07	0.00	0.00	0.00	3.89	3.65	0.23	0.00	0.00	0.00	1.08E-03	1.02E-03	6.52E-05	0.00E+00	0.00E+00	0.00E+00
0900 - 1000	1.18	1.11	0.07	0.00	0.00	0.00	3.89	3.65	0.23	0.00	0.00	0.00	1.08E-03	1.02E-03	6.52E-05	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	0.73	0.67	0.06	0.00	0.00	0.00	2.41	2.22	0.20	0.00	0.00	0.00	6.70E-04	6.16E-04	5.42E-05	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1900 - 2000	0.73	0.67	0.06	0.00	0.00	0.00	2.41	2.22	0.20	0.00	0.00	0.00	6.70E-04	6.16E-04	5.42E-05	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	1.18	1.11	0.07	0.00	0.00	0.00	3.89	3.65	0.23	0.00	0.00	0.00	1.08E-03	1.02E-03	6.52E-05	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	0.91	0.86	0.06	0.00	0.00	0.00	3.01	2.82	0.18	0.00	0.00	0.00	8.35E-04	7.85E-04	5.04E-05	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	0.36	0.32	0.04	0.00	0.00	0.00	1.17	1.05	0.12	0.00	0.00	0.00	3.26E-04	2.93E-04	3.36E-05	0.00E+00	0.00E+00	0.00E+00
												total	3.00E-02	2.79E-02	2.01E-03	0.00E+00	0.00E+00	0.00E+00

Daily Emission Distribution

Hour	NO	NO_2
00 - 01	4%	4%
01 - 02	3%	3%
02 - 03	3%	2%
03 - 04	0%	0%
04 - 05	5%	4%
05 - 06	11%	10%
06 - 07	18%	17%
07 - 08	12%	12%
08 - 09	4%	3%
09 - 10	3%	3%
10 - 11	3%	3%
11 - 12	2%	2%
12 - 13	3%	3%
13 - 14	3%	3%
14 - 15	3%	3%
15 - 16	3%	3%
16 - 17	3%	3%
17 - 18	3%	3%
18 - 19	3%	4%
19 - 20	2%	2%
20 - 21	3%	3%
21 - 22	3%	3%
22 - 23	3%	2%
23 - 24	1%	2%
Total	100%	100%

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	FBDD											
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.46	2.34	0.12	0.02	0.02	0.02
0100 - 0200	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
0200 - 0300	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.05	1.00	0.05	0.01	0.01	0.01
0300 - 0400	1	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.35	0.33	0.02	0.00	0.00	0.00
0400 - 0500	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.05	1.00	0.05	0.01	0.01	0.01
0500 - 0600	5	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	3.51	3.34	0.18	0.03	0.03	0.03
0600 - 0700	10	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	6.68	6.35	0.33	0.06	0.06	0.06
0700 - 0800	10	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	6.68	6.35	0.33	0.06	0.06	0.06
0800 - 0900	10	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	6.68	6.35	0.33	0.06	0.06	0.06
0900 - 1000	11	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	7.73	7.35	0.39	0.07	0.07	0.07
1000 - 1100	10	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	7.03	6.68	0.35	0.06	0.06	0.06
1100 - 1200	13	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.14	8.68	0.46	0.08	0.08	0.08
1200 - 1300	14	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.49	9.02	0.47	0.08	0.08	0.08
1300 - 1400	14	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.84	9.35	0.49	0.08	0.08	0.08
1400 - 1500	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.44	8.02	0.42	0.07	0.07	0.07
1500 - 1600	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.08	7.68	0.40	0.07	0.07	0.07
1600 - 1700	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.08	7.68	0.40	0.07	0.07	0.07
1700 - 1800	13	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.79	8.35	0.44	0.07	0.07	0.07
1800 - 1900	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.44	8.02	0.42	0.07	0.07	0.07
1900 - 2000	13	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.79	8.35	0.44	0.07	0.07	0.07
2000 - 2100	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.44	8.02	0.42	0.07	0.07	0.07
2100 - 2200	13	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.14	8.68	0.46	0.08	0.08	0.08
2200 - 2300	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.44	8.02	0.42	0.07	0.07	0.07
2300 - 2400	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.08	7.68	0.40	0.07	0.07	0.07

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

Hour	FBDD												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	7	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	30.981	29.438	1.543	0.947	0.947	0.871
0100 - 0200	4	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	19.065	18.116	0.949	0.582	0.582	0.536
0200 - 0300	3	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	11.916	11.322	0.593	0.364	0.364	0.335
0300 - 0400	1	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	2.383	2.264	0.119	0.073	0.073	0.067
0400 - 0500	6	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	26.215	24.909	1.305	0.801	0.801	0.737
0500 - 0600	7	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	33.364	31.703	1.661	1.019	1.019	0.938
0600 - 0700	12	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	54.813	52.083	2.729	1.675	1.675	1.540
0700 - 0800	15	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	69.112	65.670	3.441	2.112	2.112	1.942
0800 - 0900	14	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	64.345	61.141	3.204	1.966	1.966	1.808
0900 - 1000	15	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	71.495	67.935	3.560	2.184	2.184	2.009
1000 - 1100	15	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	71.495	67.935	3.560	2.184	2.184	2.009
1100 - 1200	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	81.027	76.993	4.035	2.476	2.476	2.277
1200 - 1300	19	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	88.177	83.786	4.391	2.694	2.694	2.478
1300 - 1400	19	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	90.560	86.051	4.509	2.767	2.767	2.545
1400 - 1500	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	81.027	76.993	4.035	2.476	2.476	2.277
1500 - 1600	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	78.644	74.728	3.916	2.403	2.403	2.210
1600 - 1700	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	78.644	74.728	3.916	2.403	2.403	2.210
1700 - 1800	18	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	83.411	79.257	4.153	2.548	2.548	2.344
1800 - 1900	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	81.027	76.993	4.035	2.476	2.476	2.277
1900 - 2000	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	78.644	74.728	3.916	2.403	2.403	2.210
2000 - 2100	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	81.027	76.993	4.035	2.476	2.476	2.277
2100 - 2200	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	81.027	76.993	4.035	2.476	2.476	2.277
2200 - 2300	15	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	71.495	67.935	3.560	2.184	2.184	2.009
2300 - 2400	15	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	69.112	65.670	3.441	2.112	2.112	1.942

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	37.144	35.279	1.865	0.985	0.985	0.909	1.03E-02	9.80E-03	5.18E-04	2.74E-04	2.74E-04	2.53E-04
0100 - 0200	22.827	21.681	1.146	0.606	0.606	0.559	6.34E-03	6.02E-03	3.18E-04	1.68E-04	1.68E-04	1.55E-04
0200 - 0300	14.623	13.886	0.737	0.379	0.379	0.350	4.06E-03	3.86E-03	2.05E-04	1.05E-04	1.05E-04	9.71E-05
0300 - 0400	2.735	2.598	0.136	0.076	0.076	0.070	7.60E-04	7.22E-04	3.78E-05	2.10E-05	2.10E-05	1.94E-05
0400 - 0500	31.584	29.996	1.588	0.833	0.833	0.769	8.77E-03	8.33E-03	4.41E-04	2.32E-04	2.32E-04	2.14E-04
0500 - 0600	62.843	59.663	3.180	1.061	1.061	0.979	1.75E-02	1.66E-02	8.83E-04	2.95E-04	2.95E-04	2.72E-04
0600 - 0700	87.455	83.049	4.406	1.743	1.743	1.609	2.43E-02	2.31E-02	1.22E-03	4.84E-04	4.84E-04	4.47E-04
0700 - 0800	124.887	118.598	6.289	2.197	2.197	2.028	3.47E-02	3.29E-02	1.75E-03	6.10E-04	6.10E-04	5.63E-04
0800 - 0900	75.016	71.268	3.748	2.046	2.046	1.888	2.08E-02	1.98E-02	1.04E-03	5.68E-04	5.68E-04	5.25E-04
0900 - 1000	83.220	79.064	4.156	2.273	2.273	2.098	2.31E-02	2.20E-02	1.15E-03	6.31E-04	6.31E-04	5.83E-04
1000 - 1100	103.600	98.416	5.184	2.273	2.273	2.098	2.88E-02	2.73E-02	1.44E-03	6.31E-04	6.31E-04	5.83E-04
1100 - 1200	114.271	108.558	5.713	2.576	2.576	2.378	3.17E-02	3.02E-02	1.59E-03	7.16E-04	7.16E-04	6.61E-04
1200 - 1300	122.743	116.605	6.137	2.804	2.804	2.588	3.41E-02	3.24E-02	1.70E-03	7.79E-04	7.79E-04	7.19E-04
1300 - 1400	125.477	119.204	6.274	2.879	2.879	2.658	3.49E-02	3.31E-02	1.74E-03	8.00E-04	8.00E-04	7.38E-04
1400 - 1500	114.539	108.810	5.729	2.576	2.576	2.378	3.18E-02	3.02E-02	1.59E-03	7.16E-04	7.16E-04	6.61E-04
1500 - 1600	111.804	106.212	5.593	2.500	2.500	2.308	3.11E-02	2.95E-02	1.55E-03	6.95E-04	6.95E-04	6.41E-04
1600 - 1700	111.804	106.212	5.593	2.500	2.500	2.308	3.11E-02	2.95E-02	1.55E-03	6.95E-04	6.95E-04	6.41E-04
1700 - 1800	117.274	111.408	5.865	2.652	2.652	2.448	3.26E-02	3.09E-02	1.63E-03	7.37E-04	7.37E-04	6.80E-04
1800 - 1900	114.539	108.810	5.729	2.576	2.576	2.378	3.18E-02	3.02E-02	1.59E-03	7.16E-04	7.16E-04	6.61E-04
1900 - 2000	111.536	105.960	5.576	2.500	2.500	2.308	3.10E-02	2.94E-02	1.55E-03	6.95E-04	6.95E-04	6.41E-04
2000 - 2100	114.539	108.810	5.729	2.576	2.576	2.378	3.18E-02	3.02E-02	1.59E-03	7.16E-04	7.16E-04	6.61E-04
2100 - 2200	94.158	89.457	4.701	2.576	2.576	2.378	2.62E-02	2.48E-02	1.31E-03	7.16E-04	7.16E-04	6.61E-04
2200 - 2300	82.952	78.812	4.140	2.273	2.273	2.098	2.30E-02	2.19E-02	1.15E-03	6.31E-04	6.31E-04	5.83E-04
2300 - 2400	100.222	95.212	5.009	2.197	2.197	2.028	2.78E-02	2.64E-02	1.39E-03	6.10E-04	6.10E-04	5.63E-04
						total	5.78E-01	5.49E-01	2.90E-02	1.32E-02	1.32E-02	1.22E-02

Daily Emission Distribution

Hour	NOx	NO	NO_2	TSP	RSP	FSP
00 - 01	2%	2%	2%	2%	2%	2%
01 - 02	1%	1%	1%	1%	1%	1%
02 - 03	1%	1%	1%	1%	1%	1%
03 - 04	0%	0%	0%	0%	0%	0%
04 - 05	2%	2%	2%	2%	2%	2%
05 - 06	3%	3%	3%	2%	2%	2%
06 - 07	5%	5%	5%	4%	4%	4%
07 - 08	6%	6%	6%	5%	5%	5%
08 - 09	4%	4%	4%	4%	4%	4%
09 - 10	4%	4%	4%	5%	5%	5%
10 - 11	5%	5%	5%	5%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%
12 - 13	6%	6%	6%	6%	6%	6%
13 - 14	6%	6%	6%	6%	6%	6%
14 - 15	5%	5%	5%	5%	5%	5%
15 - 16	5%	5%	5%	5%	5%	5%
16 - 17	5%	5%	5%	5%	5%	5%
17 - 18	6%	6%	6%	6%	6%	6%
18 - 19	6%	6%	6%	6%	6%	6%
19 - 20	5%	5%	5%	5%	5%	5%
20 - 21	5%	5%	5%	5%	5%	5%
21 - 22	4%	4%	4%	5%	5%	5%
22 - 23	4%	4%	4%	5%	5%	5%
23 - 24	5%	5%	5%	5%	5%	5%
Total	100%	100%	100%	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

[2] Number of cold starts were provided by the traffic consultant.

