

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Emission Inventory for AERMOD Model - Emission Associated with Bus and Minibus Termini (Operation Phase – Year 2025)

Bus Terminus	Source ID	Bus Terminus	Type	X (m)	Y (m)	Release Height (mAG)	Initial Lateral Dimension (m)	Initial Vertical Dimension (m)	Operation Period (hr)	Area for PTI (for AREAPOLY)	No. of Vertices (for AREAPOLY)	Max. Hourly Emission Rate			
												RSP	FSP	TSP	
													(g/s) or (g/m ² /s)		
Emission inside Terminus															
Tuen Yee Street Car Park	PTI05	PTI05	AREAPOLY	814896.93	827076.94	0.0	-	-	24	18639.09	9	3.45859E-08	3.18175E-08	3.45859E-08	
				814848.38	827089.25	0.0	-	-							
				814786.92	827067.88	0.0	-	-							
				814759.09	827074.20	0.0	-	-							
				814754.75	827053.85	0.0	-	-							
				814752.22	826974.02	0.0	-	-							
				814758.84	826946.98	0.0	-	-							
				814892.56	826947.14	0.0	-	-							
Lung Mun Oasis	PTI06_1	PTI06	VOLUME	814526.97	827273.88	3.0	16.28	2.79	24	-	-	1.59884E-04	1.47493E-04	1.59884E-04	
				814540.79	827306.04	3.0	16.28	2.79							
				814554.60	827338.20	3.0	16.28	2.79							
				814568.42	827370.36	3.0	16.28	2.79							
				814582.23	827402.52	3.0	16.28	2.79							
				814596.05	827434.67	3.0	16.28	2.79							
Pierhead Garden	PTI07_1	PTI07	VOLUME	814607.01	825967.69	3.0	16.28	2.79	24	-	-	1.70958E-04	1.57701E-04	1.70958E-04	
				814640.69	825958.19	3.0	16.28	2.79							
				814674.38	825948.68	3.0	16.28	2.79							
				814708.06	825939.18	3.0	16.28	2.79							
				814741.75	825929.67	3.0	16.28	2.79							
				814597.51	825934.01	3.0	16.28	2.79							
				814631.19	825924.50	3.0	16.28	2.79							
				814664.87	825915.00	3.0	16.28	2.79							
				814698.56	825905.49	3.0	16.28	2.79							
				814732.24	825895.99	3.0	16.28	2.79							
Tuen Mun Ferry Pier Minibus Terminus	PTI08	PTI08	AREAPOLY	815000.00	826032.80	0.0	-	-	24	857.27	7	2.28573E-09	2.17447E-09	2.28573E-09	
				815005.10	826028.20	0.0	-	-							
				815025.69	825987.97	0.0	-	-							
				815041.16	825992.41	0.0	-	-							
				815023.13	826026.67	0.0	-	-							
				815008.46	826041.73	0.0	-	-							
Yau Oi (South) Bus Terminus	PTI09	PTI09	AREAPOLY	815256.32	827188.52	0.0	-	-	24	1092.85	8	1.22627E-07	1.13953E-07	1.22627E-07	
				815195.02	827192.15	0.0	-	-							
				815174.11	827195.10	0.0	-	-							
				815176.61	827186.85	0.0	-	-							
				815179.30	827182.22	0.0	-	-							
				815185.86	827180.67	0.0	-	-							
				815263.26	827176.45	0.0	-	-							
Tuen Mun Light Rail Depot Bus Terminus	PTI10	PTI10	AREAPOLY	814302.59	826907.44	0.0	-	-	24	3276.42	6	3.14364E-08	2.91022E-08	3.14364E-08	
				814334.62	827014.55	0.0	-	-							
				814360.50	827005.10	0.0	-	-							
				814347.49	826965.97	0.0	-	-							
				814343.43	826939.49	0.0	-	-							
CityBus Tuen Mun Depot	PTI12	PTI12	AREAPOLY	814886.77	826858.89	0.0	-	-	24	10780.05	9	1.29468E-07	1.19452E-07	1.29468E-07	
				814771.85	826858.89	0.0	-	-							
				814782.32	826830.76	0.0	-	-							
				814824.79	826746.94	0.0	-	-							
				814832.16	826733.18	0.0	-	-							
				814857.18	826743.26	0.0	-	-							
				814888.20	826753.07	0.0	-	-							
				814895.02	826852.26	0.0	-	-							
814886.55	826852.43	0.0	-	-											

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Emission Inventory for AERMOD Model - Emission Associated with Bus and Minibus Termini (Operation Phase – Year 2025)

Bus Terminus	Source ID	Bus Terminus	Type	X	Y	Release Height	Initial Lateral Dimension	Initial Vertical Dimension	Operation Period	Area for PTI	No. of Vertices	Max. Hourly Emission Rate		
				(m)	(m)							(mAG)	(m)	(m)
Emission inside Terminus														
KMB Tuen Mun Depot	PTI13	PTI13	AREAPOLY	814910.20	827074.58	0.0	-	-	24	19604.76	7	1.61992E-07	1.49279E-07	1.61992E-07
				814888.20	826753.07	0.0	-	-						
				814924.87	826779.01	0.0	-	-						
				814944.40	826799.92	0.0	-	-						
				814964.99	826857.09	0.0	-	-						
				814979.72	827047.67	0.0	-	-						
				814971.09	827060.47	0.0	-	-						
Tuen Mun Station Terminus	PTI34	PTI34	VOLUME	815327.25	828448.13	3.0	24.42	2.79	24	-	-	1.34581E-03	1.24422E-03	1.34581E-03
Tuen Mun Central Bus Terminus	PTI35	PTI35	VOLUME	815514.25	828095.62	3.0	22.09	2.79	24	-	-	2.03488E-03	1.88022E-03	2.03488E-03

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Calculation of Idling Emission Factor

Taxi

	Population %	Idling Emission Factor				Mass Factor	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[8]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro VI	58.8%		0.00E+00		0.00E+00	-	1.3				0.000E+00				0.000E+00
Euro V	39.3%		0.00E+00		0.00E+00										
Euro IV	1.2%		0.00E+00		0.00E+00										
Euro II/III	0.7%		0.00E+00		0.00E+00										

NFB7

	Population %	Idling Emission Factor				Mass Factor ^[7]	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[6]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro VI	52.7%		1.00E-02		1.00E-02	0.9	1.3				1.096E-03				1.096E-03
Euro V	43.6%		1.00E-01		1.00E-01										
Euro IV	3.7%		2.00E-01		2.00E-01										

NFB8

	Population %	Idling Emission Factor				Mass Factor ^[7]	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[6]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro VI	44.8%		1.00E-02		1.00E-02	1.0	1.3				1.371E-03				1.371E-03
Euro V	51.5%		1.00E-01		1.00E-01										
Euro IV	3.6%		2.00E-01		2.00E-01										

HGV7

	Population %	Idling Emission Factor				Mass Factor ^[7]	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[6]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro VI	43.2%		1.00E-02		1.00E-02	0.9	1.3				1.251E-03				1.251E-03
Euro V	53.8%		1.00E-01		1.00E-01										
Euro IV	3.0%		2.00E-01		2.00E-01										

HGV8

	Population %	Idling Emission Factor				Mass Factor ^[7]	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[6]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro VI	48.7%		1.00E-02		1.00E-02	1.0	1.3				1.284E-03				1.284E-03
Euro V	48.2%		1.00E-01		1.00E-01										
Euro IV	3.1%		2.00E-01		2.00E-01										

HGV9

	Population %	Idling Emission Factor				Mass Factor ^[7]	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[6]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro VI	35.6%		1.00E-02		1.00E-02	1.2	1.3				1.875E-03				1.875E-03
Euro V	60.2%		1.00E-01		1.00E-01										
Euro IV	4.2%		2.00E-01		2.00E-01										

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Calculation of Idling Emission Factor

PLB (Diesel)

	Population %	Idling Emission Factor				Mass Factor	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[2]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro VI	70.3%		2.00E-02		2.00E-02	-	1.3				4.427E-04				4.427E-04
Euro V	29.3%		2.00E-02		2.00E-02										
Euro IV	0.3%		1.60E-01		1.60E-01										

PLB (LPG)

	Population %	Idling Emission Factor				Mass Factor	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[5]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro V	73.7%		2.00E-02		2.00E-02	-	1.3				1.022E-03				1.022E-03
Euro IV	10.3%		1.60E-01		1.60E-01										
Euro III	16.0%		1.00E-01		1.00E-01										

FBDD

	Population %	Idling Emission Factor				Mass Factor ^[7]	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[6]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro VI	22.4%		1.00E-02		1.00E-02	1.2	1.3				2.253E-03				2.253E-03
Euro V	74.9%		1.00E-01		1.00E-01										
Euro IV	2.3%		2.00E-01		2.00E-01										
Euro III	0.4%		1.29E+00		1.29E+00										

Remarks

[1] Due to the lack of information, RSP cold idling emission factor was referenced to the corresponding hot idling emission factor.

[2] Reference made to Table 43 of VEADV.

[3] Reference made to the approved *Liantang / Heung Yuen Wai Boundary Control Point and Associated Works EIA Report*.

[4] All TSP (PM) emissions were assumed for RSP and FSP as a conservative approach.

[5] Due to the lack of information, RSP hot idling emission factor for PLB(LPG) was referenced to hot idling emission factor for PLB(Diesel).

[6] Reference made to Table 46 of VEADV.

[7] Reference made to Table 27 of VEADV.

[8] The idling emission factor of TAXI is assumed to be 0 as the running emission factor is 0 in EMFAC-HK.

**Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Tuen Yee Street Car Park (Non-Franchised Bus 6.4t-15t)**

Starting Emission

Starting Emission Factor (g/trip)																			
NO																			
NO ₂																			
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour	No. of Cold Starts of Non-Franchised Bus (6.4t-15t)																		
	Sitting Time (min)	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	0
0100 - 0200	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
0300 - 0400	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
0500 - 0600	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
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0800 - 0900	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
1000 - 1100	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	1	1	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
1300 - 1400	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	1	0	0	0	0	0	0	0	1	0	0	0
1500 - 1600	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
1700 - 1800	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	1	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
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2100 - 2200	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
2300 - 2400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Remark:
[1] Number of cold starts were derived based on on-site observations at the car park and operators' published schedules, while sitting time were obtained based on on-site observations at car park.

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (Non-Franchised Bus 6.4t-15t)

Running Emission

Average Travelling Distance within PTI =	450	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Non-Franchised Bus (6.4t-15t)									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	1			6.780E-02	6.230E-02	6.780E-02			3.051E-02	2.803E-02	3.051E-02
0800 - 0900	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	2			6.780E-02	6.230E-02	6.780E-02			6.102E-02	5.607E-02	6.102E-02
1200 - 1300	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	2			6.780E-02	6.230E-02	6.780E-02			6.102E-02	5.607E-02	6.102E-02
1500 - 1600	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	1			6.780E-02	6.230E-02	6.780E-02			3.051E-02	2.803E-02	3.051E-02
1900 - 2000	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	1			6.780E-02	6.230E-02	6.780E-02			3.051E-02	2.803E-02	3.051E-02
2100 - 2200	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			6.780E-02	6.230E-02	6.780E-02			0.000E+00	0.000E+00	0.000E+00

Idling Emission

Idling Time =	0	min
---------------	---	-----

Hour	Frequency	Non-Franchised Bus (6.4t-15t)									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			1.096E-03	1.096E-03	1.096E-03			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (Non-Franchised Bus 6.4t-15t)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			3.051E-02	2.803E-02	3.051E-02			8.475E-06	7.787E-06	8.475E-06
0800 - 0900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			6.102E-02	5.607E-02	6.102E-02			1.695E-05	1.557E-05	1.695E-05
1200 - 1300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			6.102E-02	5.607E-02	6.102E-02			1.695E-05	1.557E-05	1.695E-05
1500 - 1600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			3.051E-02	2.803E-02	3.051E-02			8.475E-06	7.787E-06	8.475E-06
1900 - 2000			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			3.051E-02	2.803E-02	3.051E-02			8.475E-06	7.787E-06	8.475E-06
2100 - 2200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2200 - 2300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2300 - 2400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (Non-Franchised Bus 15t-24t)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

No. of Cold Starts of Non-Franchised Bus (15t-24t)																		
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	1
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	1
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	1	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

Remark:

[1] Number of cold starts were derived based on on-site observations at the car park and operators' published schedules, while sitting time were obtained based on on-site observations at car park.

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (Non-Franchised Bus 15t-24t)

Running Emission

Average Travelling Distance within Car Park =	450	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Non-Franchised Bus (15t-24t)									
		Running Emission Factor (g/km-vehicle)					Running Emission Within Car Park (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	1			3.220E-01	2.962E-01	3.220E-01			1.449E-01	1.333E-01	1.449E-01
1000 - 1100	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	1			3.220E-01	2.962E-01	3.220E-01			1.449E-01	1.333E-01	1.449E-01
1800 - 1900	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	1			3.220E-01	2.962E-01	3.220E-01			1.449E-01	1.333E-01	1.449E-01
2000 - 2100	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			3.220E-01	2.962E-01	3.220E-01			0.000E+00	0.000E+00	0.000E+00

Idling Emission

Idling Time =	0	min
---------------	---	-----

Hour	Frequency	Non-Franchised Bus (15t-24t)									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			1.371E-03	1.371E-03	1.371E-03			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (Non-Franchised Bus 15t-24t)

Total Hourly Emission

Hour	Emission Within Car Park									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			1.449E-01	1.333E-01	1.449E-01			4.025E-05	3.702E-05	4.025E-05
1000 - 1100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			1.449E-01	1.333E-01	1.449E-01			4.025E-05	3.702E-05	4.025E-05
1800 - 1900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			1.449E-01	1.333E-01	1.449E-01			4.025E-05	3.702E-05	4.025E-05
2000 - 2100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2200 - 2300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2300 - 2400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (MGV<=15t)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Medium Goods Vehicle <=15t																	
	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	3	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
0900 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
1000 - 1100	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	2	0
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1200 - 1300	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
1300 - 1400	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	5	0	2	1	1	0
1800 - 1900	0	0	0	0	0	0	0	0	1	0	0	4	0	0	0	0	1	2
1900 - 2000	0	0	0	1	0	0	0	0	1	0	4	0	0	0	0	1	0	3
2000 - 2100	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
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 Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
[1] Number of cold starts were derived based on on-site observations at the car park and operators' published schedules, while sitting time were obtained based on on-site observations at car park.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (MGV<=15t)

Running Emission

Average Travelling Distance within Car Park =	450	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Medium Goods Vehicle <=15t									
		Running Emission Factor (g/km-vehicle)					Running Emission Within Car Park (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			8.380E-02	7.710E-02	8.380E-02			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			8.380E-02	7.710E-02	8.380E-02			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			8.380E-02	7.710E-02	8.380E-02			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			8.380E-02	7.710E-02	8.380E-02			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			8.380E-02	7.710E-02	8.380E-02			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			8.380E-02	7.710E-02	8.380E-02			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			8.380E-02	7.710E-02	8.380E-02			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	3			8.380E-02	7.710E-02	8.380E-02			1.131E-01	1.041E-01	1.131E-01
0800 - 0900	6			8.380E-02	7.710E-02	8.380E-02			2.263E-01	2.082E-01	2.263E-01
0900 - 1000	2			8.380E-02	7.710E-02	8.380E-02			7.542E-02	6.939E-02	7.542E-02
1000 - 1100	4			8.380E-02	7.710E-02	8.380E-02			1.508E-01	1.388E-01	1.508E-01
1100 - 1200	1			8.380E-02	7.710E-02	8.380E-02			3.771E-02	3.469E-02	3.771E-02
1200 - 1300	3			8.380E-02	7.710E-02	8.380E-02			1.131E-01	1.041E-01	1.131E-01
1300 - 1400	4			8.380E-02	7.710E-02	8.380E-02			1.508E-01	1.388E-01	1.508E-01
1400 - 1500	4			8.380E-02	7.710E-02	8.380E-02			1.508E-01	1.388E-01	1.508E-01
1500 - 1600	1			8.380E-02	7.710E-02	8.380E-02			3.771E-02	3.469E-02	3.771E-02
1600 - 1700	5			8.380E-02	7.710E-02	8.380E-02			1.885E-01	1.735E-01	1.885E-01
1700 - 1800	9			8.380E-02	7.710E-02	8.380E-02			3.394E-01	3.123E-01	3.394E-01
1800 - 1900	8			8.380E-02	7.710E-02	8.380E-02			3.017E-01	2.776E-01	3.017E-01
1900 - 2000	10			8.380E-02	7.710E-02	8.380E-02			3.771E-01	3.469E-01	3.771E-01
2000 - 2100	2			8.380E-02	7.710E-02	8.380E-02			7.542E-02	6.939E-02	7.542E-02
2100 - 2200	2			8.380E-02	7.710E-02	8.380E-02			7.542E-02	6.939E-02	7.542E-02
2200 - 2300	0			8.380E-02	7.710E-02	8.380E-02			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			8.380E-02	7.710E-02	8.380E-02			0.000E+00	0.000E+00	0.000E+00

Idling Emission

Idling Time =	0	min
---------------	---	-----

Hour	Frequency	Medium Goods Vehicle <=15t									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			1.251E-03	1.251E-03	1.251E-03			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (MGV<=15t)

Total Hourly Emission

Hour	Emission Within Car Park									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			1.131E-01	1.041E-01	1.131E-01			3.142E-05	2.891E-05	3.142E-05
0800 - 0900			2.263E-01	2.082E-01	2.263E-01			6.285E-05	5.782E-05	6.285E-05
0900 - 1000			7.542E-02	6.939E-02	7.542E-02			2.095E-05	1.927E-05	2.095E-05
1000 - 1100			1.508E-01	1.388E-01	1.508E-01			4.190E-05	3.855E-05	4.190E-05
1100 - 1200			3.771E-02	3.469E-02	3.771E-02			1.047E-05	9.637E-06	1.047E-05
1200 - 1300			1.131E-01	1.041E-01	1.131E-01			3.142E-05	2.891E-05	3.142E-05
1300 - 1400			1.508E-01	1.388E-01	1.508E-01			4.190E-05	3.855E-05	4.190E-05
1400 - 1500			1.508E-01	1.388E-01	1.508E-01			4.190E-05	3.855E-05	4.190E-05
1500 - 1600			3.771E-02	3.469E-02	3.771E-02			1.047E-05	9.637E-06	1.047E-05
1600 - 1700			1.885E-01	1.735E-01	1.885E-01			5.237E-05	4.819E-05	5.237E-05
1700 - 1800			3.394E-01	3.123E-01	3.394E-01			9.427E-05	8.674E-05	9.427E-05
1800 - 1900			3.017E-01	2.776E-01	3.017E-01			8.380E-05	7.710E-05	8.380E-05
1900 - 2000			3.771E-01	3.469E-01	3.771E-01			1.047E-04	9.637E-05	1.047E-04
2000 - 2100			7.542E-02	6.939E-02	7.542E-02			2.095E-05	1.927E-05	2.095E-05
2100 - 2200			7.542E-02	6.939E-02	7.542E-02			2.095E-05	1.927E-05	2.095E-05
2200 - 2300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2300 - 2400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (MGV 15t-24t)

Starting Emission

Starting Emission Factor (g/trip)																			
NO																			
NO ₂																			
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Medium Goods Vehicle 15t-24t																	
	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	3	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1
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	2
1300 - 1400	0	0	0	0	0	0	0	0	1	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	1
1500 - 1600	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1
1900 - 2000	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	1	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

Remark:

[1] Number of cold starts were derived based on on-site observations at the car park and operators' published schedules, while sitting time were obtained based on on-site observations at car park.

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (MGV 15t-24t)

Running Emission

Average Travelling Distance within PTI =	450	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Medium Goods Vehicle 15t-24t									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	3			1.764E-01	1.623E-01	1.764E-01			2.381E-01	2.191E-01	2.381E-01
0800 - 0900	3			1.764E-01	1.623E-01	1.764E-01			2.381E-01	2.191E-01	2.381E-01
0900 - 1000	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	2			1.764E-01	1.623E-01	1.764E-01			1.588E-01	1.461E-01	1.588E-01
1300 - 1400	1			1.764E-01	1.623E-01	1.764E-01			7.938E-02	7.303E-02	7.938E-02
1400 - 1500	1			1.764E-01	1.623E-01	1.764E-01			7.938E-02	7.303E-02	7.938E-02
1500 - 1600	3			1.764E-01	1.623E-01	1.764E-01			2.381E-01	2.191E-01	2.381E-01
1600 - 1700	3			1.764E-01	1.623E-01	1.764E-01			2.381E-01	2.191E-01	2.381E-01
1700 - 1800	1			1.764E-01	1.623E-01	1.764E-01			7.938E-02	7.303E-02	7.938E-02
1800 - 1900	3			1.764E-01	1.623E-01	1.764E-01			2.381E-01	2.191E-01	2.381E-01
1900 - 2000	4			1.764E-01	1.623E-01	1.764E-01			3.175E-01	2.921E-01	3.175E-01
2000 - 2100	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			1.764E-01	1.623E-01	1.764E-01			0.000E+00	0.000E+00	0.000E+00

Idling Emission

Idling Time =	0	min
---------------	---	-----

Hour	Frequency	Medium Goods Vehicle 15t-24t									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			1.284E-03	1.284E-03	1.284E-03			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (MGV 15t-24t)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			2.381E-01	2.191E-01	2.381E-01			6.615E-05	6.086E-05	6.615E-05
0800 - 0900			2.381E-01	2.191E-01	2.381E-01			6.615E-05	6.086E-05	6.615E-05
0900 - 1000			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			1.588E-01	1.461E-01	1.588E-01			4.410E-05	4.057E-05	4.410E-05
1300 - 1400			7.938E-02	7.303E-02	7.938E-02			2.205E-05	2.029E-05	2.205E-05
1400 - 1500			7.938E-02	7.303E-02	7.938E-02			2.205E-05	2.029E-05	2.205E-05
1500 - 1600			2.381E-01	2.191E-01	2.381E-01			6.615E-05	6.086E-05	6.615E-05
1600 - 1700			2.381E-01	2.191E-01	2.381E-01			6.615E-05	6.086E-05	6.615E-05
1700 - 1800			7.938E-02	7.303E-02	7.938E-02			2.205E-05	2.029E-05	2.205E-05
1800 - 1900			2.381E-01	2.191E-01	2.381E-01			6.615E-05	6.086E-05	6.615E-05
1900 - 2000			3.175E-01	2.921E-01	3.175E-01			8.820E-05	8.115E-05	8.820E-05
2000 - 2100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2200 - 2300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2300 - 2400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (HGV >24t)

Starting Emission

	Starting Emission Factor (g/trip)																	
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour	No. of Cold Starts of Heavy Goods Vehicle >24t																	
Sitting Time (min)	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	1	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0700 - 0800	0	0	0	0	1	0	0	0	1	0	0	0	0	5	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0
0900 - 1000	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	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	1	0	0	0	0	0	0	1
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
1400 - 1500	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0
1500 - 1600	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	1	0	0
1600 - 1700	0	0	0	0	0	0	0	1	0	0	1	0	0	8	3	0	0	0
1700 - 1800	0	0	1	0	0	0	0	0	0	0	2	0	5	0	2	3	2	0
1800 - 1900	0	0	0	0	0	0	0	1	0	0	1	11	0	0	0	3	1	1
1900 - 2000	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	4
2000 - 2100	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	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	2	0	0	0	0	0	0	0	0	0	1
2300 - 2400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
[1] Number of cold starts were derived based on on-site observations at the car park and operators' published schedules, while sitting time were obtained based on on-site observations at car park.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (HGV >24t)

Running Emission

Average Travelling Distance within Car Park =	450	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Heavy Goods Vehicle >24t									
		Running Emission Factor (g/km-vehicle)					Running Emission Within Car Park (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			2.161E-01	1.988E-01	2.161E-01			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			2.161E-01	1.988E-01	2.161E-01			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			2.161E-01	1.988E-01	2.161E-01			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			2.161E-01	1.988E-01	2.161E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	1			2.161E-01	1.988E-01	2.161E-01			9.724E-02	8.946E-02	9.724E-02
0500 - 0600	1			2.161E-01	1.988E-01	2.161E-01			9.724E-02	8.946E-02	9.724E-02
0600 - 0700	1			2.161E-01	1.988E-01	2.161E-01			9.724E-02	8.946E-02	9.724E-02
0700 - 0800	7			2.161E-01	1.988E-01	2.161E-01			6.807E-01	6.262E-01	6.807E-01
0800 - 0900	4			2.161E-01	1.988E-01	2.161E-01			3.890E-01	3.578E-01	3.890E-01
0900 - 1000	4			2.161E-01	1.988E-01	2.161E-01			3.890E-01	3.578E-01	3.890E-01
1000 - 1100	0			2.161E-01	1.988E-01	2.161E-01			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	2			2.161E-01	1.988E-01	2.161E-01			1.945E-01	1.789E-01	1.945E-01
1200 - 1300	0			2.161E-01	1.988E-01	2.161E-01			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	5			2.161E-01	1.988E-01	2.161E-01			4.862E-01	4.473E-01	4.862E-01
1400 - 1500	5			2.161E-01	1.988E-01	2.161E-01			4.862E-01	4.473E-01	4.862E-01
1500 - 1600	4			2.161E-01	1.988E-01	2.161E-01			3.890E-01	3.578E-01	3.890E-01
1600 - 1700	13			2.161E-01	1.988E-01	2.161E-01			1.264E+00	1.163E+00	1.264E+00
1700 - 1800	15			2.161E-01	1.988E-01	2.161E-01			1.459E+00	1.342E+00	1.459E+00
1800 - 1900	18			2.161E-01	1.988E-01	2.161E-01			1.750E+00	1.610E+00	1.750E+00
1900 - 2000	6			2.161E-01	1.988E-01	2.161E-01			5.835E-01	5.368E-01	5.835E-01
2000 - 2100	2			2.161E-01	1.988E-01	2.161E-01			1.945E-01	1.789E-01	1.945E-01
2100 - 2200	0			2.161E-01	1.988E-01	2.161E-01			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	3			2.161E-01	1.988E-01	2.161E-01			2.917E-01	2.684E-01	2.917E-01
2300 - 2400	0			2.161E-01	1.988E-01	2.161E-01			0.000E+00	0.000E+00	0.000E+00

Idling Emission

Idling Time =	0	min
---------------	---	-----

Hour	Frequency	Heavy Goods Vehicle >24t									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			1.875E-03	1.875E-03	1.875E-03			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Yee Street Car Park (HGV >24t)

Total Hourly Emission

Hour	Emission Within Car Park									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			9.724E-02	8.946E-02	9.724E-02			2.701E-05	2.485E-05	2.701E-05
0500 - 0600			9.724E-02	8.946E-02	9.724E-02			2.701E-05	2.485E-05	2.701E-05
0600 - 0700			9.724E-02	8.946E-02	9.724E-02			2.701E-05	2.485E-05	2.701E-05
0700 - 0800			6.807E-01	6.262E-01	6.807E-01			1.891E-04	1.739E-04	1.891E-04
0800 - 0900			3.890E-01	3.578E-01	3.890E-01			1.080E-04	9.940E-05	1.080E-04
0900 - 1000			3.890E-01	3.578E-01	3.890E-01			1.080E-04	9.940E-05	1.080E-04
1000 - 1100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			1.945E-01	1.789E-01	1.945E-01			5.402E-05	4.970E-05	5.402E-05
1200 - 1300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			4.862E-01	4.473E-01	4.862E-01			1.351E-04	1.242E-04	1.351E-04
1400 - 1500			4.862E-01	4.473E-01	4.862E-01			1.351E-04	1.242E-04	1.351E-04
1500 - 1600			3.890E-01	3.578E-01	3.890E-01			1.080E-04	9.940E-05	1.080E-04
1600 - 1700			1.264E+00	1.163E+00	1.264E+00			3.512E-04	3.230E-04	3.512E-04
1700 - 1800			1.459E+00	1.342E+00	1.459E+00			4.052E-04	3.727E-04	4.052E-04
1800 - 1900			1.750E+00	1.610E+00	1.750E+00			4.862E-04	4.473E-04	4.862E-04
1900 - 2000			5.835E-01	5.368E-01	5.835E-01			1.621E-04	1.491E-04	1.621E-04
2000 - 2100			1.945E-01	1.789E-01	1.945E-01			5.402E-05	4.970E-05	5.402E-05
2100 - 2200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2200 - 2300			2.917E-01	2.684E-01	2.917E-01			8.104E-05	7.455E-05	8.104E-05
2300 - 2400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (TAXI)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (TAXI)

Running Emission

Average Travelling Distance within PTI =	442	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Taxi									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	19			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	1			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	2			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	3			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	1			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	2			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	5			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	15			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	14			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	13			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	8			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	9			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	13			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	8			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	8			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	5			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	8			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	14			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	16			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	27			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	11			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	16			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	8			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	3			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Idling Emission

Idling Time =	2	min
---------------	---	-----

Hour	Frequency	Taxi									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	9			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	1			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	11			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	11			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	2			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	1			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	2			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	6			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	5			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	2			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	1			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	3			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	5			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	7			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	17			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	7			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	14			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	5			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (TAXI)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2200 - 2300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2300 - 2400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	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	1
0100 - 0200	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	4	13	2	1	0	0	0	0	0	1	0	0	1	0	0	0	1
0800 - 0900	0	2	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	3	1	0	0	0	0	1	0	0	0	0	0	0	1	1
1100 - 1200	0	0	1	4	1	0	1	0	0	0	0	0	0	0	0	0	0	2
1200 - 1300	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1300 - 1400	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
1400 - 1500	0	0	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0	1
1500 - 1600	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1700 - 1800	0	2	1	0	0	0	0	0	1	0	1	0	1	2	0	0	0	1
1800 - 1900	0	1	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
2000 - 2100	0	1	0	1	0	0	0	0	2	3	0	0	0	0	0	0	0	1
2100 - 2200	0	1	3	0	0	0	0	0	1	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
2300 - 2400	0	0	0	0	0	0	2	1	1	0	0	0	0	0	1	0	0	0

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	442	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	2			2.984E-01	2.745E-01	2.984E-01			2.638E-01	2.427E-01	2.638E-01
0100 - 0200	2			2.984E-01	2.745E-01	2.984E-01			2.638E-01	2.427E-01	2.638E-01
0200 - 0300	2			2.984E-01	2.745E-01	2.984E-01			2.638E-01	2.427E-01	2.638E-01
0300 - 0400	1			2.984E-01	2.745E-01	2.984E-01			1.319E-01	1.213E-01	1.319E-01
0400 - 0500	3			2.984E-01	2.745E-01	2.984E-01			3.957E-01	3.640E-01	3.957E-01
0500 - 0600	2			2.984E-01	2.745E-01	2.984E-01			2.638E-01	2.427E-01	2.638E-01
0600 - 0700	9			2.984E-01	2.745E-01	2.984E-01			1.187E+00	1.092E+00	1.187E+00
0700 - 0800	25			2.984E-01	2.745E-01	2.984E-01			3.297E+00	3.033E+00	3.297E+00
0800 - 0900	10			2.984E-01	2.745E-01	2.984E-01			1.319E+00	1.213E+00	1.319E+00
0900 - 1000	6			2.984E-01	2.745E-01	2.984E-01			7.914E-01	7.280E-01	7.914E-01
1000 - 1100	7			2.984E-01	2.745E-01	2.984E-01			9.232E-01	8.493E-01	9.232E-01
1100 - 1200	9			2.984E-01	2.745E-01	2.984E-01			1.187E+00	1.092E+00	1.187E+00
1200 - 1300	4			2.984E-01	2.745E-01	2.984E-01			5.276E-01	4.853E-01	5.276E-01
1300 - 1400	6			2.984E-01	2.745E-01	2.984E-01			7.914E-01	7.280E-01	7.914E-01
1400 - 1500	8			2.984E-01	2.745E-01	2.984E-01			1.055E+00	9.706E-01	1.055E+00
1500 - 1600	6			2.984E-01	2.745E-01	2.984E-01			7.914E-01	7.280E-01	7.914E-01
1600 - 1700	3			2.984E-01	2.745E-01	2.984E-01			3.957E-01	3.640E-01	3.957E-01
1700 - 1800	11			2.984E-01	2.745E-01	2.984E-01			1.451E+00	1.335E+00	1.451E+00
1800 - 1900	7			2.984E-01	2.745E-01	2.984E-01			9.232E-01	8.493E-01	9.232E-01
1900 - 2000	6			2.984E-01	2.745E-01	2.984E-01			7.914E-01	7.280E-01	7.914E-01
2000 - 2100	15			2.984E-01	2.745E-01	2.984E-01			1.978E+00	1.820E+00	1.978E+00
2100 - 2200	8			2.984E-01	2.745E-01	2.984E-01			1.055E+00	9.706E-01	1.055E+00
2200 - 2300	6			2.984E-01	2.745E-01	2.984E-01			7.914E-01	7.280E-01	7.914E-01
2300 - 2400	5			2.984E-01	2.745E-01	2.984E-01			6.595E-01	6.066E-01	6.595E-01

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0100 - 0200	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0600 - 0700	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0700 - 0800	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
0800 - 0900	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
0900 - 1000	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
1000 - 1100	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
1300 - 1400	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
1400 - 1500	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
1500 - 1600	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
1600 - 1700	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
1800 - 1900	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
1900 - 2000	4			2.253E-03	2.253E-03	2.253E-03			9.013E-03	9.013E-03	9.013E-03
2000 - 2100	7			2.253E-03	2.253E-03	2.253E-03			1.577E-02	1.577E-02	1.577E-02
2100 - 2200	3			2.253E-03	2.253E-03	2.253E-03			6.760E-03	6.760E-03	6.760E-03
2200 - 2300	4			2.253E-03	2.253E-03	2.253E-03			9.013E-03	9.013E-03	9.013E-03
2300 - 2400	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (Franchised Bus DD)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			2.705E-01	2.494E-01	2.705E-01			7.515E-05	6.928E-05	7.515E-05
0100 - 0200			2.728E-01	2.517E-01	2.728E-01			7.578E-05	6.991E-05	7.578E-05
0200 - 0300			2.728E-01	2.517E-01	2.728E-01			7.578E-05	6.991E-05	7.578E-05
0300 - 0400			1.364E-01	1.258E-01	1.364E-01			3.789E-05	3.495E-05	3.789E-05
0400 - 0500			4.092E-01	3.775E-01	4.092E-01			1.137E-04	1.049E-04	1.137E-04
0500 - 0600			2.705E-01	2.494E-01	2.705E-01			7.515E-05	6.928E-05	7.515E-05
0600 - 0700			1.225E+00	1.130E+00	1.225E+00			3.404E-04	3.140E-04	3.404E-04
0700 - 0800			3.405E+00	3.141E+00	3.405E+00			9.460E-04	8.726E-04	9.460E-04
0800 - 0900			1.359E+00	1.254E+00	1.359E+00			3.776E-04	3.483E-04	3.776E-04
0900 - 1000			8.161E-01	7.528E-01	8.161E-01			2.267E-04	2.091E-04	2.267E-04
1000 - 1100			9.548E-01	8.808E-01	9.548E-01			2.652E-04	2.447E-04	2.652E-04
1100 - 1200			1.228E+00	1.133E+00	1.228E+00			3.410E-04	3.146E-04	3.410E-04
1200 - 1300			5.433E-01	5.011E-01	5.433E-01			1.509E-04	1.392E-04	1.509E-04
1300 - 1400			8.161E-01	7.528E-01	8.161E-01			2.267E-04	2.091E-04	2.267E-04
1400 - 1500			1.089E+00	1.004E+00	1.089E+00			3.025E-04	2.790E-04	3.025E-04
1500 - 1600			8.161E-01	7.528E-01	8.161E-01			2.267E-04	2.091E-04	2.267E-04
1600 - 1700			4.092E-01	3.775E-01	4.092E-01			1.137E-04	1.049E-04	1.137E-04
1700 - 1800			1.496E+00	1.380E+00	1.496E+00			4.155E-04	3.832E-04	4.155E-04
1800 - 1900			9.503E-01	8.763E-01	9.503E-01			2.640E-04	2.434E-04	2.640E-04
1900 - 2000			8.094E-01	7.460E-01	8.094E-01			2.248E-04	2.072E-04	2.248E-04
2000 - 2100			2.030E+00	1.872E+00	2.030E+00			5.639E-04	5.199E-04	5.639E-04
2100 - 2200			1.084E+00	9.999E-01	1.084E+00			3.012E-04	2.778E-04	3.012E-04
2200 - 2300			8.094E-01	7.460E-01	8.094E-01			2.248E-04	2.072E-04	2.248E-04
2300 - 2400			6.820E-01	6.292E-01	6.820E-01			1.894E-04	1.748E-04	1.894E-04

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (PLB)

Starting Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] =	1.33
--	------

	Starting Emission Factor (g/trip)																	
NO																		
NO₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour	No. of Cold Starts of Public Light Bus (LPG)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
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
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
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
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
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
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
0600 - 0700	0.00	0.00	0.43	0.00	0.43	0.86	0.43	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	0.86	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	0.43	0.00	0.00	0.00	0.00	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	0.43	0.43	0.00	0.00	0.00	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	0.43	0.86	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	0.86	0.43	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	0.43	0.43	0.00	0.00	0.00	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	0.86	0.00	0.00	0.00	0.00	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	0.86	0.00	0.00	0.00	0.00	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	0.43	0.43	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	0.86	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	0.43	0.86	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	0.43	0.86	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	0.43	1.29	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	0.43	0.00	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	0.43	0.00	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	0.43	0.00	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	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
 [1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.
 [2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2024 data of EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (PLB)