HZMB Hong Kong Port PTI - Layby 8

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Single-Deck Franchised Bus (FBSD) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.35	0.63	0.84	1.19	1.47	1.96	2.87	3.57	5.24	6.85	7.69	9.09	10.00	10.49	10.77	11.05	11.19	11.19
NO	0.33	0.59	0.78	1.11	1.37	1.83	2.68	3.33	4.90	6.40	7.19	8.49	9.34	9.80	10.06	10.32	10.45	10.45
NO2	0.02	0.04	0.06	0.08	0.10	0.13	0.19	0.23	0.34	0.45	0.51	0.60	0.66	0.69	0.71	0.73	0.74	0.74
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of FBSD																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBSD (g)					
NOx	NO	NO2	TSP	RSP	FSP
0	0	0	0	0	0
1	1	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
1	1	0	0	0	0
0	0	0	0	0	0
12	11	1	0	0	0
0	0	0	0	0	0
1	1	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
1	1	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
1	1	0	0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBSD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	1	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	5.44	5.12	0.32	0.00	0.00	0.00
0700 - 0800	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0	1.81E+00	1.71E+00	1.05E-01	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00

Hour	FBSD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
0200 - 0300	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
0500 - 0600	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
0700 - 0800	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
0900 - 1000	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00
1900 - 2000	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	1	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.58	0.54	0.03	0.00	0.00	0.00

Average Distance from Starting Place to Egress =	163	m
Average Spread Distance outside bus terminus =	537	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00
0200 - 0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00
0500 - 0600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	6.01	5.67	0.35	0.01	0.01	0.01	2.00	1.89	0.12	0.00	0.00	0.00
0700 - 0800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00
0900 - 1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00
1900 - 2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0.58	0.54	0.03	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.00

Hour	Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	0.15	0.14	0.01	0.00	0.00	0.00	0.50	0.46	0.03	0.00	0.00	0.00	1.38E-04	1.28E-04	9.36E-06	0.00E+00	0.00E+00	0.00E+00
0200 - 0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	0.15	0.14	0.01	0.00	0.00	0.00	0.50	0.46	0.03	0.00	0.00	0.00	1.38E-04	1.28E-04	9.36E-06	0.00E+00	0.00E+00	0.00E+00
0500 - 0600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	2.33	2.18	0.16	0.00	0.00	0.00	7.69	7.17	0.52	0.00	0.00	0.00	2.14E-03	1.99E-03	1.44E-04	0.00E+00	0.00E+00	0.00E+00
0700 - 0800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	0.15	0.14	0.01	0.00	0.00	0.00	0.50	0.46	0.03	0.00	0.00	0.00	1.38E-04	1.28E-04	9.36E-06	0.00E+00	0.00E+00	0.00E+00
0900 - 1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	0.15	0.14	0.01	0.00	0.00	0.00	0.50	0.46	0.03	0.00	0.00	0.00	1.38E-04	1.28E-04	9.36E-06	0.00E+00	0.00E+00	0.00E+00
1900 - 2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	0.15	0.14	0.01	0.00	0.00	0.00	0.50	0.46	0.03	0.00	0.00	0.00	1.38E-04	1.28E-04	9.36E-06	0.00E+00	0.00E+00	0.00E+00
												total	2.83E-03	2.63E-03	1.90E-04	0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	FBSD											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0	1.92E-01	1.81E-01	1.12E-02	1.59E-03	1.59E-03	1.59E-03	0.00	0.00	0.00	0.00	0.00	0.00

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

Hour	Frequency	FBSD											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
0100 - 0200	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.316	2.182	0.135	0.074	0.074	0.068
0200 - 0300	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
0300 - 0400	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
0400 - 0500	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.316	2.182	0.135	0.074	0.074	0.068
0500 - 0600	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
0600 - 0700	2	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	4.632	4.363	0.269	0.148	0.148	0.136
0700 - 0800	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
0800 - 0900	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.316	2.182	0.135	0.074	0.074	0.068
0900 - 1000	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1000 - 1100	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1100 - 1200	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1200 - 1300	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1300 - 1400	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1400 - 1500	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1500 - 1600	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1600 - 1700	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1700 - 1800	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
1800 - 1900	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.316	2.182	0.135	0.074	0.074	0.068
1900 - 2000	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
2000 - 2100	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
2100 - 2200	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
2200 - 2300	0	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	0.000	0.000	0.000	0.000	0.000	0.000
2300 - 2400	1	7.1048	6.6922	0.4126	0.2265	0.2265	0.2084	2.316	2.182	0.135	0.074	0.074	0.068

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	3.044	2.866	0.178	0.079	0.079	0.073	8.45E-04	7.96E-04	4.95E-05	2.18E-05	2.18E-05	2.02E-05
0200 - 0300	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	3.044	2.866	0.178	0.079	0.079	0.073	8.45E-04	7.96E-04	4.95E-05	2.18E-05	2.18E-05	2.02E-05
0500 - 0600	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	12.981	12.206	0.775	0.157	0.157	0.145	3.61E-03	3.39E-03	2.15E-04	4.37E-05	4.37E-05	4.04E-05
0700 - 0800	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	3.044	2.866	0.178	0.079	0.079	0.073	8.45E-04	7.96E-04	4.95E-05	2.18E-05	2.18E-05	2.02E-05
0900 - 1000	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	3.044	2.866	0.178	0.079	0.079	0.073	8.45E-04	7.96E-04	4.95E-05	2.18E-05	2.18E-05	2.02E-05
1900 - 2000	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	0.000	0.000	0.000	0.000	0.000	0.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	3.044	2.866	0.178	0.079	0.079	0.073	8.45E-04	7.96E-04	4.95E-05	2.18E-05	2.18E-05	2.02E-05
						total	7.83E-03	7.37E-03	4.63E-04	1.53E-04	1.53E-04	1.41E-04

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

[2] Number of cold starts were provided by the traffic consultant.

HZMB Hong Kong Port PTI - Layby 8

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

Soaking Time (min) / Pollutant	Double-Deck Franchised Bus (FBDD) Start Emission Factor (g/trip)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.77	1.39	1.85	2.62	3.23	4.31	6.32	7.86	11.55	15.09	16.94	20.02	22.03	23.10	23.72	24.34	24.64	24.64
NO	0.72	1.30	1.74	2.46	3.04	4.06	5.94	7.39	10.87	14.21	15.95	18.85	20.73	21.75	22.33	22.91	23.20	23.20
NO2	0.05	0.08	0.11	0.15	0.19	0.25	0.37	0.46	0.68	0.89	1.00	1.18	1.29	1.36	1.39	1.43	1.45	1.45
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Soaking Time (min) / Hour	No. of Trips of FBDD																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0700 - 0800	0	2	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
0800 - 0900	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of FBDD (g)					
NOx	**NO**	**NO2**	**TSP**	**RSP**	**FSP**
8	7	0	0	0	0
4	4	0	0	0	0
4	4	0	0	0	0
0	0	0	0	0	0
7	7	0	0	0	0
24	23	1	0	0	0
24	23	1	0	0	0
34	32	2	0	0	0
6	6	0	0	0	0
6	6	0	0	0	0
12	12	1	0	0	0
11	10	1	0	0	0
12	12	1	0	0	0
12	12	1	0	0	0
12	12	1	0	0	0
12	12	1	0	0	0
12	12	1	0	0	0
12	12	1	0	0	0
12	12	1	0	0	0
11	10	1	0	0	0
12	12	1	0	0	0
6	6	0	0	0	0
5	4	0	0	0	0
9	9	1	0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	FBDD												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0100 - 0200	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0200 - 0300	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0300 - 0400	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0400 - 0500	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0500 - 0600	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
0600 - 0700	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
0700 - 0800	2	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	42.527	40.409	2.118	0.012	0.012	0.012
0800 - 0900	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
0900 - 1000	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
1000 - 1100	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1100 - 1200	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1200 - 1300	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1300 - 1400	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1400 - 1500	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1500 - 1600	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1600 - 1700	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1700 - 1800	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1800 - 1900	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
1900 - 2000	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
2000 - 2100	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006
2100 - 2200	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
2200 - 2300	0	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	0.000	0.000	0.000	0.000	0.000	0.000
2300 - 2400	1	7.09E+00	6.73E+00	3.53E-01	1.97E-03	1.97E-03	1.97E-03	21.263	20.205	1.059	0.006	0.006	0.006

Hour	FBDD												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
0100 - 0200	1	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.70	0.67	0.04	0.01	0.01	0.01
0200 - 0300	1	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.70	0.67	0.04	0.01	0.01	0.01
0300 - 0400	0	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
0500 - 0600	1	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.70	0.67	0.04	0.01	0.01	0.01
0600 - 0700	1	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.70	0.67	0.04	0.01	0.01	0.01
0700 - 0800	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
0800 - 0900	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
0900 - 1000	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1000 - 1100	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1100 - 1200	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
1200 - 1300	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1300 - 1400	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1400 - 1500	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1500 - 1600	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1600 - 1700	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1700 - 1800	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1800 - 1900	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
1900 - 2000	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
2000 - 2100	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
2100 - 2200	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.81	2.67	0.14	0.02	0.02	0.02
2200 - 2300	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
2300 - 2400	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.41	1.34	0.07	0.01	0.01	0.01

Average Distance from Starting Place to Egress =	163	m
Average Spread Distance outside bus terminus =	537	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2.11	2.00	0.11	0.02	0.02	0.02	0.70	0.67	0.04	0.01	0.01	0.01
0100 - 0200	0.70	0.67	0.04	0.01	0.01	0.01	0.23	0.22	0.01	0.00	0.00	0.00
0200 - 0300	0.70	0.67	0.04	0.01	0.01	0.01	0.23	0.22	0.01	0.00	0.00	0.00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	2.81	2.67	0.14	0.02	0.02	0.02	0.94	0.89	0.05	0.01	0.01	0.01
0500 - 0600	21.97	20.87	1.09	0.01	0.01	0.01	7.32	6.96	0.36	0.00	0.00	0.00
0600 - 0700	21.97	20.87	1.09	0.01	0.01	0.01	7.32	6.96	0.36	0.00	0.00	0.00
0700 - 0800	44.64	42.41	2.22	0.03	0.03	0.03	14.88	14.14	0.74	0.01	0.01	0.01
0800 - 0900	2.81	2.67	0.14	0.02	0.02	0.02	0.94	0.89	0.05	0.01	0.01	0.01
0900 - 1000	2.81	2.67	0.14	0.02	0.02	0.02	0.94	0.89	0.05	0.01	0.01	0.01
1000 - 1100	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1100 - 1200	23.37	22.21	1.16	0.02	0.02	0.02	7.79	7.40	0.39	0.01	0.01	0.01
1200 - 1300	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1300 - 1400	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1400 - 1500	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1500 - 1600	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1600 - 1700	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1700 - 1800	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1800 - 1900	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
1900 - 2000	23.37	22.21	1.16	0.02	0.02	0.02	7.79	7.40	0.39	0.01	0.01	0.01
2000 - 2100	24.08	22.88	1.20	0.03	0.03	0.03	8.03	7.63	0.40	0.01	0.01	0.01
2100 - 2200	2.81	2.67	0.14	0.02	0.02	0.02	0.94	0.89	0.05	0.01	0.01	0.01
2200 - 2300	2.11	2.00	0.11	0.02	0.02	0.02	0.70	0.67	0.04	0.01	0.01	0.01
2300 - 2400	22.67	21.54	1.13	0.02	0.02	0.02	7.56	7.18	0.38	0.01	0.01	0.01

Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
1.59	1.50	0.10	0.00	0.00	0.00	5.25	4.94	0.31	0.00	0.00	0.00	1.46E-03	1.37E-03	8.70E-05	0.00E+00	0.00E+00	0.00E+00
0.95	0.89	0.06	0.00	0.00	0.00	3.13	2.94	0.19	0.00	0.00	0.00	8.69E-04	8.18E-04	5.15E-05	0.00E+00	0.00E+00	0.00E+00
0.95	0.89	0.06	0.00	0.00	0.00	3.13	2.94	0.19	0.00	0.00	0.00	8.69E-04	8.18E-04	5.15E-05	0.00E+00	0.00E+00	0.00E+00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.50	1.41	0.09	0.00	0.00	0.00	4.95	4.66	0.30	0.00	0.00	0.00	1.38E-03	1.29E-03	8.26E-05	0.00E+00	0.00E+00	0.00E+00
4.00	3.75	0.25	0.00	0.00	0.00	13.17	12.35	0.82	0.00	0.00	0.00	3.66E-03	3.43E-03	2.29E-04	0.00E+00	0.00E+00	0.00E+00
4.00	3.75	0.25	0.00	0.00	0.00	13.17	12.35	0.82	0.00	0.00	0.00	3.66E-03	3.43E-03	2.29E-04	0.00E+00	0.00E+00	0.00E+00
4.46	4.17	0.29	0.00	0.00	0.00	14.70	13.73	0.97	0.00	0.00	0.00	4.08E-03	3.82E-03	2.68E-04	0.00E+00	0.00E+00	0.00E+00
1.18	1.11	0.07	0.00	0.00	0.00	3.89	3.65	0.23	0.00	0.00	0.00	1.08E-03	1.02E-03	6.52E-05	0.00E+00	0.00E+00	0.00E+00
1.18	1.11	0.07	0.00	0.00	0.00	3.89	3.65	0.23	0.00	0.00	0.00	1.08E-03	1.02E-03	6.52E-05	0.00E+00	0.00E+00	0.00E+00
1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
0.73	0.67	0.06	0.00	0.00	0.00	2.41	2.22	0.20	0.00	0.00	0.00	6.70E-04	6.16E-04	5.42E-05	0.00E+00	0.00E+00	0.00E+00
1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
0.73	0.67	0.06	0.00	0.00	0.00	2.41	2.22	0.20	0.00	0.00	0.00	6.70E-04	6.16E-04	5.42E-05	0.00E+00	0.00E+00	0.00E+00
1.00	0.93	0.08	0.00	0.00	0.00	3.30	3.05	0.25	0.00	0.00	0.00	9.16E-04	8.47E-04	6.91E-05	0.00E+00	0.00E+00	0.00E+00
1.18	1.11	0.07	0.00	0.00	0.00	3.89	3.65	0.23	0.00	0.00	0.00	1.08E-03	1.02E-03	6.52E-05	0.00E+00	0.00E+00	0.00E+00
0.91	0.86	0.06	0.00	0.00	0.00	3.01	2.82	0.18	0.00	0.00	0.00	8.35E-04	7.85E-04	5.04E-05	0.00E+00	0.00E+00	0.00E+00
0.36	0.32	0.04	0.00	0.00	0.00	1.17	1.05	0.12	0.00	0.00	0.00	3.26E-04	2.93E-04	3.36E-05	0.00E+00	0.00E+00	0.00E+00
											total	3.00E-02	2.79E-02	2.01E-03	0.00E+00	0.00E+00	0.00E+00

Daily Emission Distribution

Hour	NO	NO_2
00 - 01	4%	4%
01 - 02	3%	3%
02 - 03	3%	2%
03 - 04	0%	0%
04 - 05	5%	4%
05 - 06	11%	10%
06 - 07	18%	17%
07 - 08	12%	12%
08 - 09	4%	3%
09 - 10	3%	3%
10 - 11	3%	3%
11 - 12	2%	2%
12 - 13	3%	3%
13 - 14	3%	3%
14 - 15	3%	3%
15 - 16	3%	3%
16 - 17	3%	3%
17 - 18	3%	3%
18 - 19	3%	4%
19 - 20	2%	2%
20 - 21	3%	3%
21 - 22	3%	3%
22 - 23	3%	2%
23 - 24	1%	2%
Total	100%	100%