Running Emission

Average Travelling Distance within PTI =	442	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Public Light Bus (Diesel + LPG)									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	5			3.350E-02	3.082E-02	3.350E-02			7.404E-02	6.812E-02	7.404E-02
0700 - 0800	3			3.350E-02	3.082E-02	3.350E-02			4.443E-02	4.087E-02	4.443E-02
0800 - 0900	2			3.350E-02	3.082E-02	3.350E-02			2.962E-02	2.725E-02	2.962E-02
0900 - 1000	2			3.350E-02	3.082E-02	3.350E-02			2.962E-02	2.725E-02	2.962E-02
1000 - 1100	3			3.350E-02	3.082E-02	3.350E-02			4.443E-02	4.087E-02	4.443E-02
1100 - 1200	3			3.350E-02	3.082E-02	3.350E-02			4.443E-02	4.087E-02	4.443E-02
1200 - 1300	2			3.350E-02	3.082E-02	3.350E-02			2.962E-02	2.725E-02	2.962E-02
1300 - 1400	3			3.350E-02	3.082E-02	3.350E-02			4.443E-02	4.087E-02	4.443E-02
1400 - 1500	2			3.350E-02	3.082E-02	3.350E-02			2.962E-02	2.725E-02	2.962E-02
1500 - 1600	2			3.350E-02	3.082E-02	3.350E-02			2.962E-02	2.725E-02	2.962E-02
1600 - 1700	2			3.350E-02	3.082E-02	3.350E-02			2.962E-02	2.725E-02	2.962E-02
1700 - 1800	3			3.350E-02	3.082E-02	3.350E-02			4.443E-02	4.087E-02	4.443E-02
1800 - 1900	3			3.350E-02	3.082E-02	3.350E-02			4.443E-02	4.087E-02	4.443E-02
1900 - 2000	4			3.350E-02	3.082E-02	3.350E-02			5.923E-02	5.449E-02	5.923E-02
2000 - 2100	1			3.350E-02	3.082E-02	3.350E-02			1.481E-02	1.362E-02	1.481E-02
2100 - 2200	1			3.350E-02	3.082E-02	3.350E-02			1.481E-02	1.362E-02	1.481E-02
2200 - 2300	1			3.350E-02	3.082E-02	3.350E-02			1.481E-02	1.362E-02	1.481E-02
2300 - 2400	1			3.350E-02	3.082E-02	3.350E-02			1.481E-02	1.362E-02	1.481E-02

Idling Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] =	1.3
Idling Time for Non-terminating Public Light Buses =	1 min

Hour	Frequency	Public Light Bus (Diesel)										Public Light Bus (LPG)										
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)					Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)					
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	
0000 - 0100	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0.57			4.427E-04	4.427E-04	4.427E-04			2.527E-04	2.527E-04	2.527E-04	0.43			1.022E-03	1.022E-03	1.022E-03			5.834E-04	5.834E-04	5.834E-04
0800 - 0900	0.57			4.427E-04	4.427E-04	4.427E-04			2.527E-04	2.527E-04	2.527E-04	0.43			1.022E-03	1.022E-03	1.022E-03			5.834E-04	5.834E-04	5.834E-04
0900 - 1000	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0.57			4.427E-04	4.427E-04	4.427E-04			2.527E-04	2.527E-04	2.527E-04	0.43			1.022E-03	1.022E-03	1.022E-03			5.834E-04	5.834E-04	5.834E-04
1400 - 1500	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00

Remark:

[1] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2024 data of EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (PLB)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			8.096E-02	7.503E-02	8.096E-02			2.249E-05	2.084E-05	2.249E-05
0700 - 0800			4.803E-02	4.447E-02	4.803E-02			1.334E-05	1.235E-05	1.334E-05
0800 - 0900			3.184E-02	2.946E-02	3.184E-02			8.843E-06	8.185E-06	8.843E-06
0900 - 1000			3.238E-02	3.001E-02	3.238E-02			8.995E-06	8.337E-06	8.995E-06
1000 - 1100			4.857E-02	4.502E-02	4.857E-02			1.349E-05	1.250E-05	1.349E-05
1100 - 1200			4.857E-02	4.502E-02	4.857E-02			1.349E-05	1.250E-05	1.349E-05
1200 - 1300			3.238E-02	3.001E-02	3.238E-02			8.995E-06	8.337E-06	8.995E-06
1300 - 1400			4.803E-02	4.447E-02	4.803E-02			1.334E-05	1.235E-05	1.334E-05
1400 - 1500			3.238E-02	3.001E-02	3.238E-02			8.995E-06	8.337E-06	8.995E-06
1500 - 1600			3.238E-02	3.001E-02	3.238E-02			8.995E-06	8.337E-06	8.995E-06
1600 - 1700			3.238E-02	3.001E-02	3.238E-02			8.995E-06	8.337E-06	8.995E-06
1700 - 1800			4.857E-02	4.502E-02	4.857E-02			1.349E-05	1.250E-05	1.349E-05
1800 - 1900			4.857E-02	4.502E-02	4.857E-02			1.349E-05	1.250E-05	1.349E-05
1900 - 2000			6.477E-02	6.002E-02	6.477E-02			1.799E-05	1.667E-05	1.799E-05
2000 - 2100			1.619E-02	1.501E-02	1.619E-02			4.498E-06	4.168E-06	4.498E-06
2100 - 2200			1.619E-02	1.501E-02	1.619E-02			4.498E-06	4.168E-06	4.498E-06
2200 - 2300			1.619E-02	1.501E-02	1.619E-02			4.498E-06	4.168E-06	4.498E-06
2300 - 2400			1.619E-02	1.501E-02	1.619E-02			4.498E-06	4.168E-06	4.498E-06

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Pierhead Garden (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	1	2	2	4	1	1	0	0	0	0	0	0	0	0	0	0	6
0100 - 0200	0	1	1	2	1	0	0	2	0	0	0	0	0	0	0	0	0	2
0200 - 0300	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
0300 - 0400	0	0	0	0	0	0	0	2	3	3	0	0	0	0	0	0	0	1
0400 - 0500	0	0	1	0	0	0	0	2	0	0	1	0	0	0	0	0	0	2
0500 - 0600	0	0	2	1	1	1	0	0	0	0	3	4	0	0	0	0	0	3
0600 - 0700	0	2	8	7	3	0	1	0	0	0	1	0	4	0	0	0	0	4
0700 - 0800	0	3	13	5	1	1	0	4	1	0	0	0	2	3	0	0	0	4
0800 - 0900	0	9	9	2	1	0	1	6	2	0	0	0	0	0	2	0	0	5
0900 - 1000	0	4	4	3	0	0	3	4	5	1	0	0	0	0	0	0	0	4
1000 - 1100	0	2	8	1	2	2	1	9	2	0	0	0	0	0	0	1	1	4
1100 - 1200	0	2	6	0	1	1	1	11	2	2	1	0	0	0	0	0	0	3
1200 - 1300	0	1	8	5	0	0	1	7	1	0	1	0	1	0	0	0	0	7
1300 - 1400	0	2	2	6	1	0	4	8	3	1	0	0	0	0	0	0	1	3
1400 - 1500	0	2	3	6	1	3	2	7	7	1	0	0	0	0	0	2	0	2
1500 - 1600	0	0	9	4	0	1	3	8	1	0	0	0	0	0	0	0	0	0
1600 - 1700	0	2	5	5	3	0	0	8	6	0	0	0	0	1	0	0	0	1
1700 - 1800	0	3	4	4	1	0	1	9	4	2	1	0	0	0	0	0	0	1
1800 - 1900	0	6	4	3	1	2	2	9	7	2	1	2	0	0	0	0	0	0
1900 - 2000	0	2	5	3	5	2	1	11	3	2	2	1	0	0	0	0	0	2
2000 - 2100	0	0	8	1	0	3	2	12	3	2	0	0	2	0	0	0	0	1
2100 - 2200	0	1	6	3	1	2	2	7	11	1	1	0	1	0	0	0	0	2
2200 - 2300	0	2	9	2	1	1	0	13	3	0	0	0	1	0	0	0	0	0
2300 - 2400	0	2	3	2	0	2	5	7	2	0	0	0	0	0	0	0	0	3

Remark:
[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

**Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Pierhead Garden (Franchised Bus DD)**

Cold Idling Emission

Idling Time for Terminating Buses =	2	min
Max. Idling Time for Adjusting Starting Emission =	1	min

Hour	Double-Deck Franchised Bus											Double-Deck Franchised Bus												
	Frequency	Cold Idling Emission Factor (g/min)					Cold Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)						
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP		
0000 - 0100	7			2.253E-03	2.253E-03	2.253E-03			3.155E-02	3.155E-02	3.155E-02	10				2.253E-03	2.253E-03	2.253E-03				4.507E-02	4.507E-02	4.507E-02
0100 - 0200	4			2.253E-03	2.253E-03	2.253E-03			1.803E-02	1.803E-02	1.803E-02	5				2.253E-03	2.253E-03	2.253E-03				2.253E-02	2.253E-02	2.253E-02
0200 - 0300	4			2.253E-03	2.253E-03	2.253E-03			1.803E-02	1.803E-02	1.803E-02	1				2.253E-03	2.253E-03	2.253E-03				4.507E-03	4.507E-03	4.507E-03
0300 - 0400	9			2.253E-03	2.253E-03	2.253E-03			4.056E-02	4.056E-02	4.056E-02	0				2.253E-03	2.253E-03	2.253E-03				0.000E+00	0.000E+00	0.000E+00
0400 - 0500	5			2.253E-03	2.253E-03	2.253E-03			2.253E-02	2.253E-02	2.253E-02	1				2.253E-03	2.253E-03	2.253E-03				4.507E-03	4.507E-03	4.507E-03
0500 - 0600	10			2.253E-03	2.253E-03	2.253E-03			4.507E-02	4.507E-02	4.507E-02	5				2.253E-03	2.253E-03	2.253E-03				2.253E-02	2.253E-02	2.253E-02
0600 - 0700	10			2.253E-03	2.253E-03	2.253E-03			4.507E-02	4.507E-02	4.507E-02	20				2.253E-03	2.253E-03	2.253E-03				9.013E-02	9.013E-02	9.013E-02
0700 - 0800	14			2.253E-03	2.253E-03	2.253E-03			6.309E-02	6.309E-02	6.309E-02	23				2.253E-03	2.253E-03	2.253E-03				1.037E-01	1.037E-01	1.037E-01
0800 - 0900	16			2.253E-03	2.253E-03	2.253E-03			7.210E-02	7.210E-02	7.210E-02	21				2.253E-03	2.253E-03	2.253E-03				9.464E-02	9.464E-02	9.464E-02
0900 - 1000	17			2.253E-03	2.253E-03	2.253E-03			7.661E-02	7.661E-02	7.661E-02	11				2.253E-03	2.253E-03	2.253E-03				4.957E-02	4.957E-02	4.957E-02
1000 - 1100	18			2.253E-03	2.253E-03	2.253E-03			8.112E-02	8.112E-02	8.112E-02	15				2.253E-03	2.253E-03	2.253E-03				6.760E-02	6.760E-02	6.760E-02
1100 - 1200	20			2.253E-03	2.253E-03	2.253E-03			9.013E-02	9.013E-02	9.013E-02	10				2.253E-03	2.253E-03	2.253E-03				4.507E-02	4.507E-02	4.507E-02
1200 - 1300	18			2.253E-03	2.253E-03	2.253E-03			8.112E-02	8.112E-02	8.112E-02	14				2.253E-03	2.253E-03	2.253E-03				6.309E-02	6.309E-02	6.309E-02
1300 - 1400	20			2.253E-03	2.253E-03	2.253E-03			9.013E-02	9.013E-02	9.013E-02	11				2.253E-03	2.253E-03	2.253E-03				4.957E-02	4.957E-02	4.957E-02
1400 - 1500	21			2.253E-03	2.253E-03	2.253E-03			9.464E-02	9.464E-02	9.464E-02	15				2.253E-03	2.253E-03	2.253E-03				6.760E-02	6.760E-02	6.760E-02
1500 - 1600	12			2.253E-03	2.253E-03	2.253E-03			5.408E-02	5.408E-02	5.408E-02	14				2.253E-03	2.253E-03	2.253E-03				6.309E-02	6.309E-02	6.309E-02
1600 - 1700	16			2.253E-03	2.253E-03	2.253E-03			7.210E-02	7.210E-02	7.210E-02	15				2.253E-03	2.253E-03	2.253E-03				6.760E-02	6.760E-02	6.760E-02
1700 - 1800	18			2.253E-03	2.253E-03	2.253E-03			8.112E-02	8.112E-02	8.112E-02	12				2.253E-03	2.253E-03	2.253E-03				5.408E-02	5.408E-02	5.408E-02
1800 - 1900	23			2.253E-03	2.253E-03	2.253E-03			1.037E-01	1.037E-01	1.037E-01	16				2.253E-03	2.253E-03	2.253E-03				7.210E-02	7.210E-02	7.210E-02
1900 - 2000	22			2.253E-03	2.253E-03	2.253E-03			9.914E-02	9.914E-02	9.914E-02	17				2.253E-03	2.253E-03	2.253E-03				7.661E-02	7.661E-02	7.661E-02
2000 - 2100	22			2.253E-03	2.253E-03	2.253E-03			9.914E-02	9.914E-02	9.914E-02	12				2.253E-03	2.253E-03	2.253E-03				5.408E-02	5.408E-02	5.408E-02
2100 - 2200	25			2.253E-03	2.253E-03	2.253E-03			1.127E-01	1.127E-01	1.127E-01	13				2.253E-03	2.253E-03	2.253E-03				5.858E-02	5.858E-02	5.858E-02
2200 - 2300	17			2.253E-03	2.253E-03	2.253E-03			7.661E-02	7.661E-02	7.661E-02	15				2.253E-03	2.253E-03	2.253E-03				6.760E-02	6.760E-02	6.760E-02
2300 - 2400	17			2.253E-03	2.253E-03	2.253E-03			7.661E-02	7.661E-02	7.661E-02	9				2.253E-03	2.253E-03	2.253E-03				4.056E-02	4.056E-02	4.056E-02

Average Distance from Starting Place to PTI Egress =	208	m
Average Spread Distance outside PTI =	492	m

Hour	Idling Emission (g)					Emission for Adjusting Starting Emission (g)					Adjusted Starting Emission Within PTI (g)					Adjusted Starting Emission Outside PTI (g)					Starting Emission Rate Outside PTI (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			7.661E-02	7.661E-02	7.661E-02			3.831E-02	3.831E-02	3.831E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			4.056E-02	4.056E-02	4.056E-02			2.028E-02	2.028E-02	2.028E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			2.253E-02	2.253E-02	2.253E-02			1.127E-02	1.127E-02	1.127E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			4.056E-02	4.056E-02	4.056E-02			2.028E-02	2.028E-02	2.028E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			2.704E-02	2.704E-02	2.704E-02			1.352E-02	1.352E-02	1.352E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			6.760E-02	6.760E-02	6.760E-02			3.380E-02	3.380E-02	3.380E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			1.352E-01	1.352E-01	1.352E-01			6.760E-02	6.760E-02	6.760E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			1.667E-01	1.667E-01	1.667E-01			8.337E-02	8.337E-02	8.337E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			1.667E-01	1.667E-01	1.667E-01			8.337E-02	8.337E-02	8.337E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			1.262E-01	1.262E-01	1.262E-01			6.309E-02	6.309E-02	6.309E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			1.487E-01	1.487E-01	1.487E-01			7.436E-02	7.436E-02	7.436E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			1.352E-01	1.352E-01	1.352E-01			6.760E-02	6.760E-02	6.760E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			1.442E-01	1.442E-01	1.442E-01			7.210E-02	7.210E-02	7.210E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			1.397E-01	1.397E-01	1.397E-01			6.985E-02	6.985E-02	6.985E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			1.622E-01	1.622E-01	1.622E-01			8.112E-02	8.112E-02	8.112E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			1.172E-01	1.172E-01	1.172E-01			5.858E-02	5.858E-02	5.858E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			1.397E-01	1.397E-01	1.397E-01			6.985E-02	6.985E-02	6.985E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			1.352E-01	1.352E-01	1.352E-01			6.760E-02	6.760E-02	6.760E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			1.758E-01	1.758E-01	1.758E-01			8.788E-02	8.788E-02	8.788E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			1.758E-01	1.758E-01	1.758E-01			8.788E-02	8.788E-02	8.788E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			1.532E-01	1.532E-01	1.532E-01			7.661E-02	7.661E-02	7.															

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Pierhead Garden (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	416	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	27			2.984E-01	2.745E-01	2.984E-01			3.352E+00	3.083E+00	3.352E+00
0100 - 0200	10			2.984E-01	2.745E-01	2.984E-01			1.241E+00	1.142E+00	1.241E+00
0200 - 0300	5			2.984E-01	2.745E-01	2.984E-01			6.207E-01	5.710E-01	6.207E-01
0300 - 0400	10			2.984E-01	2.745E-01	2.984E-01			1.241E+00	1.142E+00	1.241E+00
0400 - 0500	6			2.984E-01	2.745E-01	2.984E-01			7.448E-01	6.852E-01	7.448E-01
0500 - 0600	16			2.984E-01	2.745E-01	2.984E-01			1.986E+00	1.827E+00	1.986E+00
0600 - 0700	33			2.984E-01	2.745E-01	2.984E-01			4.096E+00	3.768E+00	4.096E+00
0700 - 0800	37			2.984E-01	2.745E-01	2.984E-01			4.593E+00	4.225E+00	4.593E+00
0800 - 0900	39			2.984E-01	2.745E-01	2.984E-01			4.841E+00	4.453E+00	4.841E+00
0900 - 1000	34			2.984E-01	2.745E-01	2.984E-01			4.221E+00	3.883E+00	4.221E+00
1000 - 1100	37			2.984E-01	2.745E-01	2.984E-01			4.593E+00	4.225E+00	4.593E+00
1100 - 1200	35			2.984E-01	2.745E-01	2.984E-01			4.345E+00	3.997E+00	4.345E+00
1200 - 1300	35			2.984E-01	2.745E-01	2.984E-01			4.345E+00	3.997E+00	4.345E+00
1300 - 1400	35			2.984E-01	2.745E-01	2.984E-01			4.345E+00	3.997E+00	4.345E+00
1400 - 1500	37			2.984E-01	2.745E-01	2.984E-01			4.593E+00	4.225E+00	4.593E+00
1500 - 1600	29			2.984E-01	2.745E-01	2.984E-01			3.600E+00	3.312E+00	3.600E+00
1600 - 1700	33			2.984E-01	2.745E-01	2.984E-01			4.096E+00	3.768E+00	4.096E+00
1700 - 1800	36			2.984E-01	2.745E-01	2.984E-01			4.469E+00	4.111E+00	4.469E+00
1800 - 1900	48			2.984E-01	2.745E-01	2.984E-01			5.958E+00	5.481E+00	5.958E+00
1900 - 2000	47			2.984E-01	2.745E-01	2.984E-01			5.834E+00	5.367E+00	5.834E+00
2000 - 2100	42			2.984E-01	2.745E-01	2.984E-01			5.214E+00	4.796E+00	5.214E+00
2100 - 2200	44			2.984E-01	2.745E-01	2.984E-01			5.462E+00	5.024E+00	5.462E+00
2200 - 2300	38			2.984E-01	2.745E-01	2.984E-01			4.717E+00	4.339E+00	4.717E+00
2300 - 2400	31			2.984E-01	2.745E-01	2.984E-01			3.848E+00	3.540E+00	3.848E+00

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	10			2.253E-03	2.253E-03	2.253E-03			2.253E-02	2.253E-02	2.253E-02
0100 - 0200	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0200 - 0300	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0400 - 0500	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0600 - 0700	3			2.253E-03	2.253E-03	2.253E-03			6.760E-03	6.760E-03	6.760E-03
0700 - 0800	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
0900 - 1000	6			2.253E-03	2.253E-03	2.253E-03			1.352E-02	1.352E-02	1.352E-02
1000 - 1100	4			2.253E-03	2.253E-03	2.253E-03			9.013E-03	9.013E-03	9.013E-03
1100 - 1200	5			2.253E-03	2.253E-03	2.253E-03			1.127E-02	1.127E-02	1.127E-02
1200 - 1300	3			2.253E-03	2.253E-03	2.253E-03			6.760E-03	6.760E-03	6.760E-03
1300 - 1400	4			2.253E-03	2.253E-03	2.253E-03			9.013E-03	9.013E-03	9.013E-03
1400 - 1500	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
1500 - 1600	3			2.253E-03	2.253E-03	2.253E-03			6.760E-03	6.760E-03	6.760E-03
1600 - 1700	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
1700 - 1800	6			2.253E-03	2.253E-03	2.253E-03			1.352E-02	1.352E-02	1.352E-02
1800 - 1900	9			2.253E-03	2.253E-03	2.253E-03			2.028E-02	2.028E-02	2.028E-02
1900 - 2000	8			2.253E-03	2.253E-03	2.253E-03			1.803E-02	1.803E-02	1.803E-02
2000 - 2100	8			2.253E-03	2.253E-03	2.253E-03			1.803E-02	1.803E-02	1.803E-02
2100 - 2200	6			2.253E-03	2.253E-03	2.253E-03			1.352E-02	1.352E-02	1.352E-02
2200 - 2300	6			2.253E-03	2.253E-03	2.253E-03			1.352E-02	1.352E-02	1.352E-02
2300 - 2400	5			2.253E-03	2.253E-03	2.253E-03			1.127E-02	1.127E-02	1.127E-02

**Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Pierhead Garden (Franchised Bus DD)**

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			3.451E+00	3.182E+00	3.451E+00			9.585E-04	8.840E-04	9.585E-04
0100 - 0200			1.284E+00	1.185E+00	1.284E+00			3.567E-04	3.291E-04	3.567E-04
0200 - 0300			6.432E-01	5.935E-01	6.432E-01			1.787E-04	1.649E-04	1.787E-04
0300 - 0400			1.284E+00	1.185E+00	1.284E+00			3.567E-04	3.291E-04	3.567E-04
0400 - 0500			7.718E-01	7.122E-01	7.718E-01			2.144E-04	1.978E-04	2.144E-04
0500 - 0600			2.056E+00	1.897E+00	2.056E+00			5.711E-04	5.269E-04	5.711E-04
0600 - 0700			4.238E+00	3.910E+00	4.238E+00			1.177E-03	1.086E-03	1.177E-03
0700 - 0800			4.760E+00	4.392E+00	4.760E+00			1.322E-03	1.220E-03	1.322E-03
0800 - 0900			5.012E+00	4.625E+00	5.012E+00			1.392E-03	1.285E-03	1.392E-03
0900 - 1000			4.360E+00	4.022E+00	4.360E+00			1.211E-03	1.117E-03	1.211E-03
1000 - 1100			4.751E+00	4.383E+00	4.751E+00			1.320E-03	1.217E-03	1.320E-03
1100 - 1200			4.491E+00	4.143E+00	4.491E+00			1.248E-03	1.151E-03	1.248E-03
1200 - 1300			4.496E+00	4.148E+00	4.496E+00			1.249E-03	1.152E-03	1.249E-03
1300 - 1400			4.493E+00	4.145E+00	4.493E+00			1.248E-03	1.152E-03	1.248E-03
1400 - 1500			4.757E+00	4.390E+00	4.757E+00			1.322E-03	1.219E-03	1.322E-03
1500 - 1600			3.724E+00	3.435E+00	3.724E+00			1.034E-03	9.543E-04	1.034E-03
1600 - 1700			4.241E+00	3.913E+00	4.241E+00			1.178E-03	1.087E-03	1.178E-03
1700 - 1800			4.618E+00	4.260E+00	4.618E+00			1.283E-03	1.183E-03	1.283E-03
1800 - 1900			6.154E+00	5.677E+00	6.154E+00			1.710E-03	1.577E-03	1.710E-03
1900 - 2000			6.028E+00	5.561E+00	6.028E+00			1.674E-03	1.545E-03	1.674E-03
2000 - 2100			5.385E+00	4.967E+00	5.385E+00			1.496E-03	1.380E-03	1.496E-03
2100 - 2200			5.647E+00	5.209E+00	5.647E+00			1.569E-03	1.447E-03	1.569E-03
2200 - 2300			4.875E+00	4.497E+00	4.875E+00			1.354E-03	1.249E-03	1.354E-03
2300 - 2400			3.977E+00	3.668E+00	3.977E+00			1.105E-03	1.019E-03	1.105E-03

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Ferry Pier Minibus Terminus (PLB)

Starting Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] = 1.33

Starting Emission Factor (g/trip)

NO																			
NO₂																			
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	

No. of Cold Starts of Public Light Bus (Diesel)

Hour Sitting Time (min)	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
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
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
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
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
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
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	0.57
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
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
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	0.00	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	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	0.00	0.00	0.00	0.00	0.00	0.57
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
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
1300 - 1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.57	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	0.00	0.00	0.00	0.57	0.57	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	0.00	0.00	0.57	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	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	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	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	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	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2024 data of EMFAC-HK.

Total Starting Emission (g)

NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Tuen Mun Ferry Pier Minibus Terminus (PLB)

Starting Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] =	1.33
--	------

Starting Emission Factor (g/trip)																		
NO																		
NO₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Public Light Bus (LPG)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
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
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
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
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
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
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	0.43
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
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
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	0.00	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	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	0.00	0.00	0.00	0.00	0.00	0.43
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
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
1300 - 1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.43	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	0.00	0.00	0.00	0.43	0.43	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	0.00	0.00	0.43	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	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	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	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	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	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
 [1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.
 [2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2024 data of EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Tuen Mun Ferry Pier Minibus Terminus (PLB)

Running Emission

Average Travelling Distance within PTI =	64	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Public Light Bus (Diesel + LPG)									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	1			3.350E-02	3.082E-02	3.350E-02			2.144E-03	1.973E-03	2.144E-03
0600 - 0700	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	1			3.350E-02	3.082E-02	3.350E-02			2.144E-03	1.973E-03	2.144E-03
1000 - 1100	1			3.350E-02	3.082E-02	3.350E-02			2.144E-03	1.973E-03	2.144E-03
1100 - 1200	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	2			3.350E-02	3.082E-02	3.350E-02			4.288E-03	3.945E-03	4.288E-03
1400 - 1500	2			3.350E-02	3.082E-02	3.350E-02			4.288E-03	3.945E-03	4.288E-03
1500 - 1600	1			3.350E-02	3.082E-02	3.350E-02			2.144E-03	1.973E-03	2.144E-03
1600 - 1700	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00

Idling Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] =	1.3
Idling Time for Non-terminating Buses =	1 min

Hour	Frequency	Public Light Bus (Diesel)										Frequency	Public Light Bus (LPG)									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)						Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0.57			4.427E-04	4.427E-04	4.427E-04			2.527E-04	2.527E-04	2.527E-04	0.43			1.022E-03	1.022E-03	1.022E-03			5.834E-04	5.834E-04	5.834E-04
1000 - 1100	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00

Remark:

[1] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2024 data of EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Ferry Pier Minibus Terminus (PLB)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			3.527E-03	3.355E-03	3.527E-03			9.797E-07	9.321E-07	9.797E-07
0600 - 0700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			2.980E-03	2.809E-03	2.980E-03			8.279E-07	7.802E-07	8.279E-07
1000 - 1100			3.527E-03	3.355E-03	3.527E-03			9.797E-07	9.321E-07	9.797E-07
1100 - 1200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			7.054E-03	6.711E-03	7.054E-03			1.959E-06	1.864E-06	1.959E-06
1400 - 1500			7.054E-03	6.711E-03	7.054E-03			1.959E-06	1.864E-06	1.959E-06
1500 - 1600			3.527E-03	3.355E-03	3.527E-03			9.797E-07	9.321E-07	9.797E-07
1600 - 1700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2200 - 2300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2300 - 2400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Yau Oi (South) Bus Terminus (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	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	1	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
0700 - 0800	0	0	4	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0800 - 0900	0	2	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
0900 - 1000	0	2	2	1	0	0	0	2	0	1	0	0	0	0	0	0	0	0
1000 - 1100	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0
1200 - 1300	0	1	0	1	1	1	2	2	0	0	0	0	0	0	0	0	0	1
1300 - 1400	0	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0
1400 - 1500	0	1	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	2	1	0	0	0	2	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	4	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	3	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
1900 - 2000	0	2	3	1	0	0	0	0	1	0	2	2	0	0	0	0	0	0
2000 - 2100	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	1	0	0	2	1	0	0	0	0	0	0	0	0	0
2200 - 2300	0	1	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	0	0	0	0	0	2	1	0	1	0	0	0	0	0	0	0

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Yau Oi (South) Bus Terminus (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	102	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	2			2.984E-01	2.745E-01	2.984E-01			6.087E-02	5.600E-02	6.087E-02
0100 - 0200	3			2.984E-01	2.745E-01	2.984E-01			9.131E-02	8.400E-02	9.131E-02
0200 - 0300	2			2.984E-01	2.745E-01	2.984E-01			6.087E-02	5.600E-02	6.087E-02
0300 - 0400	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	1			2.984E-01	2.745E-01	2.984E-01			3.044E-02	2.800E-02	3.044E-02
0600 - 0700	4			2.984E-01	2.745E-01	2.984E-01			1.217E-01	1.120E-01	1.217E-01
0700 - 0800	13			2.984E-01	2.745E-01	2.984E-01			3.957E-01	3.640E-01	3.957E-01
0800 - 0900	10			2.984E-01	2.745E-01	2.984E-01			3.044E-01	2.800E-01	3.044E-01
0900 - 1000	9			2.984E-01	2.745E-01	2.984E-01			2.739E-01	2.520E-01	2.739E-01
1000 - 1100	4			2.984E-01	2.745E-01	2.984E-01			1.217E-01	1.120E-01	1.217E-01
1100 - 1200	3			2.984E-01	2.745E-01	2.984E-01			9.131E-02	8.400E-02	9.131E-02
1200 - 1300	10			2.984E-01	2.745E-01	2.984E-01			3.044E-01	2.800E-01	3.044E-01
1300 - 1400	6			2.984E-01	2.745E-01	2.984E-01			1.826E-01	1.680E-01	1.826E-01
1400 - 1500	5			2.984E-01	2.745E-01	2.984E-01			1.522E-01	1.400E-01	1.522E-01
1500 - 1600	5			2.984E-01	2.745E-01	2.984E-01			1.522E-01	1.400E-01	1.522E-01
1600 - 1700	4			2.984E-01	2.745E-01	2.984E-01			1.217E-01	1.120E-01	1.217E-01
1700 - 1800	7			2.984E-01	2.745E-01	2.984E-01			2.131E-01	1.960E-01	2.131E-01
1800 - 1900	7			2.984E-01	2.745E-01	2.984E-01			2.131E-01	1.960E-01	2.131E-01
1900 - 2000	14			2.984E-01	2.745E-01	2.984E-01			4.261E-01	3.920E-01	4.261E-01
2000 - 2100	3			2.984E-01	2.745E-01	2.984E-01			9.131E-02	8.400E-02	9.131E-02
2100 - 2200	4			2.984E-01	2.745E-01	2.984E-01			1.217E-01	1.120E-01	1.217E-01
2200 - 2300	9			2.984E-01	2.745E-01	2.984E-01			2.739E-01	2.520E-01	2.739E-01
2300 - 2400	7			2.984E-01	2.745E-01	2.984E-01			2.131E-01	1.960E-01	2.131E-01

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0100 - 0200	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0200 - 0300	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0300 - 0400	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0700 - 0800	6			2.253E-03	2.253E-03	2.253E-03			1.352E-02	1.352E-02	1.352E-02
0800 - 0900	4			2.253E-03	2.253E-03	2.253E-03			9.013E-03	9.013E-03	9.013E-03
0900 - 1000	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
1000 - 1100	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
1100 - 1200	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
1300 - 1400	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
1400 - 1500	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	3			2.253E-03	2.253E-03	2.253E-03			6.760E-03	6.760E-03	6.760E-03
2000 - 2100	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	4			2.253E-03	2.253E-03	2.253E-03			9.013E-03	9.013E-03	9.013E-03
2300 - 2400	3			2.253E-03	2.253E-03	2.253E-03			6.760E-03	6.760E-03	6.760E-03

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Yau Oi (South) Bus Terminus (Franchised Bus DD)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			6.763E-02	6.276E-02	6.763E-02			1.879E-05	1.743E-05	1.879E-05
0100 - 0200			1.026E-01	9.526E-02	1.026E-01			2.849E-05	2.646E-05	2.849E-05
0200 - 0300			6.763E-02	6.276E-02	6.763E-02			1.879E-05	1.743E-05	1.879E-05
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			3.494E-02	3.251E-02	3.494E-02			9.706E-06	9.029E-06	9.706E-06
0600 - 0700			1.375E-01	1.278E-01	1.375E-01			3.820E-05	3.549E-05	3.820E-05
0700 - 0800			4.407E-01	4.091E-01	4.407E-01			1.224E-04	1.136E-04	1.224E-04
0800 - 0900			3.404E-01	3.160E-01	3.404E-01			9.456E-05	8.779E-05	9.456E-05
0900 - 1000			3.122E-01	2.903E-01	3.122E-01			8.673E-05	8.064E-05	8.673E-05
1000 - 1100			1.375E-01	1.278E-01	1.375E-01			3.820E-05	3.549E-05	3.820E-05
1100 - 1200			1.048E-01	9.752E-02	1.048E-01			2.912E-05	2.709E-05	2.912E-05
1200 - 1300			3.472E-01	3.228E-01	3.472E-01			9.644E-05	8.967E-05	9.644E-05
1300 - 1400			2.074E-01	1.928E-01	2.074E-01			5.761E-05	5.355E-05	5.761E-05
1400 - 1500			1.747E-01	1.625E-01	1.747E-01			4.853E-05	4.515E-05	4.853E-05
1500 - 1600			1.747E-01	1.625E-01	1.747E-01			4.853E-05	4.515E-05	4.853E-05
1600 - 1700			1.398E-01	1.300E-01	1.398E-01			3.883E-05	3.612E-05	3.883E-05
1700 - 1800			2.446E-01	2.275E-01	2.446E-01			6.795E-05	6.321E-05	6.795E-05
1800 - 1900			2.446E-01	2.275E-01	2.446E-01			6.795E-05	6.321E-05	6.795E-05
1900 - 2000			4.824E-01	4.483E-01	4.824E-01			1.340E-04	1.245E-04	1.340E-04
2000 - 2100			1.048E-01	9.752E-02	1.048E-01			2.912E-05	2.709E-05	2.912E-05
2100 - 2200			1.398E-01	1.300E-01	1.398E-01			3.883E-05	3.612E-05	3.883E-05
2200 - 2300			3.055E-01	2.835E-01	3.055E-01			8.485E-05	7.876E-05	8.485E-05
2300 - 2400			2.378E-01	2.208E-01	2.378E-01			6.607E-05	6.133E-05	6.607E-05

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun LRT depot Bus Terminus (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour	No. of Cold Starts of Double-Deck Franchised Bus																	
	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	3	0	0	0	1	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	1	3	1	0	0	1	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	2	1	0	0	0	0	0	1	0	0	0	0
1700 - 1800	0	0	0	0	0	0	2	3	1	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	2	2	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 Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun LRT depot Bus Terminus (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	192	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	4			2.984E-01	2.745E-01	2.984E-01			2.292E-01	2.108E-01	2.292E-01
0700 - 0800	4			2.984E-01	2.745E-01	2.984E-01			2.292E-01	2.108E-01	2.292E-01
0800 - 0900	6			2.984E-01	2.745E-01	2.984E-01			3.438E-01	3.162E-01	3.438E-01
0900 - 1000	4			2.984E-01	2.745E-01	2.984E-01			2.292E-01	2.108E-01	2.292E-01
1000 - 1100	4			2.984E-01	2.745E-01	2.984E-01			2.292E-01	2.108E-01	2.292E-01
1100 - 1200	6			2.984E-01	2.745E-01	2.984E-01			3.438E-01	3.162E-01	3.438E-01
1200 - 1300	4			2.984E-01	2.745E-01	2.984E-01			2.292E-01	2.108E-01	2.292E-01
1300 - 1400	6			2.984E-01	2.745E-01	2.984E-01			3.438E-01	3.162E-01	3.438E-01
1400 - 1500	5			2.984E-01	2.745E-01	2.984E-01			2.865E-01	2.635E-01	2.865E-01
1500 - 1600	5			2.984E-01	2.745E-01	2.984E-01			2.865E-01	2.635E-01	2.865E-01
1600 - 1700	4			2.984E-01	2.745E-01	2.984E-01			2.292E-01	2.108E-01	2.292E-01
1700 - 1800	6			2.984E-01	2.745E-01	2.984E-01			3.438E-01	3.162E-01	3.438E-01
1800 - 1900	4			2.984E-01	2.745E-01	2.984E-01			2.292E-01	2.108E-01	2.292E-01
1900 - 2000	4			2.984E-01	2.745E-01	2.984E-01			2.292E-01	2.108E-01	2.292E-01
2000 - 2100	4			2.984E-01	2.745E-01	2.984E-01			2.292E-01	2.108E-01	2.292E-01
2100 - 2200	4			2.984E-01	2.745E-01	2.984E-01			2.292E-01	2.108E-01	2.292E-01
2200 - 2300	4			2.984E-01	2.745E-01	2.984E-01			2.292E-01	2.108E-01	2.292E-01
2300 - 2400	2			2.984E-01	2.745E-01	2.984E-01			1.146E-01	1.054E-01	1.146E-01