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	FBDD											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	4	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.46	2.34	0.12	0.02	0.02	0.02
0100 - 0200	3	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	2.11	2.00	0.11	0.02	0.02	0.02
0200 - 0300	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.05	1.00	0.05	0.01	0.01	0.01
0300 - 0400	1	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	0.35	0.33	0.02	0.00	0.00	0.00
0400 - 0500	2	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	1.05	1.00	0.05	0.01	0.01	0.01
0500 - 0600	5	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	3.51	3.34	0.18	0.03	0.03	0.03
0600 - 0700	10	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	6.68	6.35	0.33	0.06	0.06	0.06
0700 - 0800	10	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	6.68	6.35	0.33	0.06	0.06	0.06
0800 - 0900	10	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	6.68	6.35	0.33	0.06	0.06	0.06
0900 - 1000	11	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	7.73	7.35	0.39	0.07	0.07	0.07
1000 - 1100	10	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	7.03	6.68	0.35	0.06	0.06	0.06
1100 - 1200	13	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.14	8.68	0.46	0.08	0.08	0.08
1200 - 1300	14	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.49	9.02	0.47	0.08	0.08	0.08
1300 - 1400	14	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.84	9.35	0.49	0.08	0.08	0.08
1400 - 1500	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.44	8.02	0.42	0.07	0.07	0.07
1500 - 1600	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.08	7.68	0.40	0.07	0.07	0.07
1600 - 1700	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.08	7.68	0.40	0.07	0.07	0.07
1700 - 1800	13	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.79	8.35	0.44	0.07	0.07	0.07
1800 - 1900	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.44	8.02	0.42	0.07	0.07	0.07
1900 - 2000	13	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.79	8.35	0.44	0.07	0.07	0.07
2000 - 2100	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.44	8.02	0.42	0.07	0.07	0.07
2100 - 2200	13	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	9.14	8.68	0.46	0.08	0.08	0.08
2200 - 2300	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.44	8.02	0.42	0.07	0.07	0.07
2300 - 2400	12	2.34E-01	2.23E-01	1.17E-02	1.97E-03	1.97E-03	1.97E-03	8.08	7.68	0.40	0.07	0.07	0.07

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

Hour	Frequency	FBDD											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	7	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	30.981	29.438	1.543	0.947	0.947	0.871
0100 - 0200	4	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	19.065	18.116	0.949	0.582	0.582	0.536
0200 - 0300	3	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	11.916	11.322	0.593	0.364	0.364	0.335
0300 - 0400	1	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	2.383	2.264	0.119	0.073	0.073	0.067
0400 - 0500	6	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	26.215	24.909	1.305	0.801	0.801	0.737
0500 - 0600	7	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	33.364	31.703	1.661	1.019	1.019	0.938
0600 - 0700	12	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	54.813	52.083	2.729	1.675	1.675	1.540
0700 - 0800	15	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	69.112	65.670	3.441	2.112	2.112	1.942
0800 - 0900	14	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	64.345	61.141	3.204	1.966	1.966	1.808
0900 - 1000	15	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	71.495	67.935	3.560	2.184	2.184	2.009
1000 - 1100	15	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	71.495	67.935	3.560	2.184	2.184	2.009
1100 - 1200	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	81.027	76.993	4.035	2.476	2.476	2.277
1200 - 1300	19	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	88.177	83.786	4.391	2.694	2.694	2.478
1300 - 1400	19	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	90.560	86.051	4.509	2.767	2.767	2.545
1400 - 1500	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	81.027	76.993	4.035	2.476	2.476	2.277
1500 - 1600	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	78.644	74.728	3.916	2.403	2.403	2.210
1600 - 1700	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	78.644	74.728	3.916	2.403	2.403	2.210
1700 - 1800	18	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	83.411	79.257	4.153	2.548	2.548	2.344
1800 - 1900	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	81.027	76.993	4.035	2.476	2.476	2.277
1900 - 2000	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	78.644	74.728	3.916	2.403	2.403	2.210
2000 - 2100	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	81.027	76.993	4.035	2.476	2.476	2.277
2100 - 2200	17	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	81.027	76.993	4.035	2.476	2.476	2.277
2200 - 2300	15	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	71.495	67.935	3.560	2.184	2.184	2.009
2300 - 2400	15	14.6206	13.8926	0.728	0.4467	0.4467	0.4109	69.112	65.670	3.441	2.112	2.112	1.942

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	37.144	35.279	1.865	0.985	0.985	0.909	1.03E-02	9.80E-03	5.18E-04	2.74E-04	2.74E-04	2.53E-04
0100 - 0200	22.827	21.681	1.146	0.606	0.606	0.559	6.34E-03	6.02E-03	3.18E-04	1.68E-04	1.68E-04	1.55E-04
0200 - 0300	14.623	13.886	0.737	0.379	0.379	0.350	4.06E-03	3.86E-03	2.05E-04	1.05E-04	1.05E-04	9.71E-05
0300 - 0400	2.735	2.598	0.136	0.076	0.076	0.070	7.60E-04	7.22E-04	3.78E-05	2.10E-05	2.10E-05	1.94E-05
0400 - 0500	31.584	29.996	1.588	0.833	0.833	0.769	8.77E-03	8.33E-03	4.41E-04	2.32E-04	2.32E-04	2.14E-04
0500 - 0600	62.843	59.663	3.180	1.061	1.061	0.979	1.75E-02	1.66E-02	8.83E-04	2.95E-04	2.95E-04	2.72E-04
0600 - 0700	87.455	83.049	4.406	1.743	1.743	1.609	2.43E-02	2.31E-02	1.22E-03	4.84E-04	4.84E-04	4.47E-04
0700 - 0800	124.887	118.598	6.289	2.197	2.197	2.028	3.47E-02	3.29E-02	1.75E-03	6.10E-04	6.10E-04	5.63E-04
0800 - 0900	75.016	71.268	3.748	2.046	2.046	1.888	2.08E-02	1.98E-02	1.04E-03	5.68E-04	5.68E-04	5.25E-04
0900 - 1000	83.220	79.064	4.156	2.273	2.273	2.098	2.31E-02	2.20E-02	1.15E-03	6.31E-04	6.31E-04	5.83E-04
1000 - 1100	103.600	98.416	5.184	2.273	2.273	2.098	2.88E-02	2.73E-02	1.44E-03	6.31E-04	6.31E-04	5.83E-04
1100 - 1200	114.271	108.558	5.713	2.576	2.576	2.378	3.17E-02	3.02E-02	1.59E-03	7.16E-04	7.16E-04	6.61E-04
1200 - 1300	122.743	116.605	6.137	2.804	2.804	2.588	3.41E-02	3.24E-02	1.70E-03	7.79E-04	7.79E-04	7.19E-04
1300 - 1400	125.477	119.204	6.274	2.879	2.879	2.658	3.49E-02	3.31E-02	1.74E-03	8.00E-04	8.00E-04	7.38E-04
1400 - 1500	114.539	108.810	5.729	2.576	2.576	2.378	3.18E-02	3.02E-02	1.59E-03	7.16E-04	7.16E-04	6.61E-04
1500 - 1600	111.804	106.212	5.593	2.500	2.500	2.308	3.11E-02	2.95E-02	1.55E-03	6.95E-04	6.95E-04	6.41E-04
1600 - 1700	111.804	106.212	5.593	2.500	2.500	2.308	3.11E-02	2.95E-02	1.55E-03	6.95E-04	6.95E-04	6.41E-04
1700 - 1800	117.274	111.408	5.865	2.652	2.652	2.448	3.26E-02	3.09E-02	1.63E-03	7.37E-04	7.37E-04	6.80E-04
1800 - 1900	114.539	108.810	5.729	2.576	2.576	2.378	3.18E-02	3.02E-02	1.59E-03	7.16E-04	7.16E-04	6.61E-04
1900 - 2000	111.536	105.960	5.576	2.500	2.500	2.308	3.10E-02	2.94E-02	1.55E-03	6.95E-04	6.95E-04	6.41E-04
2000 - 2100	114.539	108.810	5.729	2.576	2.576	2.378	3.18E-02	3.02E-02	1.59E-03	7.16E-04	7.16E-04	6.61E-04
2100 - 2200	94.158	89.457	4.701	2.576	2.576	2.378	2.62E-02	2.48E-02	1.31E-03	7.16E-04	7.16E-04	6.61E-04
2200 - 2300	82.952	78.812	4.140	2.273	2.273	2.098	2.30E-02	2.19E-02	1.15E-03	6.31E-04	6.31E-04	5.83E-04
2300 - 2400	100.222	95.212	5.009	2.197	2.197	2.028	2.78E-02	2.64E-02	1.39E-03	6.10E-04	6.10E-04	5.63E-04
						total	5.78E-01	5.49E-01	2.90E-02	1.32E-02	1.32E-02	1.22E-02

Daily Emission Distribution

Hour	NOx	NO	NO_2	TSP	RSP	FSP
00 - 01	2%	2%	2%	2%	2%	2%
01 - 02	1%	1%	1%	1%	1%	1%
02 - 03	1%	1%	1%	1%	1%	1%
03 - 04	0%	0%	0%	0%	0%	0%
04 - 05	2%	2%	2%	2%	2%	2%
05 - 06	3%	3%	3%	2%	2%	2%
06 - 07	5%	5%	5%	4%	4%	4%
07 - 08	6%	6%	6%	5%	5%	5%
08 - 09	4%	4%	4%	4%	4%	4%
09 - 10	4%	4%	4%	5%	5%	5%
10 - 11	5%	5%	5%	5%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%
12 - 13	6%	6%	6%	6%	6%	6%
13 - 14	6%	6%	6%	6%	6%	6%
14 - 15	5%	5%	5%	5%	5%	5%
15 - 16	5%	5%	5%	5%	5%	5%
16 - 17	5%	5%	5%	5%	5%	5%
17 - 18	6%	6%	5%	5%	5%	5%
18 - 19	6%	6%	5%	5%	5%	5%
19 - 20	5%	5%	5%	5%	5%	5%
20 - 21	5%	5%	5%	5%	5%	5%
21 - 22	4%	4%	4%	5%	5%	5%
22 - 23	4%	4%	4%	5%	5%	5%
23 - 24	5%	5%	5%	5%	5%	5%
Total	100%	100%	100%	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

[2] Number of cold starts were provided by the traffic consultant.

HZMB Hong Kong Port PTI - Layby 8

Temp: 7 **RH:** 15

Start Emission - Terminating PLB-DSL

	Public Light Bus (PLB-DSL) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.05	0.10	0.13	0.19	0.23	0.30	0.45	0.56	0.82	1.07	1.20	1.41	1.56	1.63	1.68	1.72	1.74	1.74
NO	0.04	0.07	0.09	0.13	0.16	0.22	0.32	0.40	0.59	0.77	0.86	1.02	1.12	1.18	1.21	1.24	1.25	1.25
NO2	0.02	0.03	0.04	0.05	0.06	0.09	0.12	0.16	0.23	0.30	0.34	0.40	0.44	0.46	0.47	0.48	0.49	0.49
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of PLB-DSL																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of PLB-DSL (g)					
NOx	NO	NO2	TSP	RSP	FSP
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

Idling Emission - Terminating PLB-DSL

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	PLB-DSL												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0	6.00E-02	4.32E-02	1.68E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00

Hour	PLB-DSL												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.00	0.00	0.00	0.00	0.00	0.00

Average Distance from Starting Place to Egress =	163	m
Average Spread Distance outside bus terminus =	537	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hour	Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0200 - 0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0500 - 0600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0700 - 0800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0900 - 1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1900 - 2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass PLB-DSL

Idling Time =	3	min

Hour	PLB-DSL											
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
0100 - 0200	1	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.16	0.11	0.04	0.00	0.00	0.00
0200 - 0300	1	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.16	0.11	0.04	0.00	0.00	0.00
0300 - 0400	1	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.16	0.11	0.04	0.00	0.00	0.00
0400 - 0500	1	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.16	0.11	0.04	0.00	0.00	0.00
0500 - 0600	1	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.16	0.11	0.04	0.00	0.00	0.00
0600 - 0700	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
0700 - 0800	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
0800 - 0900	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
0900 - 1000	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
1000 - 1100	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
1100 - 1200	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
1200 - 1300	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
1300 - 1400	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
1400 - 1500	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
1500 - 1600	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
1600 - 1700	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
1700 - 1800	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
1800 - 1900	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
1900 - 2000	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
2000 - 2100	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
2100 - 2200	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
2200 - 2300	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00
2300 - 2400	3	3.81E-02	2.74E-02	1.07E-02	4.33E-04	4.33E-04	4.33E-04	0.40	0.28	0.11	0.00	0.00	0.00

Running Emission - Terminating PLB-DSL and Bypass PLB-DSL

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

Hour	PLB-DSL												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
0100 - 0200	1	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	0.645	0.464	0.181	0.034	0.034	0.031
0200 - 0300	1	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	0.645	0.464	0.181	0.034	0.034	0.031
0300 - 0400	1	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	0.645	0.464	0.181	0.034	0.034	0.031
0400 - 0500	1	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	0.645	0.464	0.181	0.034	0.034	0.031
0500 - 0600	1	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	0.645	0.464	0.181	0.034	0.034	0.031
0600 - 0700	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
0700 - 0800	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
0800 - 0900	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
0900 - 1000	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
1000 - 1100	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
1100 - 1200	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
1200 - 1300	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
1300 - 1400	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
1400 - 1500	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
1500 - 1600	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
1600 - 1700	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
1700 - 1800	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
1800 - 1900	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
1900 - 2000	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
2000 - 2100	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
2100 - 2200	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
2200 - 2300	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078
2300 - 2400	3	1.4278	1.028	0.3998	0.0747	0.0747	0.0687	1.613	1.161	0.452	0.084	0.084	0.078

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
0100 - 0200	0.803	0.578	0.225	0.036	0.036	0.033	2.23E-04	1.61E-04	6.25E-05	9.88E-06	9.88E-06	9.12E-06
0200 - 0300	0.803	0.578	0.225	0.036	0.036	0.033	2.23E-04	1.61E-04	6.25E-05	9.88E-06	9.88E-06	9.12E-06
0300 - 0400	0.803	0.578	0.225	0.036	0.036	0.033	2.23E-04	1.61E-04	6.25E-05	9.88E-06	9.88E-06	9.12E-06
0400 - 0500	0.803	0.578	0.225	0.036	0.036	0.033	2.23E-04	1.61E-04	6.25E-05	9.88E-06	9.88E-06	9.12E-06
0500 - 0600	0.803	0.578	0.225	0.036	0.036	0.033	2.23E-04	1.61E-04	6.25E-05	9.88E-06	9.88E-06	9.12E-06
0600 - 0700	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
0700 - 0800	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
0800 - 0900	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
0900 - 1000	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
1000 - 1100	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
1100 - 1200	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
1200 - 1300	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
1300 - 1400	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
1400 - 1500	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
1500 - 1600	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
1600 - 1700	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
1700 - 1800	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
1800 - 1900	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
1900 - 2000	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
2000 - 2100	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
2100 - 2200	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
2200 - 2300	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
2300 - 2400	2.009	1.446	0.562	0.089	0.089	0.082	5.58E-04	4.02E-04	1.56E-04	2.47E-05	2.47E-05	2.28E-05
						total	1.17E-02	8.44E-03	3.28E-03	5.18E-04	5.18E-04	4.79E-04

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.