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun LRT depot Bus Terminus (Franchised Bus DD)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			2.472E-01	2.288E-01	2.472E-01			6.867E-05	6.357E-05	6.867E-05
0700 - 0800			2.472E-01	2.288E-01	2.472E-01			6.867E-05	6.357E-05	6.867E-05
0800 - 0900			3.708E-01	3.433E-01	3.708E-01			1.030E-04	9.535E-05	1.030E-04
0900 - 1000			2.472E-01	2.288E-01	2.472E-01			6.867E-05	6.357E-05	6.867E-05
1000 - 1100			2.472E-01	2.288E-01	2.472E-01			6.867E-05	6.357E-05	6.867E-05
1100 - 1200			3.708E-01	3.433E-01	3.708E-01			1.030E-04	9.535E-05	1.030E-04
1200 - 1300			2.472E-01	2.288E-01	2.472E-01			6.867E-05	6.357E-05	6.867E-05
1300 - 1400			3.708E-01	3.433E-01	3.708E-01			1.030E-04	9.535E-05	1.030E-04
1400 - 1500			3.090E-01	2.861E-01	3.090E-01			8.583E-05	7.946E-05	8.583E-05
1500 - 1600			3.090E-01	2.861E-01	3.090E-01			8.583E-05	7.946E-05	8.583E-05
1600 - 1700			2.472E-01	2.288E-01	2.472E-01			6.867E-05	6.357E-05	6.867E-05
1700 - 1800			3.708E-01	3.433E-01	3.708E-01			1.030E-04	9.535E-05	1.030E-04
1800 - 1900			2.472E-01	2.288E-01	2.472E-01			6.867E-05	6.357E-05	6.867E-05
1900 - 2000			2.472E-01	2.288E-01	2.472E-01			6.867E-05	6.357E-05	6.867E-05
2000 - 2100			2.472E-01	2.288E-01	2.472E-01			6.867E-05	6.357E-05	6.867E-05
2100 - 2200			2.472E-01	2.288E-01	2.472E-01			6.867E-05	6.357E-05	6.867E-05
2200 - 2300			2.472E-01	2.288E-01	2.472E-01			6.867E-05	6.357E-05	6.867E-05
2300 - 2400			1.236E-01	1.144E-01	1.236E-01			3.433E-05	3.178E-05	3.433E-05

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

CityBus Tuen Mun Depot (Franchised Bus DD)

Starting Emission

	Starting Emission Factor (g/trip)																	
NO																		
NO₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	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	0	1	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	1	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	1	0	0	0	0	1	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	1	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	2	2	0	0	0	1	1	0	4	1	7	0	0	0	0	0	0
0600 - 0700	0	2	1	0	1	1	1	2	1	0	2	5	12	0	0	0	0	0
0700 - 0800	0	0	0	0	0	2	0	1	0	0	1	1	5	28	0	0	0	0
0800 - 0900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0900 - 1000	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	1
1200 - 1300	0	0	1	0	0	0	1	1	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	1	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	1	0	1	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1900 - 2000	0	0	0	0	0	1	0	0	0	0	6	0	0	0	0	0	0	7
2000 - 2100	0	0	1	0	0	0	0	0	0	18	0	0	0	0	0	0	0	12
2100 - 2200	0	0	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	5
2200 - 2300	0	1	1	0	0	0	0	3	1	1	0	1	2	0	0	0	0	5
2300 - 2400	0	1	0	1	1	0	1	0	0	1	1	0	0	0	0	0	0	3

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
 [1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

CityBus Tuen Mun Depot (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	428	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	4			2.984E-01	2.745E-01	2.984E-01			5.109E-01	4.699E-01	5.109E-01
0100 - 0200	7			2.984E-01	2.745E-01	2.984E-01			8.940E-01	8.224E-01	8.940E-01
0200 - 0300	2			2.984E-01	2.745E-01	2.984E-01			2.554E-01	2.350E-01	2.554E-01
0300 - 0400	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	1			2.984E-01	2.745E-01	2.984E-01			1.277E-01	1.175E-01	1.277E-01
0500 - 0600	18			2.984E-01	2.745E-01	2.984E-01			2.299E+00	2.115E+00	2.299E+00
0600 - 0700	30			2.984E-01	2.745E-01	2.984E-01			3.831E+00	3.525E+00	3.831E+00
0700 - 0800	38			2.984E-01	2.745E-01	2.984E-01			4.853E+00	4.464E+00	4.853E+00
0800 - 0900	2			2.984E-01	2.745E-01	2.984E-01			2.554E-01	2.350E-01	2.554E-01
0900 - 1000	2			2.984E-01	2.745E-01	2.984E-01			2.554E-01	2.350E-01	2.554E-01
1000 - 1100	3			2.984E-01	2.745E-01	2.984E-01			3.831E-01	3.525E-01	3.831E-01
1100 - 1200	4			2.984E-01	2.745E-01	2.984E-01			5.109E-01	4.699E-01	5.109E-01
1200 - 1300	3			2.984E-01	2.745E-01	2.984E-01			3.831E-01	3.525E-01	3.831E-01
1300 - 1400	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	1			2.984E-01	2.745E-01	2.984E-01			1.277E-01	1.175E-01	1.277E-01
1500 - 1600	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	2			2.984E-01	2.745E-01	2.984E-01			2.554E-01	2.350E-01	2.554E-01
1700 - 1800	1			2.984E-01	2.745E-01	2.984E-01			1.277E-01	1.175E-01	1.277E-01
1800 - 1900	3			2.984E-01	2.745E-01	2.984E-01			3.831E-01	3.525E-01	3.831E-01
1900 - 2000	14			2.984E-01	2.745E-01	2.984E-01			1.788E+00	1.645E+00	1.788E+00
2000 - 2100	31			2.984E-01	2.745E-01	2.984E-01			3.959E+00	3.642E+00	3.959E+00
2100 - 2200	13			2.984E-01	2.745E-01	2.984E-01			1.660E+00	1.527E+00	1.660E+00
2200 - 2300	15			2.984E-01	2.745E-01	2.984E-01			1.916E+00	1.762E+00	1.916E+00
2300 - 2400	10			2.984E-01	2.745E-01	2.984E-01			1.277E+00	1.175E+00	1.277E+00

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0100 - 0200	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
0700 - 0800	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

CityBus Tuen Mun Depot (Franchised Bus DD)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			5.266E-01	4.857E-01	5.266E-01			1.463E-04	1.349E-04	1.463E-04
0100 - 0200			9.256E-01	8.539E-01	9.256E-01			2.571E-04	2.372E-04	2.571E-04
0200 - 0300			2.644E-01	2.440E-01	2.644E-01			7.346E-05	6.777E-05	7.346E-05
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			1.322E-01	1.220E-01	1.322E-01			3.673E-05	3.389E-05	3.673E-05
0500 - 0600			2.380E+00	2.196E+00	2.380E+00			6.611E-04	6.100E-04	6.611E-04
0600 - 0700			3.962E+00	3.655E+00	3.962E+00			1.101E-03	1.015E-03	1.101E-03
0700 - 0800			5.024E+00	4.636E+00	5.024E+00			1.396E-03	1.288E-03	1.396E-03
0800 - 0900			2.644E-01	2.440E-01	2.644E-01			7.346E-05	6.777E-05	7.346E-05
0900 - 1000			2.644E-01	2.440E-01	2.644E-01			7.346E-05	6.777E-05	7.346E-05
1000 - 1100			3.967E-01	3.660E-01	3.967E-01			1.102E-04	1.017E-04	1.102E-04
1100 - 1200			5.289E-01	4.880E-01	5.289E-01			1.469E-04	1.355E-04	1.469E-04
1200 - 1300			3.967E-01	3.660E-01	3.967E-01			1.102E-04	1.017E-04	1.102E-04
1300 - 1400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			1.322E-01	1.220E-01	1.322E-01			3.673E-05	3.389E-05	3.673E-05
1500 - 1600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			2.644E-01	2.440E-01	2.644E-01			7.346E-05	6.777E-05	7.346E-05
1700 - 1800			1.322E-01	1.220E-01	1.322E-01			3.673E-05	3.389E-05	3.673E-05
1800 - 1900			3.967E-01	3.660E-01	3.967E-01			1.102E-04	1.017E-04	1.102E-04
1900 - 2000			1.851E+00	1.708E+00	1.851E+00			5.142E-04	4.744E-04	5.142E-04
2000 - 2100			4.099E+00	3.782E+00	4.099E+00			1.139E-03	1.050E-03	1.139E-03
2100 - 2200			1.719E+00	1.586E+00	1.719E+00			4.775E-04	4.405E-04	4.775E-04
2200 - 2300			1.983E+00	1.830E+00	1.983E+00			5.509E-04	5.083E-04	5.509E-04
2300 - 2400			1.320E+00	1.218E+00	1.320E+00			3.667E-04	3.382E-04	3.667E-04

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

KMB Tuen Mun Depot (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																			
NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	1	1	1	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	2	2	2	0	0	0	0	0	0	0
0500 - 0600	0	2	0	0	1	0	0	0	1	7	11	11	0	0	0	0	0	0
0600 - 0700	0	0	5	1	0	1	1	1	1	1	5	13	9	0	0	0	0	0
0700 - 0800	0	2	2	1	0	1	0	0	3	0	0	4	9	3	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	1	5	4	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	1	0	1	2	1	5	8	4	0	0	0	0	0	0
1100 - 1200	0	1	0	1	1	1	4	11	1	3	8	4	0	0	0	0	0	0
1200 - 1300	0	0	1	2	0	0	2	13	2	0	1	3	2	1	0	0	0	1
1300 - 1400	0	0	4	0	0	0	0	13	4	0	0	2	3	1	2	0	0	0
1400 - 1500	0	0	1	3	0	1	4	8	6	4	3	1	0	1	4	0	0	0
1500 - 1600	0	2	2	2	1	1	3	14	8	5	7	1	0	1	1	1	1	0
1600 - 1700	0	1	2	0	1	1	3	4	7	6	4	1	0	0	0	0	1	0
1700 - 1800	0	1	0	1	0	0	0	2	2	1	1	0	1	0	0	0	0	0
1800 - 1900	0	1	2	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	3
2000 - 2100	0	2	0	0	0	0	0	2	0	0	3	0	1	0	0	0	0	8
2100 - 2200	0	0	1	0	0	1	0	2	0	0	0	1	0	1	0	1	0	4
2200 - 2300	0	0	2	0	0	0	1	3	3	0	0	0	2	1	2	0	1	5
2300 - 2400	0	0	0	0	0	0	0	1	1	0	0	0	0	2	1	0	0	7

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

KMB Tuen Mun Depot (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	722	m
Average Travelling Speed =	15	km/h

18

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	3			2.984E-01	2.745E-01	2.984E-01			6.463E-01	5.946E-01	6.463E-01
0100 - 0200	5			2.984E-01	2.745E-01	2.984E-01			1.077E+00	9.909E-01	1.077E+00
0200 - 0300	1			2.984E-01	2.745E-01	2.984E-01			2.154E-01	1.982E-01	2.154E-01
0300 - 0400	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	9			2.984E-01	2.745E-01	2.984E-01			1.939E+00	1.784E+00	1.939E+00
0500 - 0600	41			2.984E-01	2.745E-01	2.984E-01			8.833E+00	8.126E+00	8.833E+00
0600 - 0700	46			2.984E-01	2.745E-01	2.984E-01			9.910E+00	9.117E+00	9.910E+00
0700 - 0800	28			2.984E-01	2.745E-01	2.984E-01			6.032E+00	5.549E+00	6.032E+00
0800 - 0900	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	10			2.984E-01	2.745E-01	2.984E-01			2.154E+00	1.982E+00	2.154E+00
1000 - 1100	23			2.984E-01	2.745E-01	2.984E-01			4.955E+00	4.558E+00	4.955E+00
1100 - 1200	40			2.984E-01	2.745E-01	2.984E-01			8.618E+00	7.928E+00	8.618E+00
1200 - 1300	31			2.984E-01	2.745E-01	2.984E-01			6.679E+00	6.144E+00	6.679E+00
1300 - 1400	31			2.984E-01	2.745E-01	2.984E-01			6.679E+00	6.144E+00	6.679E+00
1400 - 1500	39			2.984E-01	2.745E-01	2.984E-01			8.402E+00	7.729E+00	8.402E+00
1500 - 1600	52			2.984E-01	2.745E-01	2.984E-01			1.120E+01	1.031E+01	1.120E+01
1600 - 1700	35			2.984E-01	2.745E-01	2.984E-01			7.541E+00	6.937E+00	7.541E+00
1700 - 1800	9			2.984E-01	2.745E-01	2.984E-01			1.939E+00	1.784E+00	1.939E+00
1800 - 1900	8			2.984E-01	2.745E-01	2.984E-01			1.724E+00	1.586E+00	1.724E+00
1900 - 2000	7			2.984E-01	2.745E-01	2.984E-01			1.508E+00	1.387E+00	1.508E+00
2000 - 2100	18			2.984E-01	2.745E-01	2.984E-01			3.878E+00	3.567E+00	3.878E+00
2100 - 2200	11			2.984E-01	2.745E-01	2.984E-01			2.370E+00	2.180E+00	2.370E+00
2200 - 2300	22			2.984E-01	2.745E-01	2.984E-01			4.740E+00	4.360E+00	4.740E+00
2300 - 2400	14			2.984E-01	2.745E-01	2.984E-01			3.016E+00	2.775E+00	3.016E+00

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
0200 - 0300	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0300 - 0400	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	3			2.253E-03	2.253E-03	2.253E-03			6.760E-03	6.760E-03	6.760E-03
0500 - 0600	8			2.253E-03	2.253E-03	2.253E-03			1.803E-02	1.803E-02	1.803E-02
0600 - 0700	8			2.253E-03	2.253E-03	2.253E-03			1.803E-02	1.803E-02	1.803E-02
0700 - 0800	3			2.253E-03	2.253E-03	2.253E-03			6.760E-03	6.760E-03	6.760E-03
0800 - 0900	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
1100 - 1200	5			2.253E-03	2.253E-03	2.253E-03			1.127E-02	1.127E-02	1.127E-02
1200 - 1300	3			2.253E-03	2.253E-03	2.253E-03			6.760E-03	6.760E-03	6.760E-03
1300 - 1400	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
1400 - 1500	3			2.253E-03	2.253E-03	2.253E-03			6.760E-03	6.760E-03	6.760E-03
1500 - 1600	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
1600 - 1700	4			2.253E-03	2.253E-03	2.253E-03			9.013E-03	9.013E-03	9.013E-03
1700 - 1800	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
1900 - 2000	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
2100 - 2200	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
2300 - 2400	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03

**Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
KMB Tuen Mun Depot (Franchised Bus DD)**

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			6.599E-01	6.081E-01	6.599E-01			1.833E-04	1.689E-04	1.833E-04
0100 - 0200			1.095E+00	1.009E+00	1.095E+00			3.042E-04	2.803E-04	3.042E-04
0200 - 0300			2.177E-01	2.004E-01	2.177E-01			6.047E-05	5.568E-05	6.047E-05
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			1.973E+00	1.817E+00	1.973E+00			5.480E-04	5.049E-04	5.480E-04
0500 - 0600			9.000E+00	8.292E+00	9.000E+00			2.500E-03	2.303E-03	2.500E-03
0600 - 0700			1.010E+01	9.306E+00	1.010E+01			2.805E-03	2.585E-03	2.805E-03
0700 - 0800			6.152E+00	5.669E+00	6.152E+00			1.709E-03	1.575E-03	1.709E-03
0800 - 0900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			2.200E+00	2.027E+00	2.200E+00			6.110E-04	5.630E-04	6.110E-04
1000 - 1100			5.057E+00	4.660E+00	5.057E+00			1.405E-03	1.294E-03	1.405E-03
1100 - 1200			8.787E+00	8.097E+00	8.787E+00			2.441E-03	2.249E-03	2.441E-03
1200 - 1300			6.812E+00	6.277E+00	6.812E+00			1.892E-03	1.744E-03	1.892E-03
1300 - 1400			6.814E+00	6.279E+00	6.814E+00			1.893E-03	1.744E-03	1.893E-03
1400 - 1500			8.571E+00	7.898E+00	8.571E+00			2.381E-03	2.194E-03	2.381E-03
1500 - 1600			1.143E+01	1.054E+01	1.143E+01			3.176E-03	2.927E-03	3.176E-03
1600 - 1700			7.689E+00	7.085E+00	7.689E+00			2.136E-03	1.968E-03	2.136E-03
1700 - 1800			1.980E+00	1.824E+00	1.980E+00			5.499E-04	5.067E-04	5.499E-04
1800 - 1900			1.757E+00	1.619E+00	1.757E+00			4.882E-04	4.498E-04	4.882E-04
1900 - 2000			1.540E+00	1.419E+00	1.540E+00			4.277E-04	3.941E-04	4.277E-04
2000 - 2100			3.955E+00	3.644E+00	3.955E+00			1.099E-03	1.012E-03	1.099E-03
2100 - 2200			2.419E+00	2.230E+00	2.419E+00			6.721E-04	6.193E-04	6.721E-04
2200 - 2300			4.834E+00	4.455E+00	4.834E+00			1.343E-03	1.237E-03	1.343E-03
2300 - 2400			3.075E+00	2.833E+00	3.075E+00			8.541E-04	7.870E-04	8.541E-04

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																			
NO																			
NO₂																			
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour	No. of Cold Starts of Double-Deck Franchised Bus																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0
0600 - 0700	0	4	7	4	1	0	1	0	0	0	1	4	0	0	0	0	0	0
0700 - 0800	0	3	16	9	2	3	1	3	2	0	0	0	1	2	0	0	0	2
0800 - 0900	0	5	5	8	3	1	1	4	0	0	0	0	0	0	0	0	0	5
0900 - 1000	0	3	6	0	2	3	1	6	1	0	0	0	0	0	1	0	0	2
1000 - 1100	0	2	4	3	2	2	0	6	2	1	0	0	1	0	0	0	0	0
1100 - 1200	0	0	7	0	3	3	1	8	0	1	1	0	0	0	0	0	0	0
1200 - 1300	0	1	1	2	0	0	1	8	0	1	2	0	0	0	0	0	0	3
1300 - 1400	0	1	2	3	0	1	1	9	1	1	0	1	1	1	0	0	3	2
1400 - 1500	0	1	5	2	0	0	1	7	0	0	0	0	0	0	0	1	1	0
1500 - 1600	0	0	5	3	1	2	0	4	5	3	1	1	0	0	1	0	0	3
1600 - 1700	0	8	3	3	6	0	4	9	3	0	1	0	0	4	1	0	0	2
1700 - 1800	0	4	9	4	2	1	2	4	3	1	0	0	0	0	0	0	0	0
1800 - 1900	0	6	5	3	3	1	3	9	1	1	0	1	0	0	0	0	0	0
1900 - 2000	0	5	7	2	0	2	3	7	2	1	1	0	0	0	0	0	0	0
2000 - 2100	0	1	3	1	7	0	1	8	3	0	0	0	0	0	0	0	0	1
2100 - 2200	0	0	6	7	2	1	2	9	3	0	0	1	0	0	0	0	0	0
2200 - 2300	0	1	4	3	4	0	1	8	4	0	0	0	0	0	0	0	0	0
2300 - 2400	0	1	4	2	1	1	0	4	1	1	0	0	0	0	0	0	0	0