[2] Number of cold starts were provided by the traffic consultant.

HZMB Hong Kong Port PTI - Layby 8

Temp: 7 **RH:** 15

Start Emission - Terminating PLB-LPG

	Public Light Bus (PLB-LPG) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	1.73	2.61	4.16	5.42	6.39	7.07	7.47	7.68	7.65	7.60	7.55	7.47	7.39	7.28	7.17	7.03	6.89	6.72
NO	1.73	2.60	4.14	5.39	6.35	7.04	7.43	7.63	7.61	7.56	7.51	7.43	7.35	7.24	7.13	7.00	6.85	6.69
NO2	0.01	0.01	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of PLB-LPG																	
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Start Emission of PLB-LPG (g)						
NOx	NO	NO2	TSP	RSP	FSP
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

Idling Emission - Terminating PLB-LPG

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

0.328425 0.3267 0.001725 0.000682

Hour	PLB-LPG												PLB-LPG											
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0	2.53E-01	2.51E-01	1.33E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	0	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	0.00	0.00	0.00	0.00	0.00	0.00

Average Distance from Starting Place to Egress =	150	m
Average Spread Distance outside bus terminus =	0	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0200 - 0300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0500 - 0600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0700 - 0800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0900 - 1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1900 - 2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Hot Idling Emission - Bypass PLB-LPG

Idling Time =	3	min

Hour	PLB - LPG												
	Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
0100 - 0200	1	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	1	1	0	0	0	0
0200 - 0300	1	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	1	1	0	0	0	0
0300 - 0400	1	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	1	1	0	0	0	0
0400 - 0500	1	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	1	1	0	0	0	0
0500 - 0600	1	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	1	1	0	0	0	0
0600 - 0700	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
0700 - 0800	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
0800 - 0900	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
0900 - 1000	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
1000 - 1100	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
1100 - 1200	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
1200 - 1300	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
1300 - 1400	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
1400 - 1500	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
1500 - 1600	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
1600 - 1700	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
1700 - 1800	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
1800 - 1900	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
1900 - 2000	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
2000 - 2100	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
2100 - 2200	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
2200 - 2300	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0
2300 - 2400	2	3.28E-01	3.27E-01	1.72E-03	6.82E-04	6.82E-04	6.82E-04	2	2	0	0	0	0

Running Emission - Terminating PLB-LPG and Bypass PLB-LPG

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

Hour	PLB-LPG												
	Frequency	Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
0100 - 0200	1	1.9805	1.9701	0.0104	0	0	0	0.396	0.394	0.002	0.000	0.000	0.000
0200 - 0300	1	1.9805	1.9701	0.0104	0	0	0	0.396	0.394	0.002	0.000	0.000	0.000
0300 - 0400	1	1.9805	1.9701	0.0104	0	0	0	0.396	0.394	0.002	0.000	0.000	0.000
0400 - 0500	1	1.9805	1.9701	0.0104	0	0	0	0.396	0.394	0.002	0.000	0.000	0.000
0500 - 0600	1	1.9805	1.9701	0.0104	0	0	0	0.396	0.394	0.002	0.000	0.000	0.000
0600 - 0700	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
0700 - 0800	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
0800 - 0900	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
0900 - 1000	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
1000 - 1100	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
1100 - 1200	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
1200 - 1300	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
1300 - 1400	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
1400 - 1500	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
1500 - 1600	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
1600 - 1700	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
1700 - 1800	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
1800 - 1900	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
1900 - 2000	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
2000 - 2100	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
2100 - 2200	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
2200 - 2300	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000
2300 - 2400	2	1.9805	1.9701	0.0104	0	0	0	0.991	0.986	0.005	0.000	0.000	0.000

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
0100 - 0200	1.001	0.996	0.005	0.001	0.001	0.001	2.78E-04	2.77E-04	1.46E-06	3.49E-07	3.49E-07	3.49E-07
0200 - 0300	1.001	0.996	0.005	0.001	0.001	0.001	2.78E-04	2.77E-04	1.46E-06	3.49E-07	3.49E-07	3.49E-07
0300 - 0400	1.001	0.996	0.005	0.001	0.001	0.001	2.78E-04	2.77E-04	1.46E-06	3.49E-07	3.49E-07	3.49E-07
0400 - 0500	1.001	0.996	0.005	0.001	0.001	0.001	2.78E-04	2.77E-04	1.46E-06	3.49E-07	3.49E-07	3.49E-07
0500 - 0600	1.001	0.996	0.005	0.001	0.001	0.001	2.78E-04	2.77E-04	1.46E-06	3.49E-07	3.49E-07	3.49E-07
0600 - 0700	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
0700 - 0800	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
0800 - 0900	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
0900 - 1000	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
1000 - 1100	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
1100 - 1200	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
1200 - 1300	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
1300 - 1400	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
1400 - 1500	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
1500 - 1600	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
1600 - 1700	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
1700 - 1800	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
1800 - 1900	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
1900 - 2000	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
2000 - 2100	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
2100 - 2200	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
2200 - 2300	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
2300 - 2400	2.503	2.490	0.013	0.003	0.003	0.003	6.95E-04	6.92E-04	3.65E-06	8.72E-07	8.72E-07	8.72E-07
						total	1.46E-02	1.45E-02	7.67E-05	1.83E-05	1.83E-05	1.83E-05

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] It is assumed that the distance from start place to egress to be 150m.

HZMB Hong Kong Port PTI - Layby 9

Temp: 7 **RH:** 15

Start Emission - Terminating Bus

	Non-franchised Buses 15-24t (NFB8) Start Emission Factor (g/trip)																	
Soaking Time (min) / Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
NOx	0.22	0.40	0.54	0.76	0.94	1.25	1.83	2.28	3.36	4.38	4.92	5.82	6.40	6.71	6.89	7.07	7.16	7.16
NO	0.19	0.34	0.46	0.65	0.80	1.07	1.56	1.94	2.86	3.74	4.19	4.96	5.45	5.72	5.87	6.02	6.10	6.10
NO2	0.03	0.06	0.08	0.11	0.14	0.19	0.27	0.34	0.50	0.65	0.73	0.86	0.95	0.99	1.02	1.05	1.06	1.06
TSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FSP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	No. of Trips of NFB8																		Total Start Emission of FBSD & FBDD (g)					
Soaking Time (min) / Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	NOx	NO	NO2	TSP	RSP	FSP
0000 - 0100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0100 - 0200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0200 - 0300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0300 - 0400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0400 - 0500	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0500 - 0600	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0600 - 0700	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0700 - 0800	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0800 - 0900	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
0900 - 1000	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1000 - 1100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1100 - 1200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1200 - 1300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1300 - 1400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1400 - 1500	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1500 - 1600	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1600 - 1700	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1700 - 1800	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1800 - 1900	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
1900 - 2000	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
2000 - 2100	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
2100 - 2200	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
2200 - 2300	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0
2300 - 2400	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	3	1	0	0	0

Idling Emission - Terminating Bus

Idling Time =	3	min
Max. Idling Time for Adjusting Start Emission =	1	min

Hour	NFB8													NFB8												
	Frequency	Cold Idling Emission Factor (g/min)						Cold Idling Emission (g)						Frequency	Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO$_2$	TSP	RSP	FSP	NOx	NO	NO$_2$	TSP	RSP	FSP		NOx	NO	NO$_2$	TSP	RSP	FSP	NOx	NO	NO$_2$	TSP	RSP	FSP
0000 - 0100	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0100 - 0200	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0200 - 0300	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0300 - 0400	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0400 - 0500	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0500 - 0600	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0600 - 0700	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0700 - 0800	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0800 - 0900	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
0900 - 1000	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1000 - 1100	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1100 - 1200	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1200 - 1300	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1400 - 1500	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1500 - 1600	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1600 - 1700	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1800 - 1900	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
1900 - 2000	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2000 - 2100	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2100 - 2200	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2200 - 2300	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00
2300 - 2400	2	1.15E+00	9.67E-01	1.87E-01	7.85E-04	7.85E-04	7.85E-04	6.926	5.801	1.124	0.005	0.005	0.005	0	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	0.00	0.00	0.00	0.00	0.00	0.00

Average Distance from Starting Place to Egress =	163	m
Average Spread Distance outside bus terminus =	537	m

Hour	Total Idling Emission (g)						Idling Emission for Start Emission Adjustment (g)						Adjusted Start Emission within PTI (g)						Adjusted Start Emission outside PTI (g)						Start Emission Rate outside PTI (g/s)					
	NOx	NO	NO$_2$	TSP	RSP	FSP	NOx	NO	NO$_2$	TSP	RSP	FSP	NOx	NO	NO$_2$	TSP	RSP	FSP	NOx	NO	NO$_2$	TSP	RSP	FSP	NOx	NO	NO$_2$	TSP	RSP	FSP
0000 - 0100	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
0100 - 0200	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
0200 - 0300	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
0300 - 0400	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
0400 - 0500	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
0500 - 0600	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
0600 - 0700	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
0700 - 0800	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
0800 - 0900	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
0900 - 1000	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
1000 - 1100	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
1100 - 1200	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
1200 - 1300	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
1300 - 1400	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
1400 - 1500	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
1500 - 1600	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
1600 - 1700	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
1700 - 1800	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
1800 - 1900	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
1900 - 2000	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
2000 - 2100	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
2100 - 2200	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
2200 - 2300	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
2300 - 2400	6.93	5.80	1.12	0.00	0.00	0.00	2.31	1.93	0.37	0.00	0.00	0.00	0.32	0.28	0.04	0.00	0.00	0.00	1.04	0.91	0.13	0.00	0.00	0.00	2.90E-04	2.54E-04	3.58E-05	0.00E+00	0.00E+00	0.00E+00
																								total	6.96E-03	6.10E-03	8.60E-04	0.00E+00	0.00E+00	0.00E+00

Daily Emission Distribution

Hour	NO	NO$_2$
00 - 01	4%	4%
01 - 02	4%	4%
02 - 03	4%	4%
03 - 04	4%	4%
04 - 05	4%	4%
05 - 06	4%	4%
06 - 07	4%	4%
07 - 08	4%	4%
08 - 09	4%	4%
09 - 10	4%	4%
10 - 11	4%	4%
11 - 12	4%	4%
12 - 13	4%	4%
13 - 14	4%	4%
14 - 15	4%	4%
15 - 16	4%	4%
16 - 17	4%	4%
17 - 18	4%	4%
18 - 19	4%	4%
19 - 20	4%	4%
20 - 21	4%	4%
21 - 22	4%	4%
22 - 23	4%	4%
23 - 24	4%	4%
Total	100%	100%

Hot Idling Emission - Bypass Bus

Idling Time =	3	min

Hour	Frequency	NFB8											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	16	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	4.83	4.05	0.78	0.04	0.04	0.04
0100 - 0200	9	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	2.72	2.28	0.44	0.02	0.02	0.02
0200 - 0300	5	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	1.51	1.26	0.25	0.01	0.01	0.01
0300 - 0400	5	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	1.51	1.26	0.25	0.01	0.01	0.01
0400 - 0500	7	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	2.11	1.77	0.34	0.02	0.02	0.02
0500 - 0600	12	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	3.62	3.04	0.59	0.03	0.03	0.03
0600 - 0700	21	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	6.34	5.31	1.03	0.05	0.05	0.05
0700 - 0800	36	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.87	9.11	1.76	0.08	0.08	0.08
0800 - 0900	43	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	12.99	10.88	2.11	0.10	0.10	0.10
0900 - 1000	34	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.27	8.60	1.67	0.08	0.08	0.08
1000 - 1100	30	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.06	7.59	1.47	0.07	0.07	0.07
1100 - 1200	31	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.36	7.84	1.52	0.07	0.07	0.07
1200 - 1300	35	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.57	8.85	1.72	0.08	0.08	0.08
1300 - 1400	35	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.57	8.85	1.72	0.08	0.08	0.08
1400 - 1500	35	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.57	8.85	1.72	0.08	0.08	0.08
1500 - 1600	31	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.36	7.84	1.52	0.07	0.07	0.07
1600 - 1700	32	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.66	8.09	1.57	0.08	0.08	0.08
1700 - 1800	34	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.27	8.60	1.67	0.08	0.08	0.08
1800 - 1900	33	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.97	8.35	1.62	0.08	0.08	0.08
1900 - 2000	29	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	8.76	7.34	1.42	0.07	0.07	0.07
2000 - 2100	25	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	7.55	6.32	1.23	0.06	0.06	0.06
2100 - 2200	25	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	7.55	6.32	1.23	0.06	0.06	0.06
2200 - 2300	25	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	7.55	6.32	1.23	0.06	0.06	0.06
2300 - 2400	22	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	6.64	5.57	1.08	0.05	0.05	0.05

Running Emission - Terminating Bus and Bypass Bus

The Longest Travelling Distance within bus terminus =	326	m
Average Travelling Speed =	5	km/h

Hour	Frequency	NFB8											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	18	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	51.264	42.942	8.322	1.744	1.744	1.605
0100 - 0200	11	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	31.328	26.242	5.086	1.066	1.066	0.981
0200 - 0300	7	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	19.936	16.700	3.236	0.678	0.678	0.624
0300 - 0400	7	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	19.936	16.700	3.236	0.678	0.678	0.624
0400 - 0500	9	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	25.632	21.471	4.161	0.872	0.872	0.802
0500 - 0600	14	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	39.872	33.399	6.473	1.356	1.356	1.248
0600 - 0700	23	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	65.504	54.870	10.634	2.228	2.228	2.051
0700 - 0800	38	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	108.224	90.655	17.569	3.682	3.682	3.388
0800 - 0900	45	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	128.160	107.355	20.805	4.360	4.360	4.012
0900 - 1000	36	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	102.528	85.884	16.644	3.488	3.488	3.210
1000 - 1100	32	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	91.136	76.341	14.795	3.100	3.100	2.853
1100 - 1200	33	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	93.984	78.727	15.257	3.197	3.197	2.942
1200 - 1300	37	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	105.376	88.270	17.106	3.585	3.585	3.299
1300 - 1400	37	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	105.376	88.270	17.106	3.585	3.585	3.299
1400 - 1500	37	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	105.376	88.270	17.106	3.585	3.585	3.299
1500 - 1600	33	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	93.984	78.727	15.257	3.197	3.197	2.942
1600 - 1700	34	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	96.832	81.113	15.719	3.294	3.294	3.031
1700 - 1800	36	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	102.528	85.884	16.644	3.488	3.488	3.210
1800 - 1900	35	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	99.680	83.498	16.182	3.391	3.391	3.121
1900 - 2000	31	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	88.288	73.956	14.332	3.004	3.004	2.764
2000 - 2100	27	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	76.896	64.413	12.483	2.616	2.616	2.407
2100 - 2200	27	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	76.896	64.413	12.483	2.616	2.616	2.407
2200 - 2300	27	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	76.896	64.413	12.483	2.616	2.616	2.407
2300 - 2400	24	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	68.352	57.256	11.096	2.325	2.325	2.140

Total Hourly Emission

Hour	Total Emission inside PTI (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	63.338	53.068	10.270	1.786	1.786	1.647	1.76E-02	1.47E-02	2.85E-03	4.96E-04	4.96E-04	4.58E-04
0100 - 0200	41.288	34.598	6.690	1.092	1.092	1.007	1.15E-02	9.61E-03	1.86E-03	3.03E-04	3.03E-04	2.80E-04
0200 - 0300	28.688	24.043	4.645	0.695	0.695	0.641	7.97E-03	6.68E-03	1.29E-03	1.93E-04	1.93E-04	1.78E-04
0300 - 0400	28.688	24.043	4.645	0.695	0.695	0.641	7.97E-03	6.68E-03	1.29E-03	1.93E-04	1.93E-04	1.78E-04
0400 - 0500	34.988	29.321	5.668	0.893	0.893	0.824	9.72E-03	8.14E-03	1.57E-03	2.48E-04	2.48E-04	2.29E-04
0500 - 0600	50.738	42.514	8.224	1.389	1.389	1.281	1.41E-02	1.18E-02	2.28E-03	3.86E-04	3.86E-04	3.56E-04
0600 - 0700	79.088	66.262	12.827	2.283	2.283	2.105	2.20E-02	1.84E-02	3.56E-03	6.34E-04	6.34E-04	5.85E-04
0700 - 0800	126.338	105.841	20.497	3.771	3.771	3.478	3.51E-02	2.94E-02	5.69E-03	1.05E-03	1.05E-03	9.66E-04
0800 - 0900	148.388	124.311	24.076	4.466	4.466	4.118	4.12E-02	3.45E-02	6.69E-03	1.24E-03	1.24E-03	1.14E-03
0900 - 1000	120.038	100.564	19.474	3.573	3.573	3.295	3.33E-02	2.79E-02	5.41E-03	9.92E-04	9.92E-04	9.15E-04
1000 - 1100	107.438	90.009	17.429	3.176	3.176	2.929	2.98E-02	2.50E-02	4.84E-03	8.82E-04	8.82E-04	8.13E-04
1100 - 1200	110.588	92.648	17.940	3.275	3.275	3.020	3.07E-02	2.57E-02	4.98E-03	9.10E-04	9.10E-04	8.39E-04
1200 - 1300	123.188	103.202	19.986	3.672	3.672	3.386	3.42E-02	2.87E-02	5.55E-03	1.02E-03	1.02E-03	9.41E-04
1300 - 1400	123.188	103.202	19.986	3.672	3.672	3.386	3.42E-02	2.87E-02	5.55E-03	1.02E-03	1.02E-03	9.41E-04
1400 - 1500	123.188	103.202	19.986	3.672	3.672	3.386	3.42E-02	2.87E-02	5.55E-03	1.02E-03	1.02E-03	9.41E-04
1500 - 1600	110.588	92.648	17.940	3.275	3.275	3.020	3.07E-02	2.57E-02	4.98E-03	9.10E-04	9.10E-04	8.39E-04
1600 - 1700	113.738	95.286	18.452	3.374	3.374	3.112	3.16E-02	2.65E-02	5.13E-03	9.37E-04	9.37E-04	8.64E-04
1700 - 1800	120.038	100.564	19.474	3.573	3.573	3.295	3.33E-02	2.79E-02	5.41E-03	9.92E-04	9.92E-04	9.15E-04
1800 - 1900	116.888	97.925	18.963	3.474	3.474	3.203	3.25E-02	2.72E-02	5.27E-03	9.65E-04	9.65E-04	8.90E-04
1900 - 2000	104.288	87.371	16.917	3.077	3.077	2.837	2.90E-02	2.43E-02	4.70E-03	8.55E-04	8.55E-04	7.88E-04
2000 - 2100	91.688	76.816	14.872	2.680	2.680	2.471	2.55E-02	2.13E-02	4.13E-03	7.44E-04	7.44E-04	6.86E-04
2100 - 2200	91.688	76.816	14.872	2.680	2.680	2.471	2.55E-02	2.13E-02	4.13E-03	7.44E-04	7.44E-04	6.86E-04
2200 - 2300	91.688	76.816	14.872	2.680	2.680	2.471	2.55E-02	2.13E-02	4.13E-03	7.44E-04	7.44E-04	6.86E-04
2300 - 2400	82.238	68.900	13.338	2.382	2.382	2.196	2.28E-02	1.91E-02	3.70E-03	6.62E-04	6.62E-04	6.10E-04
						total	6.20E-01	5.19E-01	1.01E-01	1.81E-02	1.81E-02	1.67E-02

Daily Emission Distribution

Hour	NOx	NO	NO_2	TSP	RSP	FSP
00 - 01	3%	3%	3%	3%	3%	3%
01 - 02	2%	2%	2%	2%	2%	2%
02 - 03	1%	1%	1%	1%	1%	1%
03 - 04	1%	1%	1%	1%	1%	1%
04 - 05	2%	2%	2%	1%	1%	1%
05 - 06	2%	2%	2%	2%	2%	2%
06 - 07	4%	4%	4%	3%	3%	3%
07 - 08	6%	6%	6%	6%	6%	6%
08 - 09	7%	7%	7%	7%	7%	7%
09 - 10	5%	5%	5%	5%	5%	5%
10 - 11	5%	5%	5%	5%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%
12 - 13	6%	6%	6%	6%	6%	6%
13 - 14	6%	6%	6%	6%	6%	6%
14 - 15	6%	6%	6%	6%	6%	6%
15 - 16	5%	5%	5%	5%	5%	5%
16 - 17	5%	5%	5%	5%	5%	5%
17 - 18	5%	5%	5%	5%	5%	5%
18 - 19	5%	5%	5%	5%	5%	5%
19 - 20	5%	5%	5%	5%	5%	5%
20 - 21	4%	4%	4%	4%	4%	4%
21 - 22	4%	4%	4%	4%	4%	4%
22 - 23	4%	4%	4%	4%	4%	4%
23 - 24	4%	4%	4%	4%	4%	4%
Total	100%	100%	100%	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

HZMB Hong Kong Port PTI - Kiosk

Temp: 7 **RH:** 15

Hot Idling Emission - Bypass NFB

Idling Time =	1	min

Hour	Frequency	NFB8											
		Hot Idling Emission Factor (g/min)						Hot Idling Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	52	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	5.24	4.39	0.85	0.04	0.04	0.04
0100 - 0200	24	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	2.42	2.03	0.39	0.02	0.02	0.02
0200 - 0300	16	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	1.61	1.35	0.26	0.01	0.01	0.01
0300 - 0400	16	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	1.61	1.35	0.26	0.01	0.01	0.01
0400 - 0500	20	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	2.01	1.69	0.33	0.02	0.02	0.02
0500 - 0600	36	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	3.63	3.04	0.59	0.03	0.03	0.03
0600 - 0700	60	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	6.04	5.06	0.98	0.05	0.05	0.05
0700 - 0800	108	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.88	9.12	1.77	0.08	0.08	0.08
0800 - 0900	128	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	12.90	10.80	2.09	0.10	0.10	0.10
0900 - 1000	100	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.07	8.44	1.64	0.08	0.08	0.08
1000 - 1100	88	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	8.87	7.43	1.44	0.07	0.07	0.07
1100 - 1200	92	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.27	7.76	1.50	0.07	0.07	0.07
1200 - 1300	104	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.48	8.78	1.70	0.08	0.08	0.08
1300 - 1400	104	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.48	8.78	1.70	0.08	0.08	0.08
1400 - 1500	104	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.48	8.78	1.70	0.08	0.08	0.08
1500 - 1600	92	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.27	7.76	1.50	0.07	0.07	0.07
1600 - 1700	92	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.27	7.76	1.50	0.07	0.07	0.07
1700 - 1800	100	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	10.07	8.44	1.64	0.08	0.08	0.08
1800 - 1900	96	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	9.67	8.10	1.57	0.08	0.08	0.08
1900 - 2000	88	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	8.87	7.43	1.44	0.07	0.07	0.07
2000 - 2100	76	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	7.66	6.42	1.24	0.06	0.06	0.06
2100 - 2200	76	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	7.66	6.42	1.24	0.06	0.06	0.06
2200 - 2300	72	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	7.26	6.08	1.18	0.06	0.06	0.06
2300 - 2400	68	1.01E-01	8.43E-02	1.63E-02	7.85E-04	7.85E-04	7.85E-04	6.85	5.74	1.11	0.05	0.05	0.05

Running Emission - Bypass NFB

The Longest Travelling Distance within bus terminus =	57	m
Average Travelling Speed =	5	km/h

Hour	Frequency	NFB8											
		Running Emission Factor (g/km-vehicle)						Running Emission (g)					
		NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	52	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	25.914	21.707	4.207	0.882	0.882	0.811
0100 - 0200	24	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	11.971	10.028	1.943	0.407	0.407	0.375
0200 - 0300	16	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	7.967	6.674	1.293	0.271	0.271	0.249
0300 - 0400	16	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	7.967	6.674	1.293	0.271	0.271	0.249
0400 - 0500	20	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	9.959	8.343	1.617	0.339	0.339	0.312
0500 - 0600	36	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	17.947	15.033	2.913	0.611	0.611	0.562
0600 - 0700	60	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	29.898	25.044	4.853	1.017	1.017	0.936
0700 - 0800	108	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	53.840	45.100	8.740	1.832	1.832	1.686
0800 - 0900	128	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	63.799	53.442	10.357	2.170	2.170	1.997
0900 - 1000	100	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	49.836	41.746	8.090	1.695	1.695	1.560
1000 - 1100	88	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	43.861	36.740	7.120	1.492	1.492	1.373
1100 - 1200	92	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	45.852	38.409	7.444	1.560	1.560	1.435
1200 - 1300	104	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	51.848	43.431	8.417	1.764	1.764	1.623
1300 - 1400	104	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	51.828	43.414	8.414	1.763	1.763	1.623
1400 - 1500	104	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	51.828	43.414	8.414	1.763	1.763	1.623
1500 - 1600	92	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	45.852	38.409	7.444	1.560	1.560	1.435
1600 - 1700	92	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	45.852	38.409	7.444	1.560	1.560	1.435
1700 - 1800	100	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	49.836	41.746	8.090	1.695	1.695	1.560
1800 - 1900	96	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	47.844	40.077	7.767	1.628	1.628	1.498
1900 - 2000	88	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	43.861	36.740	7.120	1.492	1.492	1.373
2000 - 2100	76	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	37.885	31.735	6.150	1.289	1.289	1.186
2100 - 2200	76	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	37.885	31.735	6.150	1.289	1.289	1.186
2200 - 2300	72	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	35.893	30.066	5.827	1.221	1.221	1.124
2300 - 2400	68	8.7362	7.318	1.4182	0.2972	0.2972	0.2735	33.901	28.398	5.503	1.153	1.153	1.061