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	244	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	16			2.984E-01	2.745E-01	2.984E-01			1.165E+00	1.072E+00	1.165E+00
0100 - 0200	6			2.984E-01	2.745E-01	2.984E-01			4.369E-01	4.019E-01	4.369E-01
0200 - 0300	3			2.984E-01	2.745E-01	2.984E-01			2.184E-01	2.009E-01	2.184E-01
0300 - 0400	0			2.984E-01	2.745E-01	2.984E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	5			2.984E-01	2.745E-01	2.984E-01			3.640E-01	3.349E-01	3.640E-01
0500 - 0600	10			2.984E-01	2.745E-01	2.984E-01			7.281E-01	6.698E-01	7.281E-01
0600 - 0700	33			2.984E-01	2.745E-01	2.984E-01			2.403E+00	2.210E+00	2.403E+00
0700 - 0800	58			2.984E-01	2.745E-01	2.984E-01			4.223E+00	3.885E+00	4.223E+00
0800 - 0900	47			2.984E-01	2.745E-01	2.984E-01			3.422E+00	3.148E+00	3.422E+00
0900 - 1000	34			2.984E-01	2.745E-01	2.984E-01			2.476E+00	2.277E+00	2.476E+00
1000 - 1100	34			2.984E-01	2.745E-01	2.984E-01			2.476E+00	2.277E+00	2.476E+00
1100 - 1200	38			2.984E-01	2.745E-01	2.984E-01			2.767E+00	2.545E+00	2.767E+00
1200 - 1300	27			2.984E-01	2.745E-01	2.984E-01			1.966E+00	1.808E+00	1.966E+00
1300 - 1400	31			2.984E-01	2.745E-01	2.984E-01			2.257E+00	2.076E+00	2.257E+00
1400 - 1500	26			2.984E-01	2.745E-01	2.984E-01			1.893E+00	1.741E+00	1.893E+00
1500 - 1600	36			2.984E-01	2.745E-01	2.984E-01			2.621E+00	2.411E+00	2.621E+00
1600 - 1700	54			2.984E-01	2.745E-01	2.984E-01			3.932E+00	3.617E+00	3.932E+00
1700 - 1800	41			2.984E-01	2.745E-01	2.984E-01			2.985E+00	2.746E+00	2.985E+00
1800 - 1900	40			2.984E-01	2.745E-01	2.984E-01			2.912E+00	2.679E+00	2.912E+00
1900 - 2000	45			2.984E-01	2.745E-01	2.984E-01			3.276E+00	3.014E+00	3.276E+00
2000 - 2100	32			2.984E-01	2.745E-01	2.984E-01			2.330E+00	2.143E+00	2.330E+00
2100 - 2200	33			2.984E-01	2.745E-01	2.984E-01			2.403E+00	2.210E+00	2.403E+00
2200 - 2300	31			2.984E-01	2.745E-01	2.984E-01			2.257E+00	2.076E+00	2.257E+00
2300 - 2400	20			2.984E-01	2.745E-01	2.984E-01			1.456E+00	1.340E+00	1.456E+00

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	8			2.253E-03	2.253E-03	2.253E-03			1.803E-02	1.803E-02	1.803E-02
0100 - 0200	5			2.253E-03	2.253E-03	2.253E-03			1.127E-02	1.127E-02	1.127E-02
0200 - 0300	3			2.253E-03	2.253E-03	2.253E-03			6.760E-03	6.760E-03	6.760E-03
0300 - 0400	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	4			2.253E-03	2.253E-03	2.253E-03			9.013E-03	9.013E-03	9.013E-03
0500 - 0600	6			2.253E-03	2.253E-03	2.253E-03			1.352E-02	1.352E-02	1.352E-02
0600 - 0700	11			2.253E-03	2.253E-03	2.253E-03			2.479E-02	2.479E-02	2.479E-02
0700 - 0800	14			2.253E-03	2.253E-03	2.253E-03			3.155E-02	3.155E-02	3.155E-02
0800 - 0900	15			2.253E-03	2.253E-03	2.253E-03			3.380E-02	3.380E-02	3.380E-02
0900 - 1000	9			2.253E-03	2.253E-03	2.253E-03			2.028E-02	2.028E-02	2.028E-02
1000 - 1100	11			2.253E-03	2.253E-03	2.253E-03			2.479E-02	2.479E-02	2.479E-02
1100 - 1200	14			2.253E-03	2.253E-03	2.253E-03			3.155E-02	3.155E-02	3.155E-02
1200 - 1300	8			2.253E-03	2.253E-03	2.253E-03			1.803E-02	1.803E-02	1.803E-02
1300 - 1400	4			2.253E-03	2.253E-03	2.253E-03			9.013E-03	9.013E-03	9.013E-03
1400 - 1500	8			2.253E-03	2.253E-03	2.253E-03			1.803E-02	1.803E-02	1.803E-02
1500 - 1600	7			2.253E-03	2.253E-03	2.253E-03			1.577E-02	1.577E-02	1.577E-02
1600 - 1700	10			2.253E-03	2.253E-03	2.253E-03			2.253E-02	2.253E-02	2.253E-02
1700 - 1800	11			2.253E-03	2.253E-03	2.253E-03			2.479E-02	2.479E-02	2.479E-02
1800 - 1900	7			2.253E-03	2.253E-03	2.253E-03			1.577E-02	1.577E-02	1.577E-02
1900 - 2000	15			2.253E-03	2.253E-03	2.253E-03			3.380E-02	3.380E-02	3.380E-02
2000 - 2100	7			2.253E-03	2.253E-03	2.253E-03			1.577E-02	1.577E-02	1.577E-02
2100 - 2200	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
2200 - 2300	6			2.253E-03	2.253E-03	2.253E-03			1.352E-02	1.352E-02	1.352E-02
2300 - 2400	5			2.253E-03	2.253E-03	2.253E-03			1.127E-02	1.127E-02	1.127E-02

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (Franchised Bus DD)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			1.219E+00	1.126E+00	1.219E+00			3.386E-04	3.127E-04	3.386E-04
0100 - 0200			4.526E-01	4.176E-01	4.526E-01			1.257E-04	1.160E-04	1.257E-04
0200 - 0300			2.252E-01	2.077E-01	2.252E-01			6.255E-05	5.769E-05	6.255E-05
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			3.776E-01	3.484E-01	3.776E-01			1.049E-04	9.678E-05	1.049E-04
0500 - 0600			7.596E-01	7.013E-01	7.596E-01			2.110E-04	1.948E-04	2.110E-04
0600 - 0700			2.527E+00	2.334E+00	2.527E+00			7.018E-04	6.484E-04	7.018E-04
0700 - 0800			4.453E+00	4.115E+00	4.453E+00			1.237E-03	1.143E-03	1.237E-03
0800 - 0900			3.600E+00	3.326E+00	3.600E+00			1.000E-03	9.239E-04	1.000E-03
0900 - 1000			2.608E+00	2.410E+00	2.608E+00			7.246E-04	6.695E-04	7.246E-04
1000 - 1100			2.604E+00	2.406E+00	2.604E+00			7.233E-04	6.682E-04	7.233E-04
1100 - 1200			2.906E+00	2.685E+00	2.906E+00			8.074E-04	7.458E-04	8.074E-04
1200 - 1300			2.070E+00	1.912E+00	2.070E+00			5.749E-04	5.311E-04	5.749E-04
1300 - 1400			2.388E+00	2.207E+00	2.388E+00			6.633E-04	6.131E-04	6.633E-04
1400 - 1500			1.992E+00	1.841E+00	1.992E+00			5.534E-04	5.113E-04	5.534E-04
1500 - 1600			2.768E+00	2.558E+00	2.768E+00			7.688E-04	7.105E-04	7.688E-04
1600 - 1700			4.153E+00	3.838E+00	4.153E+00			1.153E-03	1.066E-03	1.153E-03
1700 - 1800			3.145E+00	2.906E+00	3.145E+00			8.737E-04	8.072E-04	8.737E-04
1800 - 1900			3.077E+00	2.844E+00	3.077E+00			8.547E-04	7.899E-04	8.547E-04
1900 - 2000			3.445E+00	3.183E+00	3.445E+00			9.571E-04	8.842E-04	9.571E-04
2000 - 2100			2.458E+00	2.272E+00	2.458E+00			6.829E-04	6.310E-04	6.829E-04
2100 - 2200			2.547E+00	2.354E+00	2.547E+00			7.075E-04	6.540E-04	7.075E-04
2200 - 2300			2.383E+00	2.203E+00	2.383E+00			6.620E-04	6.118E-04	6.620E-04
2300 - 2400			1.535E+00	1.418E+00	1.535E+00			4.264E-04	3.940E-04	4.264E-04

**Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Tuen Mun Station Terminus (PLB)**

Starting Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] =	1.33
--	------

	Starting Emission Factor (g/trip)																	
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

	No. of Cold Starts of Public Light Bus (Diesel)																	
Hour	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
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
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	0.57
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
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
0400 - 0500	0.00	0.57	0.57	0.00	0.57	0.00	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	1.14	0.57	2.85	0.00	0.00	0.00	0.00	0.00	0.57	0.00	1.14	0.00	0.00	0.00	0.00	0.00	0.57
0600 - 0700	0.00	2.28	4.00	1.71	1.14	0.57	3.42	1.71	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	2.28	0.57	2.28	2.85	0.57	2.85	0.57	0.00	0.00	0.00	0.00	1.14	0.00	0.00	0.00	1.14
0800 - 0900	0.00	2.28	2.85	1.14	1.14	1.14	2.85	2.28	1.71	2.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.28
0900 - 1000	0.00	1.14	0.00	0.57	6.28	4.00	1.14	4.57	0.57	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.14
1000 - 1100	0.00	0.57	1.14	1.14	3.42	4.00	2.28	5.71	0.57	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
1100 - 1200	0.00	0.00	1.14	1.71	2.85	2.85	1.14	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
1200 - 1300	0.00	1.71	3.42	0.00	2.28	2.28	1.71	4.00	2.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0.00	1.14	3.42	4.57	2.85	3.42	2.28	5.14	5.14	2.28	0.57	0.00	0.57	0.57	0.00	0.00	1.14	1.14
1400 - 1500	0.00	1.71	0.57	1.14	2.28	1.71	2.85	1.71	1.14	0.57	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.57
1500 - 1600	0.00	0.00	1.14	0.00	1.14	1.71	3.42	1.71	2.28	0.57	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0.00	0.57	1.71	2.85	0.57	0.57	1.71	5.71	1.14	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0.00	0.57	8.56	1.14	1.71	1.71	0.00	2.85	1.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
1800 - 1900	0.00	2.85	0.57	0.00	0.00	1.14	0.00	2.85	2.28	0.00	0.00	1.14	0.00	0.00	0.00	0.00	0.00	0.57
1900 - 2000	0.00	0.57	4.00	1.14	0.57	0.57	1.71	4.57	0.00	0.57	0.57	0.00	0.00	0.00	0.00	0.00	0.00	1.14
2000 - 2100	0.00	0.00	0.00	0.00	0.00	0.57	1.14	1.71	1.14	0.00	0.00	0.00	1.14	0.57	0.00	0.00	0.00	1.14
2100 - 2200	0.00	0.00	0.57	0.57	0.00	0.00	0.57	2.28	1.71	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.00
2200 - 2300	0.00	0.00	0.00	0.57	0.00	1.14	0.00	4.00	1.14	1.14	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.00
2300 - 2400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2024 data of EMFAC-HK.

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (PLB)

Cold Idling Emission

Idling Time for Terminating Buses =	2	min
Max. Idling Time for Adjusting Starting Emission =	1	min

Hour	Public Light Bus (Diesel)										Public Light Bus (Diesel)											
	Frequency	Cold Idling Emission Factor (g/min)					Cold Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0.57			4.427E-04	4.427E-04	4.427E-04			5.054E-04	5.054E-04	5.054E-04	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	1.71			4.427E-04	4.427E-04	4.427E-04			1.516E-03	1.516E-03	1.516E-03
0500 - 0600	2.28			4.427E-04	4.427E-04	4.427E-04			2.021E-03	2.021E-03	2.021E-03	4.57			4.427E-04	4.427E-04	4.427E-04			4.043E-03	4.043E-03	4.043E-03
0600 - 0700	5.14			4.427E-04	4.427E-04	4.427E-04			4.548E-03	4.548E-03	4.548E-03	9.70			4.427E-04	4.427E-04	4.427E-04			8.591E-03	8.591E-03	8.591E-03
0700 - 0800	6.28			4.427E-04	4.427E-04	4.427E-04			5.559E-03	5.559E-03	5.559E-03	7.99			4.427E-04	4.427E-04	4.427E-04			7.075E-03	7.075E-03	7.075E-03
0800 - 0900	11.42			4.427E-04	4.427E-04	4.427E-04			1.011E-02	1.011E-02	1.011E-02	8.56			4.427E-04	4.427E-04	4.427E-04			7.580E-03	7.580E-03	7.580E-03
0900 - 1000	7.99			4.427E-04	4.427E-04	4.427E-04			7.075E-03	7.075E-03	7.075E-03	11.99			4.427E-04	4.427E-04	4.427E-04			1.061E-02	1.061E-02	1.061E-02
1000 - 1100	10.27			4.427E-04	4.427E-04	4.427E-04			9.097E-03	9.097E-03	9.097E-03	10.27			4.427E-04	4.427E-04	4.427E-04			9.097E-03	9.097E-03	9.097E-03
1100 - 1200	5.71			4.427E-04	4.427E-04	4.427E-04			5.054E-03	5.054E-03	5.054E-03	8.56			4.427E-04	4.427E-04	4.427E-04			7.580E-03	7.580E-03	7.580E-03
1200 - 1300	7.99			4.427E-04	4.427E-04	4.427E-04			7.075E-03	7.075E-03	7.075E-03	9.70			4.427E-04	4.427E-04	4.427E-04			8.591E-03	8.591E-03	8.591E-03
1300 - 1400	18.84			4.427E-04	4.427E-04	4.427E-04			1.668E-02	1.668E-02	1.668E-02	15.41			4.427E-04	4.427E-04	4.427E-04			1.364E-02	1.364E-02	1.364E-02
1400 - 1500	7.42			4.427E-04	4.427E-04	4.427E-04			6.570E-03	6.570E-03	6.570E-03	7.42			4.427E-04	4.427E-04	4.427E-04			6.570E-03	6.570E-03	6.570E-03
1500 - 1600	9.13			4.427E-04	4.427E-04	4.427E-04			8.086E-03	8.086E-03	8.086E-03	4.00			4.427E-04	4.427E-04	4.427E-04			3.538E-03	3.538E-03	3.538E-03
1600 - 1700	9.70			4.427E-04	4.427E-04	4.427E-04			8.591E-03	8.591E-03	8.591E-03	6.28			4.427E-04	4.427E-04	4.427E-04			5.559E-03	5.559E-03	5.559E-03
1700 - 1800	5.14			4.427E-04	4.427E-04	4.427E-04			4.548E-03	4.548E-03	4.548E-03	13.70			4.427E-04	4.427E-04	4.427E-04			1.213E-02	1.213E-02	1.213E-02
1800 - 1900	6.85			4.427E-04	4.427E-04	4.427E-04			6.064E-03	6.064E-03	6.064E-03	4.57			4.427E-04	4.427E-04	4.427E-04			4.043E-03	4.043E-03	4.043E-03
1900 - 2000	8.56			4.427E-04	4.427E-04	4.427E-04			7.580E-03	7.580E-03	7.580E-03	6.85			4.427E-04	4.427E-04	4.427E-04			6.064E-03	6.064E-03	6.064E-03
2000 - 2100	6.85			4.427E-04	4.427E-04	4.427E-04			6.064E-03	6.064E-03	6.064E-03	0.57			4.427E-04	4.427E-04	4.427E-04			5.054E-04	5.054E-04	5.054E-04
2100 - 2200	5.14			4.427E-04	4.427E-04	4.427E-04			4.548E-03	4.548E-03	4.548E-03	1.14			4.427E-04	4.427E-04	4.427E-04			1.011E-03	1.011E-03	1.011E-03
2200 - 2300	6.85			4.427E-04	4.427E-04	4.427E-04			6.064E-03	6.064E-03	6.064E-03	1.71			4.427E-04	4.427E-04	4.427E-04			1.516E-03	1.516E-03	1.516E-03
2300 - 2400	1.14			4.427E-04	4.427E-04	4.427E-04			1.011E-03	1.011E-03	1.011E-03	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00

Average Distance from Starting Place to PTI Egress =	122	m
Average Spread Distance outside PTI =	578	m

Hour	Idling Emission (g)					Emission for Adjusting Starting Emission (g)					Adjusted Starting Emission Within PTI (g)					Adjusted Starting Emission Outside PTI (g)					Starting Emission Rate Outside PTI (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			5.054E-04	5.054E-04	5.054E-04			2.527E-04	2.527E-04	2.527E-04			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			1.516E-03	1.516E-03	1.516E-03			7.580E-04	7.580E-04	7.580E-04			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			6.064E-03	6.064E-03	6.064E-03			3.032E-03	3.032E-03	3.032E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			1.314E-02	1.314E-02	1.314E-02			6.570E-03	6.570E-03	6.570E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			1.263E-02	1.263E-02	1.263E-02			6.317E-03	6.317E-03	6.317E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			1.769E-02	1.769E-02	1.769E-02			8.844E-03	8.844E-03	8.844E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			1.769E-02	1.769E-02	1.769E-02			8.844E-03	8.844E-03	8.844E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			1.819E-02	1.819E-02	1.819E-02			9.097E-03	9.097E-03	9.097E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			1.263E-02	1.263E-02	1.263E-02			6.317E-03	6.317E-03	6.317E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			1.567E-02	1.567E-02	1.567E-02			7.833E-03	7.833E-03	7.833E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			3.032E-02	3.032E-02	3.032E-02			1.516E-02	1.516E-02	1.516E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			1.314E-02	1.314E-02	1.314E-02			6.570E-03	6.570E-03	6.570E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			1.162E-02	1.162E-02	1.162E-02			5.812E-03	5.812E-03	5.812E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			1.415E-02	1.415E-02	1.415E-02			7.075E-03	7.075E-03	7.075E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			1.668E-02	1.668E-02	1.668E-02			8.338E-03	8.338E-03	8.338E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			1.011E-02	1.011E-02	1.011E-02			5.054E-03	5.054E-03	5.054E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			1.364E-02	1.364E-02	1.364E-02			6.822E-03	6.822E-03	6.822E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			6.570E-03	6.570E-03	6.570E-03			3.285E-03	3.285E-03	3.285E-03			0.000E+00	0.000E+00											

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini**Tuen Mun Station Terminus (PLB)****Starting Emission**

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ⁽¹⁾ =	1.33
--	------

Starting Emission Factor (g/trip)