Total Hourly Emission

Hour	Total Emission inside Kiosk (g) (Running + Idling + Start)						Total Emission Rate (g/s)					
	NOx	NO	NO_2	TSP	RSP	FSP	NOx	NO	NO_2	TSP	RSP	FSP
0000 - 0100	31.152	26.095	5.057	0.922	0.922	0.852	8.65E-03	7.25E-03	1.40E-03	2.56E-04	2.56E-04	2.37E-04
0100 - 0200	14.391	12.055	2.336	0.426	0.426	0.394	4.00E-03	3.35E-03	6.49E-04	1.18E-04	1.18E-04	1.09E-04
0200 - 0300	9.578	8.023	1.555	0.284	0.284	0.262	2.66E-03	2.23E-03	4.32E-04	7.88E-05	7.88E-05	7.28E-05
0300 - 0400	9.578	8.023	1.555	0.284	0.284	0.262	2.66E-03	2.23E-03	4.32E-04	7.88E-05	7.88E-05	7.28E-05
0400 - 0500	11.972	10.029	1.944	0.355	0.355	0.327	3.33E-03	2.79E-03	5.40E-04	9.85E-05	9.85E-05	9.10E-05
0500 - 0600	21.574	18.072	3.502	0.639	0.639	0.590	5.99E-03	5.02E-03	9.73E-04	1.77E-04	1.77E-04	1.64E-04
0600 - 0700	35.941	30.107	5.835	1.064	1.064	0.983	9.98E-03	8.36E-03	1.62E-03	2.96E-04	2.96E-04	2.73E-04
0700 - 0800	64.723	54.216	10.507	1.917	1.917	1.770	1.80E-02	1.51E-02	2.92E-03	5.32E-04	5.32E-04	4.92E-04
0800 - 0900	76.696	64.245	12.450	2.271	2.271	2.098	2.13E-02	1.78E-02	3.46E-03	6.31E-04	6.31E-04	5.83E-04
0900 - 1000	59.910	50.185	9.726	1.774	1.774	1.639	1.66E-02	1.39E-02	2.70E-03	4.93E-04	4.93E-04	4.55E-04
1000 - 1100	52.727	44.167	8.559	1.561	1.561	1.442	1.46E-02	1.23E-02	2.38E-03	4.34E-04	4.34E-04	4.01E-04
1100 - 1200	55.121	46.173	8.948	1.632	1.632	1.508	1.53E-02	1.28E-02	2.49E-03	4.53E-04	4.53E-04	4.19E-04
1200 - 1300	62.329	52.211	10.118	1.846	1.846	1.705	1.73E-02	1.45E-02	2.81E-03	5.13E-04	5.13E-04	4.74E-04
1300 - 1400	62.305	52.191	10.114	1.845	1.845	1.704	1.73E-02	1.45E-02	2.81E-03	5.12E-04	5.12E-04	4.73E-04
1400 - 1500	62.305	52.191	10.114	1.845	1.845	1.704	1.73E-02	1.45E-02	2.81E-03	5.12E-04	5.12E-04	4.73E-04
1500 - 1600	55.121	46.173	8.948	1.632	1.632	1.508	1.53E-02	1.28E-02	2.49E-03	4.53E-04	4.53E-04	4.19E-04
1600 - 1700	55.121	46.173	8.948	1.632	1.632	1.508	1.53E-02	1.28E-02	2.49E-03	4.53E-04	4.53E-04	4.19E-04
1700 - 1800	59.910	50.185	9.726	1.774	1.774	1.639	1.66E-02	1.39E-02	2.70E-03	4.93E-04	4.93E-04	4.55E-04
1800 - 1900	57.516	48.179	9.337	1.703	1.703	1.573	1.60E-02	1.34E-02	2.59E-03	4.73E-04	4.73E-04	4.37E-04
1900 - 2000	52.727	44.167	8.559	1.561	1.561	1.442	1.46E-02	1.23E-02	2.38E-03	4.34E-04	4.34E-04	4.01E-04
2000 - 2100	45.543	38.150	7.393	1.349	1.349	1.246	1.27E-02	1.06E-02	2.05E-03	3.75E-04	3.75E-04	3.46E-04
2100 - 2200	45.543	38.150	7.393	1.349	1.349	1.246	1.27E-02	1.06E-02	2.05E-03	3.75E-04	3.75E-04	3.46E-04
2200 - 2300	43.149	36.144	7.005	1.278	1.278	1.180	1.20E-02	1.00E-02	1.95E-03	3.55E-04	3.55E-04	3.28E-04
2300 - 2400	40.754	34.138	6.616	1.207	1.207	1.115	1.13E-02	9.48E-03	1.84E-03	3.35E-04	3.35E-04	3.10E-04
						total	3.02E-01	2.53E-01	4.90E-02	8.93E-03	8.93E-03	8.25E-03

Daily Emission Distribution

Hour	NOx	NO	NO_2	TSP	RSP	FSP
00 - 01	3%	3%	3%	3%	3%	3%
01 - 02	1%	1%	1%	1%	1%	1%
02 - 03	1%	1%	1%	1%	1%	1%
03 - 04	1%	1%	1%	1%	1%	1%
04 - 05	1%	1%	1%	1%	1%	1%
05 - 06	2%	2%	2%	2%	2%	2%
06 - 07	3%	3%	3%	3%	3%	3%
07 - 08	6%	6%	6%	6%	6%	6%
08 - 09	7%	7%	7%	7%	7%	7%
09 - 10	6%	6%	6%	6%	6%	6%
10 - 11	5%	5%	5%	5%	5%	5%
11 - 12	5%	5%	5%	5%	5%	5%
12 - 13	6%	6%	6%	6%	6%	6%
13 - 14	6%	6%	6%	6%	6%	6%
14 - 15	6%	6%	6%	6%	6%	6%
15 - 16	5%	5%	5%	5%	5%	5%
16 - 17	5%	5%	5%	5%	5%	5%
17 - 18	6%	6%	6%	6%	6%	6%
18 - 19	5%	5%	5%	5%	5%	5%
19 - 20	5%	5%	5%	5%	5%	5%
20 - 21	4%	4%	4%	4%	4%	4%
21 - 22	4%	4%	4%	4%	4%	4%
22 - 23	4%	4%	4%	4%	4%	4%
23 - 24	4%	4%	4%	4%	4%	4%
Total	100%	100%	100%	100%	100%	100%

Remarks:

[1] Start Emissions were extracted from Year 2028 of EMFAC-HK v4.3. The lowest temperature and relative humidity data in the whole year (2021) at Chek Lap Kok Weather Station was adopted in the calculation of start emission factors.
[2] Number of cold starts were provided by the traffic consultant.
[3] Non-Franchised Bus 15-24t (NFB8) was assumed for Non-Franchised Bus as conservative approach.

Emission Sources (Hong Kong Port Island) Listing in AERMOD

Location	Source ID	Type	Coordinates		Base Elevation	Release Height	Length X	Length Y	Area	Angle	Szinit	Daily Emission Rate			
			X	Y	mPD	mAG	m	m	m^2	degree	m	NO	NO2	RSP	FSP
												g/s or $g/m^2/s$			
Vehicular Emission inside Bus Terminus															
HZMB Hong Kong Port PTI - Layby 5	PTI_HKP01	AREA	812878	819791	6.7	0	140	20	2800	106	-	9.63E-05	1.86E-05	2.87E-06	2.65E-06
HZMB Hong Kong Port PTI - Layby 6	PTI_HKP02	AREA	812902	819784	6.7	0	140	28	3920	106	-	6.88E-05	1.33E-05	2.05E-06	1.90E-06
HZMB Hong Kong Port PTI - Layby 7	PTI_HKP03	AREA	812942	819795	6.1	0	162	43	6966	106	-	7.99E-05	4.22E-06	1.92E-06	1.77E-06
HZMB Hong Kong Port PTI - Layby 8	PTI_HKP04	AREA	812996	819779	6.1	0	162	28	4536	106	-	1.28E-04	7.22E-06	3.07E-06	2.83E-06
HZMB Hong Kong Port PTI - Layby 9	PTI_HKP05	AREA	813036	819766	6.1	0	162	28	4536	106	-	1.15E-04	2.22E-05	4.00E-06	3.69E-06
Kiosks	PTI_HKP06	AREA	812872	820000	7.0	0	57	28	1596	106	-	1.58E-04	3.07E-05	5.60E-06	5.17E-06
Start Emission outside Bus Terminus															
HZMB Hong Kong Port PTI - Layby 5	SE_HKP01	AREA_POLY	812741	819573	6.4	2.98	-	-	11550	-	2.77	6.19E-07	8.74E-08	0.00E+00	0.00E+00
HZMB Hong Kong Port PTI - Layby 6	SE_HKP02	AREA_POLY	812736	819571	6.4	2.98	-	-	12140	-	2.77	5.89E-07	8.31E-08	0.00E+00	0.00E+00
HZMB Hong Kong Port PTI - Layby 7	SE_HKP03	AREA_POLY	812736	819571	6.4	3.9	-	-	11024	-	3.58	2.77E-06	1.99E-07	0.00E+00	0.00E+00
HZMB Hong Kong Port PTI - Layby 8	SE_HKP04	AREA_POLY	812736	819571	6.4	3.85	-	-	10542	-	3.58	2.90E-06	2.09E-07	0.00E+00	0.00E+00
HZMB Hong Kong Port PTI - Layby 9	SE_HKP05	AREA_POLY	812736	819571	6.4	2.98	-	-	9849	-	2.77	6.19E-07	8.74E-08	0.00E+00	0.00E+00

Remarks:

[1] Release height for emission inside bus terminus were made reference to Appendix 3.8 of the approved EIA Report AEIAR-237/2022 for Tung Chung Line Extension.

[2] Release height for emission outside bus terminus were made reference to Appendix C of Modeling Guidelines for Air Quality Impact Assessment issued by Santa Barbara County APCD in June 2020.

Average Vehicle Height for FBDD, FBSD, PLB and NFB are 4.6, 3.5, 3 and 3.5 m, respectively.

Release height = 0.5 x 1.7 x vehicle height. Daily traffic volume weighted average was applied to the vehicle height.

[3] Initial vertical dimension Szinit = 1.7 x vehicle height/ 2.15. Daily traffic volume weighted average was applied to the vehicle height.

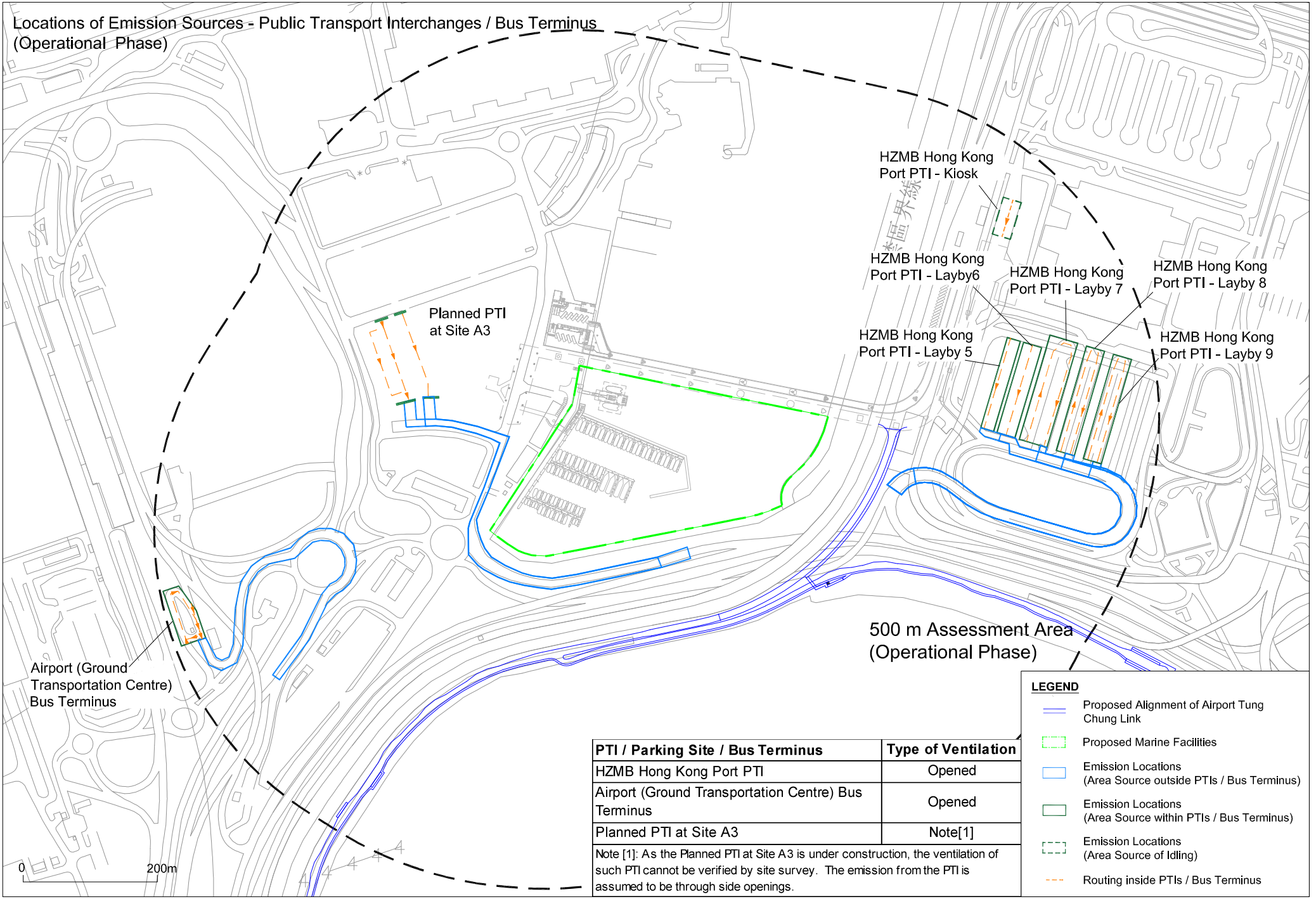
Emission Sources (Airport Island) Listing in AERMOD

No. of Coordinate	Source ID									
	SE_HKP01		SE_HKP02		SE_HKP03		SE_HKP04		SE_HKP05	
	X	Y	X	Y	X	Y	X	Y	X	Y
1	812741	819573	812736	819571	812736	819571	812736	819571	812736	819571
2	812754	819576	812745	819574	812745	819574	812745	819574	812745	819574
3	812765	819575	812754	819576	812754	819576	812754	819576	812754	819576
4	812775	819572	812765	819575	812765	819575	812765	819575	812765	819575
5	812787	819565	812775	819572	812775	819572	812775	819572	812775	819572
6	812817	819543	812787	819565	812787	819565	812787	819565	812787	819565
7	812839	819530	812817	819543	812817	819543	812817	819543	812817	819543
8	812860	819522	812839	819530	812839	819530	812839	819530	812839	819530
9	812919	819504	812860	819522	812860	819522	812860	819522	812860	819522
10	812986	819485	812919	819504	812919	819504	812919	819504	812919	819504
11	813006	819480	812986	819485	812986	819485	812986	819485	812986	819485
12	813017	819479	813006	819480	813006	819480	813006	819480	813006	819480
13	813027	819481	813017	819479	813017	819479	813017	819479	813017	819479
14	813038	819483	813027	819481	813027	819481	813027	819481	813027	819481
15	813048	819489	813038	819483	813038	819483	813038	819483	813038	819483
16	813057	819499	813048	819489	813048	819489	813048	819489	813048	819489
17	813065	819511	813057	819499	813057	819499	813057	819499	813057	819499
18	813070	819525	813065	819511	813065	819511	813065	819511	813065	819511
19	813071	819542	813070	819525	813070	819525	813070	819525	813070	819525
20	813067	819558	813071	819542	813071	819542	813071	819542	813071	819542
21	813059	819571	813067	819558	813067	819558	813067	819558	813067	819558
22	813047	819585	813059	819571	813059	819571	813059	819571	813059	819571
23	813025	819596	813047	819585	813044	819583	813047	819585	813047	819585
24	812896	819628	813025	819596	813024	819593	813024	819593	813024	819593
25	812890	819641	812896	819628	812934	819618	812975	819607	813016	819595
26	812838	819657	812890	819641	812937	819627	812978	819615	813018	819603
27	812836	819651	812868	819648	812927	819630	812965	819619	813006	819607
28	812845	819643	812865	819637	812920	819607	812958	819595	812998	819583
29	812881	819633	812881	819633	813006	819581	813006	819581	813006	819581
30	812881	819618	812881	819618	813019	819575	813019	819575	813019	819575
31	813006	819581	813006	819581	813032	819566	813032	819566	813032	819566
32	813019	819575	813019	819575	813042	819555	813042	819555	813042	819555
33	813032	819566	813032	819566	813047	819544	813047	819544	813047	819544
34	813042	819555	813042	819555	813047	819526	813047	819526	813047	819526
35	813047	819544	813047	819544	813038	819511	813038	819511	813038	819511
36	813047	819526	813047	819526	813029	819504	813029	819504	813029	819504
37	813038	819511	813038	819511	813019	819500	813019	819500	813019	819500
38	813029	819504	813029	819504	813007	819498	813007	819498	813007	819498
39	813019	819500	813019	819500	812996	819499	812996	819499	812996	819499
40	813007	819498	813007	819498	812924	819520	812924	819520	812924	819520
41	812996	819499	812996	819499	812866	819538	812866	819538	812866	819538
42	812924	819520	812924	819520	812848	819546	812848	819546	812848	819546
43	812866	819538	812866	819538	812832	819556	812832	819556	812832	819556
44	812848	819546	812848	819546	812803	819578	812803	819578	812803	819578
45	812832	819556	812832	819556	812780	819592	812780	819592	812780	819592
46	812803	819578	812803	819578	812768	819596	812768	819596	812768	819596
47	812780	819592	812780	819592	812757	819597	812757	819597	812757	819597
48	812768	819596	812768	819596	812741	819597	812741	819597	812741	819597
49	812757	819597	812757	819597	812729	819594	812729	819594	812729	819594
50	812738	819596	812741	819597	812719	819590	812719	819590	812719	819590
51			812729	819594	812709	819583	812709	819583	812709	819583
52			812719	819590	812699	819572	812699	819572	812699	819572
53			812709	819583	812720	819557	812720	819557	812720	819557
54			812699	819572	812728	819566	812728	819566	812728	819566
55			812720	819557						
56			812728	819566						

Hourly Emission Profile

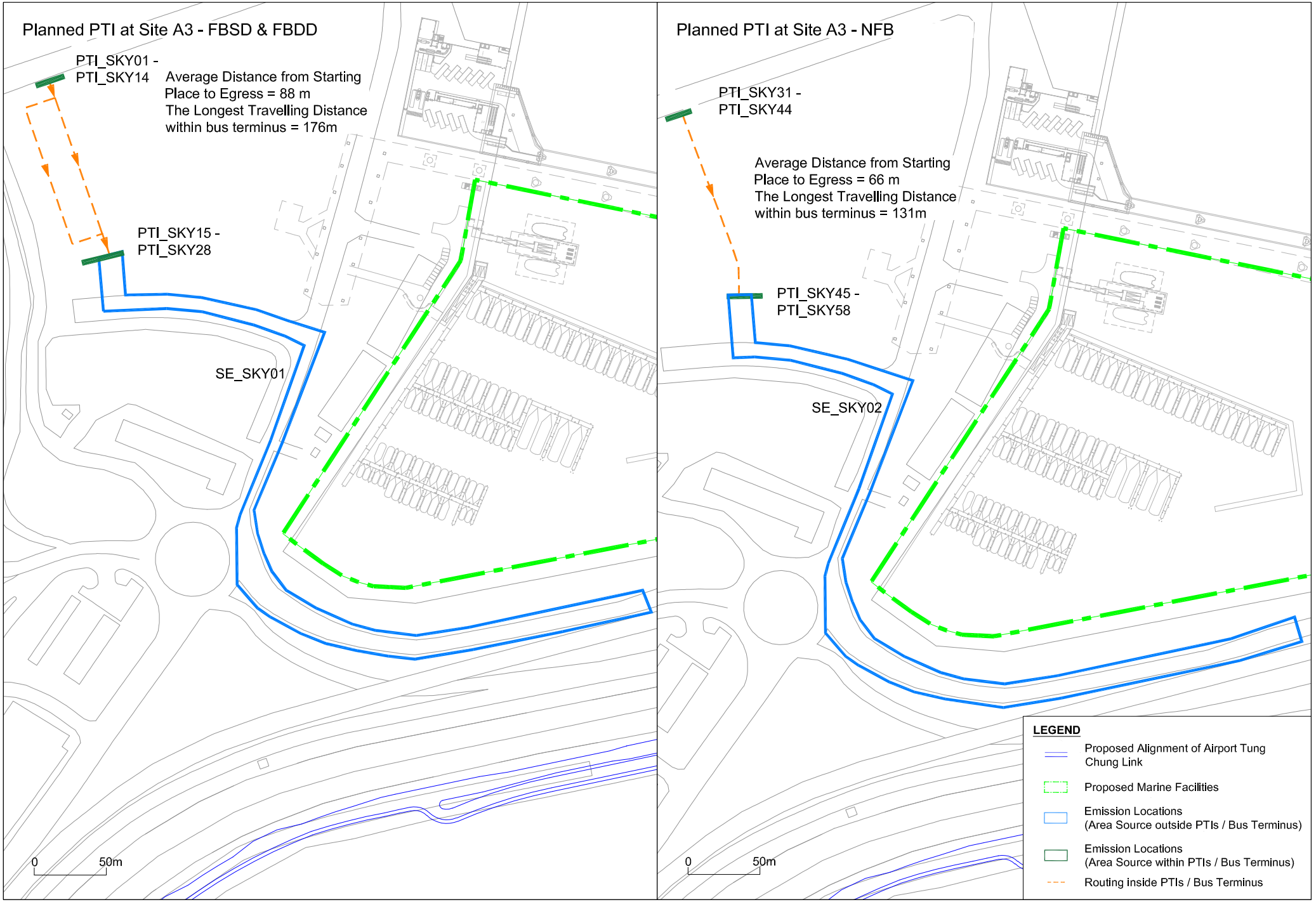
	NO											NO2										
Hour	**PTI_HKP01**	**PTI_HKP02**	**PTI_HKP03**	**PTI_HKP04**	**PTI_HKP05**	**PTI_HKP06**	**SE_HKP01**	**SE_HKP02**	**SE_HKP03**	**SE_HKP04**	**SE_HKP05**	**PTI_HKP01**	**PTI_HKP02**	**PTI_HKP03**	**PTI_HKP04**	**PTI_HKP05**	**PTI_HKP06**	**SE_HKP01**	**SE_HKP02**	**SE_HKP03**	**SE_HKP04**	**SE_HKP05**
00 - 01	0.02927	0.02927	0.01760	0.01879	0.02838	0.02869	0.04167	0.04167	0.04484	0.04484	0.04167	0.02926	0.02926	0.01761	0.02069	0.02837	0.02869	0.04167	0.04167	0.03958	0.03958	0.04167
01 - 02	0.02006	0.02006	0.01225	0.01252	0.01850	0.01326	0.04167	0.04167	0.03093	0.03093	0.04167	0.02004	0.02004	0.01250	0.01317	0.01848	0.01326	0.04167	0.04167	0.02768	0.02768	0.04167
02 - 03	0.01479	0.01479	0.00693	0.00741	0.01286	0.00882	0.04167	0.04167	0.02673	0.02673	0.04167	0.01477	0.01477	0.00696	0.00820	0.01283	0.00882	0.04167	0.04167	0.02342	0.02342	0.04167
03 - 04	0.01479	0.01479	0.00130	0.00200	0.01286	0.00882	0.04167	0.04167	0.00000	0.00000	0.04167	0.01477	0.01477	0.00129	0.00311	0.01283	0.00882	0.04167	0.04167	0.00000	0.00000	0.04167
04 - 05	0.01743	0.01743	0.01640	0.01650	0.01568	0.01103	0.04167	0.04167	0.04648	0.04648	0.04167	0.01741	0.01741	0.01668	0.01692	0.01565	0.01103	0.04167	0.04167	0.04184	0.04184	0.04167
05 - 06	0.02401	0.02401	0.02977	0.02935	0.02274	0.01987	0.04167	0.04167	0.11214	0.11214	0.04167	0.02399	0.02399	0.03003	0.02891	0.02272	0.01987	0.04167	0.04167	0.10408	0.10408	0.04167
06 - 07	0.03585	0.03585	0.04753	0.04753	0.03543	0.03310	0.04167	0.04167	0.17728	0.17728	0.04167	0.03585	0.03585	0.04893	0.04879	0.03543	0.03310	0.04167	0.04167	0.16941	0.16941	0.04167
07 - 08	0.05560	0.05560	0.05918	0.05872	0.05660	0.05961	0.04167	0.04167	0.12474	0.12474	0.04167	0.05561	0.05561	0.05940	0.05819	0.05661	0.05961	0.04167	0.04167	0.12198	0.12198	0.04167
08 - 09	0.06481	0.06481	0.03699	0.03741	0.06648	0.07064	0.04167	0.04167	0.03739	0.03739	0.04167	0.06483	0.06483	0.03708	0.03816	0.06650	0.07064	0.04167	0.04167	0.03393	0.03393	0.04167
09 - 10	0.05296	0.05296	0.03945	0.03977	0.05378	0.05518	0.04167	0.04167	0.03319	0.03319	0.04167	0.05297	0.05297	0.03925	0.04011	0.05379	0.05518	0.04167	0.04167	0.02967	0.02967	0.04167
10 - 11	0.04770	0.04770	0.04911	0.04905	0.04813	0.04857	0.04167	0.04167	0.02768	0.02768	0.04167	0.04770	0.04770	0.04896	0.04882	0.04814	0.04857	0.04167	0.04167	0.03142	0.03142	0.04167
11 - 12	0.04902	0.04902	0.05417	0.05391	0.04955	0.05077	0.04167	0.04167	0.02014	0.02014	0.04167	0.04902	0.04902	0.05395	0.05330	0.04955	0.05077	0.04167	0.04167	0.02466	0.02466	0.04167
12 - 13	0.05428	0.05428	0.05818	0.05776	0.05519	0.05741	0.04167	0.04167	0.02768	0.02768	0.04167	0.05429	0.05429	0.05796	0.05690	0.05520	0.05741	0.04167	0.04167	0.03142	0.03142	0.04167
13 - 14	0.05428	0.05428	0.05948	0.05901	0.05519	0.05739	0.04167	0.04167	0.02768	0.02768	0.04167	0.05429	0.05429	0.05925	0.05805	0.05520	0.05739	0.04167	0.04167	0.03142	0.03142	0.04167
14 - 15	0.05428	0.05428	0.05429	0.05403	0.05519	0.05739	0.04167	0.04167	0.02768	0.02768	0.04167	0.05429	0.05429	0.05410	0.05344	0.05520	0.05739	0.04167	0.04167	0.03142	0.03142	0.04167
15 - 16	0.04902	0.04902	0.05300	0.05278	0.04955	0.05077	0.04167	0.04167	0.02768	0.02768	0.04167	0.04902	0.04902	0.05282	0.05228	0.04955	0.05077	0.04167	0.04167	0.03142	0.03142	0.04167
16 - 17	0.05033	0.05033	0.05300	0.05278	0.05096	0.05077	0.04167	0.04167	0.02768	0.02768	0.04167	0.05034	0.05034	0.05282	0.05228	0.05097	0.05077	0.04167	0.04167	0.03142	0.03142	0.04167
17 - 18	0.05296	0.05296	0.05559	0.05527	0.05378	0.05518	0.04167	0.04167	0.02768	0.02768	0.04167	0.05297	0.05297	0.05539	0.05459	0.05379	0.05518	0.04167	0.04167	0.03142	0.03142	0.04167
18 - 19	0.05165	0.05165	0.05572	0.05540	0.05237	0.05298	0.04167	0.04167	0.03188	0.03188	0.04167	0.05166	0.05166	0.05579	0.05495	0.05238	0.05298	0.04167	0.04167	0.03567	0.03567	0.04167
19 - 20	0.04638	0.04638	0.05287	0.05266	0.04672	0.04857	0.04167	0.04167	0.02014	0.02014	0.04167	0.04639	0.04639	0.05266	0.05215	0.04673	0.04857	0.04167	0.04167	0.02466	0.02466	0.04167
20 - 21	0.04112	0.04112	0.05429	0.05403	0.04108	0.04195	0.04167	0.04167	0.02768	0.02768	0.04167	0.04112	0.04112	0.05410	0.05344	0.04108	0.04195	0.04167	0.04167	0.03142	0.03142	0.04167
21 - 22	0.04112	0.04112	0.04464	0.04476	0.04108	0.04195	0.04167	0.04167	0.03319	0.03319	0.04167	0.04112	0.04112	0.04439	0.04473	0.04108	0.04195	0.04167	0.04167	0.02967	0.02967	0.04167
22 - 23	0.04112	0.04112	0.03933	0.03965	0.04108	0.03974	0.04167	0.04167	0.02565	0.02565	0.04167	0.04112	0.04112	0.03910	0.03997	0.04108	0.03974	0.04167	0.04167	0.02291	0.02291	0.04167
23 - 24	0.03717	0.03717	0.04894	0.04889	0.03685	0.03754	0.04167	0.04167	0.01377	0.01377	0.04167	0.03717	0.03717	0.04899	0.04885	0.03684	0.03754	0.04167	0.04167	0.01952	0.01952	0.04167