NO	NO ₂	RSP	FSP	TSP														
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour	No. of Cold Starts of Public Light Bus (LPG)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
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
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	0.43
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
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
0400 - 0500	0.00	0.43	0.43	0.00	0.43	0.00	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	0.86	0.43	2.15	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.86	0.00	0.00	0.00	0.00	0.00	0.43
0600 - 0700	0.00	1.72	3.00	1.29	0.86	0.43	2.58	1.29	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	1.72	0.43	1.72	2.15	0.43	2.15	0.43	0.00	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.86
0800 - 0900	0.00	1.72	2.15	0.86	0.86	0.86	2.15	1.72	1.29	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72
0900 - 1000	0.00	0.86	0.00	0.43	4.72	3.00	0.86	3.43	0.43	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86
1000 - 1100	0.00	0.43	0.86	0.86	2.58	3.00	1.72	4.29	0.43	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
1100 - 1200	0.00	0.00	0.86	1.29	2.15	2.15	0.86	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
1200 - 1300	0.00	1.29	2.58	0.00	1.72	1.72	1.29	3.00	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300 - 1400	0.00	0.86	2.58	3.43	2.15	2.58	1.72	3.86	3.86	1.72	0.43	0.00	0.43	0.43	0.00	0.00	0.86	0.86
1400 - 1500	0.00	1.29	0.43	0.86	1.72	1.29	2.15	1.29	0.86	0.43	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.43
1500 - 1600	0.00	0.00	0.86	0.00	0.86	1.29	2.58	1.29	1.72	0.43	0.43	0.00	0.43	0.00	0.00	0.00	0.00	0.00
1600 - 1700	0.00	0.43	1.29	2.15	0.43	0.43	1.29	4.29	0.86	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1700 - 1800	0.00	0.43	6.44	0.86	1.29	1.29	0.00	2.15	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
1800 - 1900	0.00	2.15	0.43	0.00	0.00	0.86	0.00	2.15	1.72	0.00	0.00	0.86	0.00	0.00	0.00	0.00	0.00	0.43
1900 - 2000	0.00	0.43	3.00	0.86	0.43	0.43	1.29	3.43	0.00	0.43	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.86
2000 - 2100	0.00	0.00	0.00	0.00	0.00	0.43	0.86	1.29	0.86	0.00	0.00	0.00	0.86	0.43	0.00	0.00	0.00	0.86
2100 - 2200	0.00	0.00	0.43	0.43	0.00	0.00	0.43	1.72	1.29	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00
2200 - 2300	0.00	0.00	0.00	0.43	0.00	0.86	0.00	3.00	0.86	0.86	0.00	0.00	0.00	0.43	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	0.43	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2024 data of EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (PLB)

Running Emission

Average Travelling Distance within PTI =	244	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Public Light Bus (Diesel + LPG)									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	1			3.350E-02	3.082E-02	3.350E-02			8.175E-03	7.520E-03	8.175E-03
0100 - 0200	1			3.350E-02	3.082E-02	3.350E-02			8.175E-03	7.520E-03	8.175E-03
0200 - 0300	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			3.350E-02	3.082E-02	3.350E-02			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	3			3.350E-02	3.082E-02	3.350E-02			2.452E-02	2.256E-02	2.452E-02
0500 - 0600	17			3.350E-02	3.082E-02	3.350E-02			1.390E-01	1.278E-01	1.390E-01
0600 - 0700	41			3.350E-02	3.082E-02	3.350E-02			3.352E-01	3.083E-01	3.352E-01
0700 - 0800	42			3.350E-02	3.082E-02	3.350E-02			3.433E-01	3.159E-01	3.433E-01
0800 - 0900	49			3.350E-02	3.082E-02	3.350E-02			4.006E-01	3.685E-01	4.006E-01
0900 - 1000	49			3.350E-02	3.082E-02	3.350E-02			4.006E-01	3.685E-01	4.006E-01
1000 - 1100	46			3.350E-02	3.082E-02	3.350E-02			3.760E-01	3.459E-01	3.760E-01
1100 - 1200	32			3.350E-02	3.082E-02	3.350E-02			2.616E-01	2.407E-01	2.616E-01
1200 - 1300	37			3.350E-02	3.082E-02	3.350E-02			3.025E-01	2.783E-01	3.025E-01
1300 - 1400	75			3.350E-02	3.082E-02	3.350E-02			6.131E-01	5.640E-01	6.131E-01
1400 - 1500	34			3.350E-02	3.082E-02	3.350E-02			2.779E-01	2.557E-01	2.779E-01
1500 - 1600	31			3.350E-02	3.082E-02	3.350E-02			2.534E-01	2.331E-01	2.534E-01
1600 - 1700	35			3.350E-02	3.082E-02	3.350E-02			2.861E-01	2.632E-01	2.861E-01
1700 - 1800	48			3.350E-02	3.082E-02	3.350E-02			3.924E-01	3.610E-01	3.924E-01
1800 - 1900	33			3.350E-02	3.082E-02	3.350E-02			2.698E-01	2.482E-01	2.698E-01
1900 - 2000	34			3.350E-02	3.082E-02	3.350E-02			2.779E-01	2.557E-01	2.779E-01
2000 - 2100	16			3.350E-02	3.082E-02	3.350E-02			1.308E-01	1.203E-01	1.308E-01
2100 - 2200	16			3.350E-02	3.082E-02	3.350E-02			1.308E-01	1.203E-01	1.308E-01
2200 - 2300	19			3.350E-02	3.082E-02	3.350E-02			1.553E-01	1.429E-01	1.553E-01
2300 - 2400	2			3.350E-02	3.082E-02	3.350E-02			1.635E-02	1.504E-02	1.635E-02

Idling Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] =	1.3
Idling Time for Non-terminating Buses =	1 min

Hour	Frequency	Public Light Bus (Diesel)										Frequency	Public Light Bus (LPG)									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)						Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0.57			4.427E-04	4.427E-04	4.427E-04			2.527E-04	2.527E-04	2.527E-04	0.43			1.022E-03	1.022E-03	1.022E-03			5.834E-04	5.834E-04	5.834E-04
0100 - 0200	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	2.85			4.427E-04	4.427E-04	4.427E-04			1.263E-03	1.263E-03	1.263E-03	2.15			1.022E-03	1.022E-03	1.022E-03			2.917E-03	2.917E-03	2.917E-03
0600 - 0700	8.56			4.427E-04	4.427E-04	4.427E-04			3.790E-03	3.790E-03	3.790E-03	6.44			1.022E-03	1.022E-03	1.022E-03			8.751E-03	8.751E-03	8.751E-03
0700 - 0800	9.70			4.427E-04	4.427E-04	4.427E-04			4.296E-03	4.296E-03	4.296E-03	7.30			1.022E-03	1.022E-03	1.022E-03			9.918E-03	9.918E-03	9.918E-03
0800 - 0900	7.99			4.427E-04	4.427E-04	4.427E-04			3.538E-03	3.538E-03	3.538E-03	6.01			1.022E-03	1.022E-03	1.022E-03			8.167E-03	8.167E-03	8.167E-03
0900 - 1000	7.99			4.427E-04	4.427E-04	4.427E-04			3.538E-03	3.538E-03	3.538E-03	6.01			1.022E-03	1.022E-03	1.022E-03			8.167E-03	8.167E-03	8.167E-03
1000 - 1100	5.71			4.427E-04	4.427E-04	4.427E-04			2.527E-03	2.527E-03	2.527E-03	4.29			1.022E-03	1.022E-03	1.022E-03			5.834E-03	5.834E-03	5.834E-03
1100 - 1200	4.00			4.427E-04	4.427E-04	4.427E-04			1.769E-03	1.769E-03	1.769E-03	3.00			1.022E-03	1.022E-03	1.022E-03			4.084E-03	4.084E-03	4.084E-03
1200 - 1300	3.42			4.427E-04	4.427E-04	4.427E-04			1.516E-03	1.516E-03	1.516E-03	2.58			1.022E-03	1.022E-03	1.022E-03			3.500E-03	3.500E-03	3.500E-03
1300 - 1400	8.56			4.427E-04	4.427E-04	4.427E-04			3.790E-03	3.790E-03	3.790E-03	6.44			1.022E-03	1.022E-03	1.022E-03			8.751E-03	8.751E-03	8.751E-03
1400 - 1500	4.57			4.427E-04	4.427E-04	4.427E-04			2.021E-03	2.021E-03	2.021E-03	3.43			1.022E-03	1.022E-03	1.022E-03			4.667E-03	4.667E-03	4.667E-03
1500 - 1600	4.57			4.427E-04	4.427E-04	4.427E-04			2.021E-03	2.021E-03	2.021E-03	3.43			1.022E-03	1.022E-03	1.022E-03			4.667E-03	4.667E-03	4.667E-03
1600 - 1700	4.00			4.427E-04	4.427E-04	4.427E-04			1.769E-03	1.769E-03	1.769E-03	3.00			1.022E-03	1.022E-03	1.022E-03			4.084E-03	4.084E-03	4.084E-03
1700 - 1800	8.56			4.427E-04	4.427E-04	4.427E-04			3.790E-03	3.790E-03	3.790E-03	6.44			1.022E-03	1.022E-03	1.022E-03			8.751E-03	8.751E-03	8.751E-03
1800 - 1900	7.42			4.427E-04	4.427E-04	4.427E-04			3.285E-03	3.285E-03	3.285E-03	5.58			1.022E-03	1.022E-03	1.022E-03			7.584E-03	7.584E-03	7.584E-03
1900 - 2000	4.00			4.427E-04	4.427E-04	4.427E-04			1.769E-03	1.769E-03	1.769E-03	3.00			1.022E-03	1.022E-03	1.022E-03			4.084E-03	4.084E-03	4.084E-03
2000 - 2100	1.71			4.427E-04	4.427E-04	4.427E-04			7.580E-04	7.580E-04	7.580E-04	1.29			1.022E-03	1.022E-03	1.022E-03			1.750E-03	1.750E-03	1.750E-03
2100 - 2200	2.85			4.427E-04	4.427E-04	4.427E-04			1.263E-03	1.263E-03	1.263E-03	2.15			1.022E-03	1.022E-03	1.022E-03			2.917E-03	2.917E-03	2.917E-03
2200 - 2300	2.28			4.427E-04	4.427E-04	4.427E-04			1.011E-03	1.011E-03	1.011E-03	1.72			1.022E-03	1.022E-03	1.022E-03			2.334E-03	2.334E-03	2.334E-03
2300 - 2400	0.00			4.427E-04	4.427E-04	4.427E-04			0.000E+00	0.000E+00	0.000E+00	0.00			1.022E-03	1.022E-03	1.022E-03			0.000E+00	0.000E+00	0.000E+00

Remark:

[1] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2024 data of EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (PLB)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			9.011E-03	8.356E-03	9.011E-03			2.503E-06	2.321E-06	2.503E-06
0100 - 0200			9.558E-03	8.903E-03	9.558E-03			2.655E-06	2.473E-06	2.655E-06
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			2.867E-02	2.671E-02	2.867E-02			7.965E-06	7.419E-06	7.965E-06
0500 - 0600			1.597E-01	1.486E-01	1.597E-01			4.437E-05	4.128E-05	4.437E-05
0600 - 0700			3.837E-01	3.568E-01	3.837E-01			1.066E-04	9.912E-05	1.066E-04
0700 - 0800			3.921E-01	3.646E-01	3.921E-01			1.089E-04	1.013E-04	1.089E-04
0800 - 0900			4.607E-01	4.286E-01	4.607E-01			1.280E-04	1.191E-04	1.280E-04
0900 - 1000			4.607E-01	4.286E-01	4.607E-01			1.280E-04	1.191E-04	1.280E-04
1000 - 1100			4.342E-01	4.041E-01	4.342E-01			1.206E-04	1.122E-04	1.206E-04
1100 - 1200			3.020E-01	2.811E-01	3.020E-01			8.389E-05	7.808E-05	8.389E-05
1200 - 1300			3.504E-01	3.261E-01	3.504E-01			9.732E-05	9.059E-05	9.732E-05
1300 - 1400			7.086E-01	6.595E-01	7.086E-01			1.968E-04	1.832E-04	1.968E-04
1400 - 1500			3.206E-01	2.983E-01	3.206E-01			8.905E-05	8.287E-05	8.905E-05
1500 - 1600			2.919E-01	2.716E-01	2.919E-01			8.109E-05	7.545E-05	8.109E-05
1600 - 1700			3.307E-01	3.078E-01	3.307E-01			9.186E-05	8.550E-05	9.186E-05
1700 - 1800			4.506E-01	4.192E-01	4.506E-01			1.252E-04	1.164E-04	1.252E-04
1800 - 1900			3.083E-01	2.867E-01	3.083E-01			8.564E-05	7.964E-05	8.564E-05
1900 - 2000			3.211E-01	2.989E-01	3.211E-01			8.920E-05	8.302E-05	8.920E-05
2000 - 2100			1.513E-01	1.408E-01	1.513E-01			4.202E-05	3.911E-05	4.202E-05
2100 - 2200			1.502E-01	1.397E-01	1.502E-01			4.172E-05	3.881E-05	4.172E-05
2200 - 2300			1.794E-01	1.670E-01	1.794E-01			4.984E-05	4.638E-05	4.984E-05
2300 - 2400			1.912E-02	1.781E-02	1.912E-02			5.310E-06	4.946E-06	5.310E-06

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Tuen Mun Central Bus Terminus (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1
0500 - 0600	0	4	2	3	3	1	0	0	0	0	3	2	0	0	0	0	0	2
0600 - 0700	0	1	6	6	2	0	1	1	0	0	2	1	3	0	0	1	0	1
0700 - 0800	0	8	16	7	3	3	3	1	4	1	1	0	1	3	0	0	0	3
0800 - 0900	0	5	11	3	0	0	0	4	4	1	0	0	0	0	0	0	0	2
0900 - 1000	0	1	5	4	4	1	0	4	5	2	0	0	0	0	1	0	0	1
1000 - 1100	0	2	6	2	2	0	1	5	3	2	1	0	0	0	1	2	2	1
1100 - 1200	0	1	2	2	6	1	2	6	1	2	0	0	0	0	0	0	0	6
1200 - 1300	0	1	3	4	2	1	5	12	1	3	1	0	1	0	0	0	0	4
1300 - 1400	0	0	1	3	3	1	1	8	4	3	4	1	0	0	0	0	2	2
1400 - 1500	0	3	9	2	4	3	1	7	2	2	1	1	1	0	0	1	0	2
1500 - 1600	0	3	1	6	3	2	2	5	4	1	2	1	0	1	3	0	0	0
1600 - 1700	0	1	6	7	4	1	4	5	2	4	0	0	1	2	0	0	0	2
1700 - 1800	0	3	11	3	1	0	2	7	3	4	1	0	3	1	0	0	0	2
1800 - 1900	0	5	10	3	1	0	1	4	5	6	0	1	0	0	0	0	0	4
1900 - 2000	0	4	6	7	3	1	7	3	3	5	3	2	1	0	1	0	0	3
2000 - 2100	0	2	6	1	1	0	3	11	5	6	1	2	0	0	0	0	0	1
2100 - 2200	0	0	4	4	1	2	3	15	3	4	2	1	0	0	0	0	0	2
2200 - 2300	0	4	3	1	1	1	4	17	5	1	0	1	0	0	0	0	0	1
2300 - 2400	0	4	5	3	2	2	2	8	8	1	0	0	0	0	0	0	0	2

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
 [1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Central Bus Terminus (Franchised Bus DD)

Cold Idling Emission

Idling Time for Terminating Buses =	2	min
Max. Idling Time for Adjusting Starting Emission =	1	min

Hour	Frequency	Double-Deck Franchised Bus										Double-Deck Franchised Bus										
		Cold Idling Emission Factor (g/min)					Cold Idling Emission (g)					Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)					
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	
0000 - 0100	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00	3			2.253E-03	2.253E-03	2.253E-03			1.352E-02	1.352E-02	1.352E-02
0100 - 0200	2			2.253E-03	2.253E-03	2.253E-03			9.013E-03	9.013E-03	9.013E-03	2			2.253E-03	2.253E-03	2.253E-03			9.013E-03	9.013E-03	9.013E-03
0200 - 0300	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00	3			2.253E-03	2.253E-03	2.253E-03			1.352E-02	1.352E-02	1.352E-02
0300 - 0400	2			2.253E-03	2.253E-03	2.253E-03			9.013E-03	9.013E-03	9.013E-03	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	3			2.253E-03	2.253E-03	2.253E-03			1.352E-02	1.352E-02	1.352E-02	0			2.253E-03	2.253E-03	2.253E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	7			2.253E-03	2.253E-03	2.253E-03			3.155E-02	3.155E-02	3.155E-02	13			2.253E-03	2.253E-03	2.253E-03			5.858E-02	5.858E-02	5.858E-02
0600 - 0700	10			2.253E-03	2.253E-03	2.253E-03			4.507E-02	4.507E-02	4.507E-02	15			2.253E-03	2.253E-03	2.253E-03			6.760E-02	6.760E-02	6.760E-02
0700 - 0800	17			2.253E-03	2.253E-03	2.253E-03			7.661E-02	7.661E-02	7.661E-02	37			2.253E-03	2.253E-03	2.253E-03			1.667E-01	1.667E-01	1.667E-01
0800 - 0900	11			2.253E-03	2.253E-03	2.253E-03			4.957E-02	4.957E-02	4.957E-02	19			2.253E-03	2.253E-03	2.253E-03			8.562E-02	8.562E-02	8.562E-02
0900 - 1000	13			2.253E-03	2.253E-03	2.253E-03			5.858E-02	5.858E-02	5.858E-02	15			2.253E-03	2.253E-03	2.253E-03			6.760E-02	6.760E-02	6.760E-02
1000 - 1100	16			2.253E-03	2.253E-03	2.253E-03			7.210E-02	7.210E-02	7.210E-02	12			2.253E-03	2.253E-03	2.253E-03			5.408E-02	5.408E-02	5.408E-02
1100 - 1200	17			2.253E-03	2.253E-03	2.253E-03			7.661E-02	7.661E-02	7.661E-02	12			2.253E-03	2.253E-03	2.253E-03			5.408E-02	5.408E-02	5.408E-02
1200 - 1300	27			2.253E-03	2.253E-03	2.253E-03			1.217E-01	1.217E-01	1.217E-01	11			2.253E-03	2.253E-03	2.253E-03			4.957E-02	4.957E-02	4.957E-02
1300 - 1400	25			2.253E-03	2.253E-03	2.253E-03			1.127E-01	1.127E-01	1.127E-01	8			2.253E-03	2.253E-03	2.253E-03			3.605E-02	3.605E-02	3.605E-02
1400 - 1500	18			2.253E-03	2.253E-03	2.253E-03			8.112E-02	8.112E-02	8.112E-02	21			2.253E-03	2.253E-03	2.253E-03			9.464E-02	9.464E-02	9.464E-02
1500 - 1600	19			2.253E-03	2.253E-03	2.253E-03			8.562E-02	8.562E-02	8.562E-02	15			2.253E-03	2.253E-03	2.253E-03			6.760E-02	6.760E-02	6.760E-02
1600 - 1700	20			2.253E-03	2.253E-03	2.253E-03			9.013E-02	9.013E-02	9.013E-02	19			2.253E-03	2.253E-03	2.253E-03			8.562E-02	8.562E-02	8.562E-02
1700 - 1800	23			2.253E-03	2.253E-03	2.253E-03			1.037E-01	1.037E-01	1.037E-01	18			2.253E-03	2.253E-03	2.253E-03			8.112E-02	8.112E-02	8.112E-02
1800 - 1900	21			2.253E-03	2.253E-03	2.253E-03			9.464E-02	9.464E-02	9.464E-02	19			2.253E-03	2.253E-03	2.253E-03			8.562E-02	8.562E-02	8.562E-02
1900 - 2000	28			2.253E-03	2.253E-03	2.253E-03			1.262E-01	1.262E-01	1.262E-01	21			2.253E-03	2.253E-03	2.253E-03			9.464E-02	9.464E-02	9.464E-02
2000 - 2100	29			2.253E-03	2.253E-03	2.253E-03			1.307E-01	1.307E-01	1.307E-01	10			2.253E-03	2.253E-03	2.253E-03			4.507E-02	4.507E-02	4.507E-02
2100 - 2200	30			2.253E-03	2.253E-03	2.253E-03			1.352E-01	1.352E-01	1.352E-01	11			2.253E-03	2.253E-03	2.253E-03			4.957E-02	4.957E-02	4.957E-02
2200 - 2300	29			2.253E-03	2.253E-03	2.253E-03			1.307E-01	1.307E-01	1.307E-01	10			2.253E-03	2.253E-03	2.253E-03			4.507E-02	4.507E-02	4.507E-02
2300 - 2400	21			2.253E-03	2.253E-03	2.253E-03			9.464E-02	9.464E-02	9.464E-02	16			2.253E-03	2.253E-03	2.253E-03			7.210E-02	7.210E-02	7.210E-02