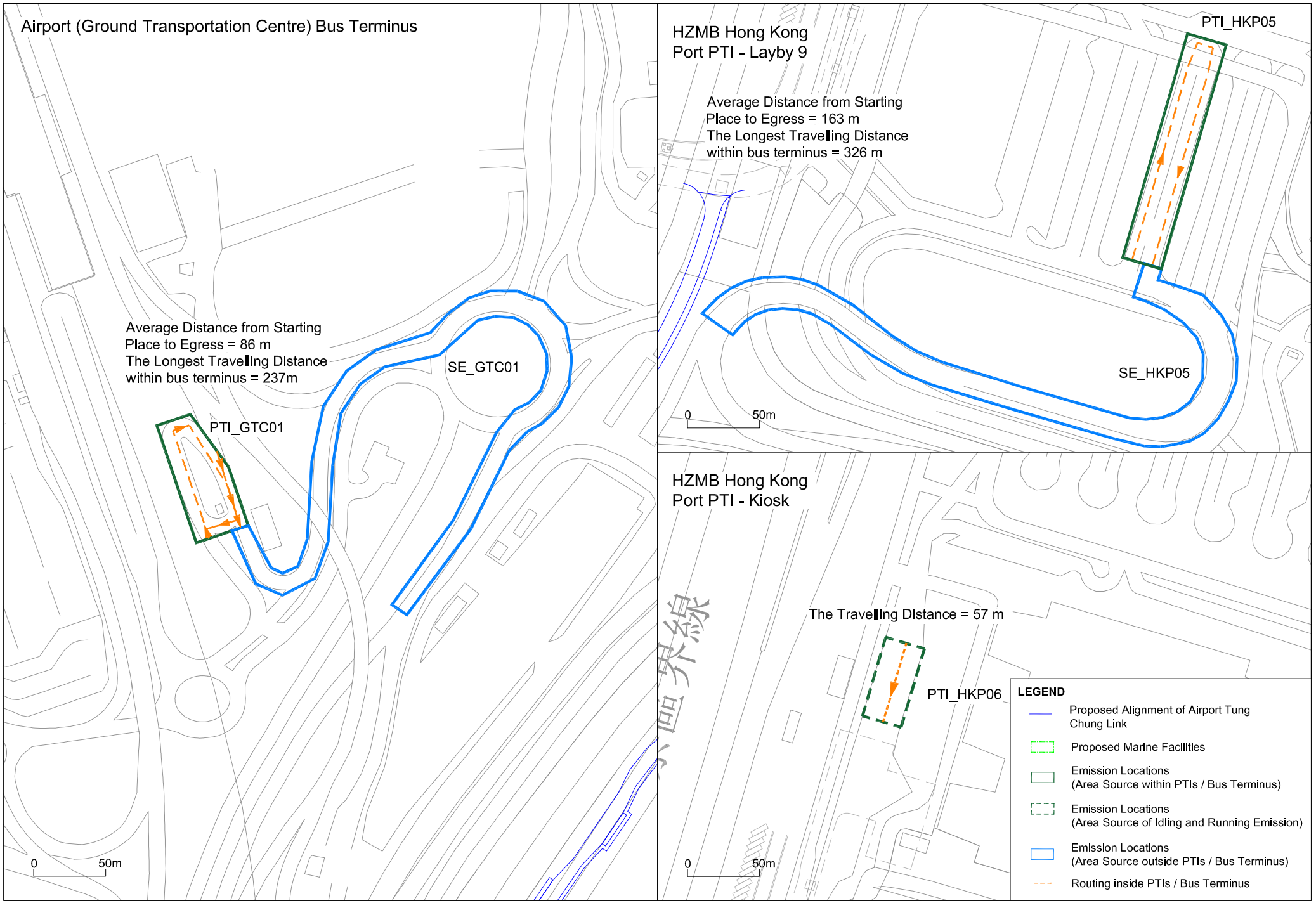
	RSP						FSP					
Hour	**PTI_HKP01**	**PTI_HKP02**	**PTI_HKP03**	**PTI_HKP04**	**PTI_HKP05**	**PTI_HKP06**	**PTI_HKP01**	**PTI_HKP02**	**PTI_HKP03**	**PTI_HKP04**	**PTI_HKP05**	**PTI_HKP06**
00 - 01	0.02736	0.02736	0.02043	0.02148	0.02736	0.02869	0.02736	0.02736	0.02043	0.02148	0.02736	0.02869
01 - 02	0.01672	0.01672	0.01420	0.01439	0.01672	0.01326	0.01672	0.01672	0.01421	0.01439	0.01672	0.01326
02 - 03	0.01064	0.01064	0.00786	0.00829	0.01064	0.00882	0.01064	0.01064	0.00786	0.00829	0.01064	0.00882
03 - 04	0.01064	0.01064	0.00157	0.00225	0.01064	0.00882	0.01064	0.01064	0.00157	0.00225	0.01064	0.00882
04 - 05	0.01368	0.01368	0.01892	0.01892	0.01368	0.01103	0.01368	0.01368	0.01892	0.01893	0.01368	0.01103
05 - 06	0.02128	0.02128	0.02200	0.02189	0.02128	0.01987	0.02128	0.02128	0.02200	0.02189	0.02128	0.01987
06 - 07	0.03495	0.03495	0.03941	0.03973	0.03495	0.03310	0.03495	0.03495	0.03942	0.03973	0.03495	0.03310
07 - 08	0.05775	0.05775	0.04558	0.04566	0.05775	0.05961	0.05775	0.05775	0.04558	0.04566	0.05775	0.05961
08 - 09	0.06839	0.06839	0.04407	0.04420	0.06839	0.07064	0.06839	0.06839	0.04407	0.04421	0.06839	0.07064
09 - 10	0.05471	0.05471	0.04715	0.04717	0.05471	0.05518	0.05471	0.05471	0.04715	0.04717	0.05471	0.05518
10 - 11	0.04863	0.04863	0.04715	0.04717	0.04863	0.04857	0.04863	0.04863	0.04715	0.04717	0.04863	0.04857
11 - 12	0.05015	0.05015	0.05344	0.05321	0.05015	0.05077	0.05015	0.05015	0.05344	0.05321	0.05015	0.05077
12 - 13	0.05623	0.05623	0.05815	0.05775	0.05623	0.05741	0.05623	0.05623	0.05815	0.05774	0.05623	0.05741
13 - 14	0.05623	0.05623	0.05972	0.05926	0.05623	0.05739	0.05623	0.05623	0.05972	0.05925	0.05623	0.05739
14 - 15	0.05623	0.05623	0.05344	0.05321	0.05623	0.05739	0.05623	0.05623	0.05344	0.05321	0.05623	0.05739
15 - 16	0.05015	0.05015	0.05187	0.05170	0.05015	0.05077	0.05015	0.05015	0.05186	0.05170	0.05015	0.05077
16 - 17	0.05167	0.05167	0.05187	0.05170	0.05167	0.05077	0.05167	0.05167	0.05186	0.05170	0.05167	0.05077
17 - 18	0.05471	0.05471	0.05501	0.05472	0.05471	0.05518	0.05471	0.05471	0.05501	0.05472	0.05471	0.05518
18 - 19	0.05319	0.05319	0.05507	0.05478	0.05319	0.05298	0.05319	0.05319	0.05507	0.05478	0.05319	0.05298
19 - 20	0.04711	0.04711	0.05187	0.05170	0.04711	0.04857	0.04711	0.04711	0.05186	0.05170	0.04711	0.04857
20 - 21	0.04103	0.04103	0.05344	0.05321	0.04103	0.04195	0.04103	0.04103	0.05344	0.05321	0.04103	0.04195
21 - 22	0.04103	0.04103	0.05344	0.05321	0.04103	0.04195	0.04103	0.04103	0.05344	0.05321	0.04103	0.04195
22 - 23	0.04103	0.04103	0.04715	0.04717	0.04103	0.03974	0.04103	0.04103	0.04715	0.04717	0.04103	0.03974
23 - 24	0.03647	0.03647	0.04721	0.04722	0.03647	0.03754	0.03647	0.03647	0.04721	0.04723	0.03647	0.03754



PTI / Parking Site / Bus Terminus	Type of Ventilation
HZMB Hong Kong Port PTI	Opened
Airport (Ground Transportation Centre) Bus Terminus	Opened
Planned PTI at Site A3	Note[1]

Note [1]: As the Planned PTI at Site A3 is under construction, the ventilation of such PTI cannot be verified by site survey. The emission from the PTI is assumed to be through side openings.


Planned PTI at Site A3 - FBSD & FBDD
PTI_SKY01 -
PTI_SKY14
Average Distance from Starting
Place to Egress = 88 m
The Longest Travelling Distance
within bus terminus = 176m
PTI_SKY15 -
PTI_SKY28
SE_SKY01
0
50m
Planned PTI at Site A3 - NFB
PTI_SKY31 -
PTI_SKY44
Average Distance from Starting
Place to Egress = 66 m
The Longest Travelling Distance
within bus terminus = 131m
PTI_SKY45 -
PTI_SKY58
SE_SKY02
0
50m
LEGEND
Proposed Alignment of Airport Tung Chung Link
Proposed Marine Facilities
Emission Locations
(Area Source outside PTIs / Bus Terminus)
Emission Locations
(Area Source within PTIs / Bus Terminus)
Routing inside PTIs / Bus Terminus


Airport (Ground Transportation Centre) Bus Terminus
Average Distance from Starting
Place to Egress = 86 m
The Longest Travelling Distance
within bus terminus = 237m
PTI_GTC01
SE_GTC01
0
50m
HZMB Hong Kong
Port PTI - Layby 9
Average Distance from Starting
Place to Egress = 163 m
The Longest Travelling Distance
within bus terminus = 326 m
PTI_HKP05
SE_HKP05
0
50m
HZMB Hong Kong
Port PTI - Kiosk
The Travelling Distance = 57 m
PTI_HKP06
0
50m
LEGEND
Proposed Alignment of Airport Tung Chung Link
Proposed Marine Facilities
Emission Locations
(Area Source within PTIs / Bus Terminus)
Emission Locations
(Area Source of Idling and Running Emission)
Emission Locations
(Area Source outside PTIs / Bus Terminus)
Routing inside PTIs / Bus Terminus


HZMB Hong Kong
Port PTI - Layby 5
Average Distance from Starting
Place to Egress = 70 m
The Longest Travelling Distance
within bus terminus = 140m
PTI_HKP01
SE_HKP01
0
50m
HZMB Hong Kong
Port PTI - Layby 6
Average Distance from Starting
Place to Egress = 70 m
The Longest Travelling Distance
within bus terminus = 140m
PTI_HKP02
SE_HKP02
0
50m
LEGEND
Proposed Alignment of Airport Tung Chung Link
Emission Locations (Area Source outside PTIs / Bus Terminus)
Emission Locations (Area Source within PTIs / Bus Terminus)
Routing inside PTIs / Bus Terminus
HZMB Hong Kong
Port PTI - Layby 7
Average Distance from Starting
Place to Egress = 163 m
The Longest Travelling Distance
within bus terminus = 326 m
PTI_HKP03
SE_HKP03
0
50m
HZMB Hong Kong
Port PTI - Layby 8
Average Distance from Starting
Place to Egress = 163 m
The Longest Travelling Distance
within bus terminus = 326 m
PTI_HKP04
SE_HKP04
0
50m