Average Distance from Starting Place to PTI Egress =	104	m
Average Spread Distance outside PTI =	596	m

Hour	Idling Emission (g)					Emission for Adjusting Starting Emission (g)					Adjusted Starting Emission Within PTI (g)					Adjusted Starting Emission Outside PTI (g)					Starting Emission Rate Outside PTI (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			1.352E-02	1.352E-02	1.352E-02			6.760E-03	6.760E-03	6.760E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			1.803E-02	1.803E-02	1.803E-02			9.013E-03	9.013E-03	9.013E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			1.352E-02	1.352E-02	1.352E-02			6.760E-03	6.760E-03	6.760E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			9.013E-03	9.013E-03	9.013E-03			4.507E-03	4.507E-03	4.507E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			1.352E-02	1.352E-02	1.352E-02			6.760E-03	6.760E-03	6.760E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			9.013E-02	9.013E-02	9.013E-02			4.507E-02	4.507E-02	4.507E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			1.127E-01	1.127E-01	1.127E-01			5.633E-02	5.633E-02	5.633E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			2.434E-01	2.434E-01	2.434E-01			1.217E-01	1.217E-01	1.217E-01			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			1.352E-01	1.352E-01	1.352E-01			6.760E-02	6.760E-02	6.760E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			1.262E-01	1.262E-01	1.262E-01			6.309E-02	6.309E-02	6.309E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			1.262E-01	1.262E-01	1.262E-01			6.309E-02	6.309E-02	6.309E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			1.307E-01	1.307E-01	1.307E-01			6.534E-02	6.534E-02	6.534E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			1.712E-01	1.712E-01	1.712E-01			8.562E-02	8.562E-02	8.562E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			1.487E-01	1.487E-01	1.487E-01			7.436E-02	7.436E-02	7.436E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			1.758E-01	1.758E-01	1.758E-01			8.788E-02	8.788E-02	8.788E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			1.532E-01	1.532E-01	1.532E-01			7.661E-02	7.661E-02	7.661E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			1.758E-01	1.758E-01	1.758E-01			8.788E-02	8.788E-02	8.788E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			1.848E-01	1.848E-01	1.848E-01			9.238E-02	9.238E-02	9.238E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			1.803E-01	1.803E-01	1.803E-01			9.013E-02	9.013E-02	9.013E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			2.208E-01	2.208E-01	2.208E-01			1.104E-01	1.104E-01	1.104E-01			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			1.758E-01	1.758E-01	1.758E-01			8.788E-02	8.788E-02	8.788E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200			1.848E-01																						

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Tuen Mun Central Bus Terminus (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	208	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	24			2.984E-01	2.745E-01	2.984E-01			1.490E+00	1.370E+00	1.490E+00
0100 - 0200	11			2.984E-01	2.745E-01	2.984E-01			6.827E-01	6.281E-01	6.827E-01
0200 - 0300	4			2.984E-01	2.745E-01	2.984E-01			2.483E-01	2.284E-01	2.483E-01
0300 - 0400	4			2.984E-01	2.745E-01	2.984E-01			2.483E-01	2.284E-01	2.483E-01
0400 - 0500	12			2.984E-01	2.745E-01	2.984E-01			7.448E-01	6.852E-01	7.448E-01
0500 - 0600	31			2.984E-01	2.745E-01	2.984E-01			1.924E+00	1.770E+00	1.924E+00
0600 - 0700	51			2.984E-01	2.745E-01	2.984E-01			3.165E+00	2.912E+00	3.165E+00
0700 - 0800	112			2.984E-01	2.745E-01	2.984E-01			6.952E+00	6.395E+00	6.952E+00
0800 - 0900	67			2.984E-01	2.745E-01	2.984E-01			4.159E+00	3.825E+00	4.159E+00
0900 - 1000	66			2.984E-01	2.745E-01	2.984E-01			4.096E+00	3.768E+00	4.096E+00
1000 - 1100	59			2.984E-01	2.745E-01	2.984E-01			3.662E+00	3.369E+00	3.662E+00
1100 - 1200	61			2.984E-01	2.745E-01	2.984E-01			3.786E+00	3.483E+00	3.786E+00
1200 - 1300	69			2.984E-01	2.745E-01	2.984E-01			4.283E+00	3.940E+00	4.283E+00
1300 - 1400	65			2.984E-01	2.745E-01	2.984E-01			4.034E+00	3.711E+00	4.034E+00
1400 - 1500	74			2.984E-01	2.745E-01	2.984E-01			4.593E+00	4.225E+00	4.593E+00
1500 - 1600	67			2.984E-01	2.745E-01	2.984E-01			4.159E+00	3.825E+00	4.159E+00
1600 - 1700	77			2.984E-01	2.745E-01	2.984E-01			4.779E+00	4.396E+00	4.779E+00
1700 - 1800	72			2.984E-01	2.745E-01	2.984E-01			4.469E+00	4.111E+00	4.469E+00
1800 - 1900	65			2.984E-01	2.745E-01	2.984E-01			4.034E+00	3.711E+00	4.034E+00
1900 - 2000	71			2.984E-01	2.745E-01	2.984E-01			4.407E+00	4.054E+00	4.407E+00
2000 - 2100	65			2.984E-01	2.745E-01	2.984E-01			4.034E+00	3.711E+00	4.034E+00
2100 - 2200	59			2.984E-01	2.745E-01	2.984E-01			3.662E+00	3.369E+00	3.662E+00
2200 - 2300	63			2.984E-01	2.745E-01	2.984E-01			3.910E+00	3.597E+00	3.910E+00
2300 - 2400	51			2.984E-01	2.745E-01	2.984E-01			3.165E+00	2.912E+00	3.165E+00

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	21			2.253E-03	2.253E-03	2.253E-03			4.732E-02	4.732E-02	4.732E-02
0100 - 0200	7			2.253E-03	2.253E-03	2.253E-03			1.577E-02	1.577E-02	1.577E-02
0200 - 0300	1			2.253E-03	2.253E-03	2.253E-03			2.253E-03	2.253E-03	2.253E-03
0300 - 0400	2			2.253E-03	2.253E-03	2.253E-03			4.507E-03	4.507E-03	4.507E-03
0400 - 0500	9			2.253E-03	2.253E-03	2.253E-03			2.028E-02	2.028E-02	2.028E-02
0500 - 0600	11			2.253E-03	2.253E-03	2.253E-03			2.479E-02	2.479E-02	2.479E-02
0600 - 0700	26			2.253E-03	2.253E-03	2.253E-03			5.858E-02	5.858E-02	5.858E-02
0700 - 0800	58			2.253E-03	2.253E-03	2.253E-03			1.307E-01	1.307E-01	1.307E-01
0800 - 0900	37			2.253E-03	2.253E-03	2.253E-03			8.337E-02	8.337E-02	8.337E-02
0900 - 1000	38			2.253E-03	2.253E-03	2.253E-03			8.562E-02	8.562E-02	8.562E-02
1000 - 1100	31			2.253E-03	2.253E-03	2.253E-03			6.985E-02	6.985E-02	6.985E-02
1100 - 1200	32			2.253E-03	2.253E-03	2.253E-03			7.210E-02	7.210E-02	7.210E-02
1200 - 1300	31			2.253E-03	2.253E-03	2.253E-03			6.985E-02	6.985E-02	6.985E-02
1300 - 1400	32			2.253E-03	2.253E-03	2.253E-03			7.210E-02	7.210E-02	7.210E-02
1400 - 1500	35			2.253E-03	2.253E-03	2.253E-03			7.886E-02	7.886E-02	7.886E-02
1500 - 1600	33			2.253E-03	2.253E-03	2.253E-03			7.436E-02	7.436E-02	7.436E-02
1600 - 1700	38			2.253E-03	2.253E-03	2.253E-03			8.562E-02	8.562E-02	8.562E-02
1700 - 1800	31			2.253E-03	2.253E-03	2.253E-03			6.985E-02	6.985E-02	6.985E-02
1800 - 1900	25			2.253E-03	2.253E-03	2.253E-03			5.633E-02	5.633E-02	5.633E-02
1900 - 2000	22			2.253E-03	2.253E-03	2.253E-03			4.957E-02	4.957E-02	4.957E-02
2000 - 2100	26			2.253E-03	2.253E-03	2.253E-03			5.858E-02	5.858E-02	5.858E-02
2100 - 2200	18			2.253E-03	2.253E-03	2.253E-03			4.056E-02	4.056E-02	4.056E-02
2200 - 2300	24			2.253E-03	2.253E-03	2.253E-03			5.408E-02	5.408E-02	5.408E-02
2300 - 2400	14			2.253E-03	2.253E-03	2.253E-03			3.155E-02	3.155E-02	3.155E-02

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Central Bus Terminus (Franchised Bus DD)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			1.550E+00	1.431E+00	1.550E+00			4.307E-04	3.975E-04	4.307E-04
0100 - 0200			7.165E-01	6.619E-01	7.165E-01			1.990E-04	1.838E-04	1.990E-04
0200 - 0300			2.640E-01	2.442E-01	2.640E-01			7.334E-05	6.782E-05	7.334E-05
0300 - 0400			2.618E-01	2.419E-01	2.618E-01			7.272E-05	6.720E-05	7.272E-05
0400 - 0500			7.786E-01	7.190E-01	7.786E-01			2.163E-04	1.997E-04	2.163E-04
0500 - 0600			2.039E+00	1.885E+00	2.039E+00			5.664E-04	5.236E-04	5.664E-04
0600 - 0700			3.337E+00	3.083E+00	3.337E+00			9.269E-04	8.564E-04	9.269E-04
0700 - 0800			7.326E+00	6.769E+00	7.326E+00			2.035E-03	1.880E-03	2.035E-03
0800 - 0900			4.377E+00	4.044E+00	4.377E+00			1.216E-03	1.123E-03	1.216E-03
0900 - 1000			4.308E+00	3.980E+00	4.308E+00			1.197E-03	1.106E-03	1.197E-03
1000 - 1100			3.858E+00	3.565E+00	3.858E+00			1.072E-03	9.902E-04	1.072E-03
1100 - 1200			3.989E+00	3.686E+00	3.989E+00			1.108E-03	1.024E-03	1.108E-03
1200 - 1300			4.524E+00	4.181E+00	4.524E+00			1.257E-03	1.161E-03	1.257E-03
1300 - 1400			4.255E+00	3.932E+00	4.255E+00			1.182E-03	1.092E-03	1.182E-03
1400 - 1500			4.848E+00	4.480E+00	4.848E+00			1.347E-03	1.244E-03	1.347E-03
1500 - 1600			4.386E+00	4.053E+00	4.386E+00			1.218E-03	1.126E-03	1.218E-03
1600 - 1700			5.041E+00	4.658E+00	5.041E+00			1.400E-03	1.294E-03	1.400E-03
1700 - 1800			4.723E+00	4.366E+00	4.723E+00			1.312E-03	1.213E-03	1.312E-03
1800 - 1900			4.271E+00	3.948E+00	4.271E+00			1.186E-03	1.097E-03	1.186E-03
1900 - 2000			4.677E+00	4.324E+00	4.677E+00			1.299E-03	1.201E-03	1.299E-03
2000 - 2100			4.269E+00	3.946E+00	4.269E+00			1.186E-03	1.096E-03	1.186E-03
2100 - 2200			3.887E+00	3.594E+00	3.887E+00			1.080E-03	9.983E-04	1.080E-03
2200 - 2300			4.140E+00	3.827E+00	4.140E+00			1.150E-03	1.063E-03	1.150E-03
2300 - 2400			3.364E+00	3.110E+00	3.364E+00			9.344E-04	8.639E-04	9.344E-04

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Emission Inventory for AERMOD Model - Emission Associated with Bus and Minibus Termini (Operation Phase – Year 2028)

Bus Terminus	Source ID	Bus Terminus	Type	X (m)	Y (m)	Release Height (mAG)	Initial Lateral Dimension (m)	Initial Vertical Dimension (m)	Operation Period (hr)	Area for PTI (for AREAPOLY)	No. of Vertices (for AREAPOLY)	Max. Hourly Emission Rate (g/s) or (g/m ² /s)		
												RSP	FSP	TSP
Emission inside Terminus														
Lung Mun Oasis	PTI06_1	PTI06	VOLUME	814526.97	827273.88	3.0	16.28	2.79	24	-	-	1.73527E-04	1.59988E-04	1.73527E-04
	PTI06_2			814540.79	827306.04	3.0	16.28	2.79				1.73527E-04	1.59988E-04	1.73527E-04
	PTI06_3			814554.60	827338.20	3.0	16.28	2.79				1.73527E-04	1.59988E-04	1.73527E-04
	PTI06_4			814568.42	827370.36	3.0	16.28	2.79				1.73527E-04	1.59988E-04	1.73527E-04
	PTI06_5			814582.23	827402.52	3.0	16.28	2.79				1.73527E-04	1.59988E-04	1.73527E-04
	PTI06_6			814596.05	827434.67	3.0	16.28	2.79				1.73527E-04	1.59988E-04	1.73527E-04
Pierhead Garden	PTI07_1	PTI07	VOLUME	814607.01	825967.69	3.0	16.28	2.79	24	-	-	1.85463E-04	1.70986E-04	1.85463E-04
	PTI07_2			814640.69	825958.19	3.0	16.28	2.79				1.85463E-04	1.70986E-04	1.85463E-04
	PTI07_3			814674.38	825948.68	3.0	16.28	2.79				1.85463E-04	1.70986E-04	1.85463E-04
	PTI07_4			814708.06	825939.18	3.0	16.28	2.79				1.85463E-04	1.70986E-04	1.85463E-04
	PTI07_5			814741.75	825929.67	3.0	16.28	2.79				1.85463E-04	1.70986E-04	1.85463E-04
	PTI07_6			814597.51	825934.01	3.0	16.28	2.79				1.85463E-04	1.70986E-04	1.85463E-04
	PTI07_7			814631.19	825924.50	3.0	16.28	2.79				1.85463E-04	1.70986E-04	1.85463E-04
	PTI07_8			814664.87	825915.00	3.0	16.28	2.79				1.85463E-04	1.70986E-04	1.85463E-04
	PTI07_9			814698.56	825905.49	3.0	16.28	2.79				1.85463E-04	1.70986E-04	1.85463E-04
	PTI07_10			814732.24	825895.99	3.0	16.28	2.79				1.85463E-04	1.70986E-04	1.85463E-04
Tuen Mun Ferry Pier Minibus Terminus	PTI08	PTI08	AREAPOLY	815000.00	826032.80	0.0	-	-	24	857.27	7	2.25251E-09	2.12610E-09	2.25251E-09
				815005.10	826028.20	0.0	-	-						
				815025.69	825987.97	0.0	-	-						
				815041.16	825992.41	0.0	-	-						
				815023.13	826026.67	0.0	-	-						
				815008.46	826041.73	0.0	-	-						
Yau Oi (South) Bus Terminus	PTI09	PTI09	AREAPOLY	815256.32	827188.52	0.0	-	-	24	1092.85	8	1.30971E-07	1.21497E-07	1.30971E-07
				815195.02	827192.15	0.0	-	-						
				815174.11	827195.10	0.0	-	-						
				815176.61	827186.85	0.0	-	-						
				815179.30	827182.22	0.0	-	-						
				815185.86	827180.67	0.0	-	-						
Tuen Mun Light Rail Depot Bus Terminus	PTI10	PTI10	AREAPOLY	814302.59	826907.44	0.0	-	-	24	3276.42	6	3.38481E-08	3.12990E-08	3.38481E-08
				814334.62	827014.55	0.0	-	-						
				814360.50	827005.10	0.0	-	-						
				814347.49	826965.97	0.0	-	-						
				814343.43	826939.49	0.0	-	-						
CityBus Tuen Mun Depot	PTI12	PTI12	AREAPOLY	814336.37	826896.46	0.0	-	-	24	10780.05	9	1.40396E-07	1.29458E-07	1.40396E-07
				814886.77	826858.89	0.0	-	-						
				814771.85	826858.89	0.0	-	-						
				814782.32	826830.76	0.0	-	-						
				814824.79	826746.94	0.0	-	-						
				814832.16	826733.18	0.0	-	-						
				814857.18	826743.26	0.0	-	-						
				814888.20	826753.07	0.0	-	-						
KMB Tuen Mun Depot	PTI13	PTI13	AREAPOLY	814895.02	826852.26	0.0	-	-	24	19604.76	7	1.76114E-07	1.62230E-07	1.76114E-07
				814886.55	826852.43	0.0	-	-						
				814910.20	827074.58	0.0	-	-						
				814888.20	826753.07	0.0	-	-						
				814924.87	826779.01	0.0	-	-						
				814944.40	826799.92	0.0	-	-						
Tuen Mun Station Terminus	PTI134	PTI134	VOLUME	815327.25	828448.13	3.0	24.42	2.79	24	-	-	1.45696E-03	1.34568E-03	1.45696E-03
Tuen Mun Central Bus Terminus	PTI135	PTI135	VOLUME	815514.25	828095.62	3.0	22.09	2.79	24	-	-	2.19979E-03	2.03090E-03	2.19979E-03

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Calculation of Idling Emission Factor

Taxi

	Population	Idling Emission Factor				Mass Factor	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[8]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro VI	73.4%		0.00E+00		0.00E+00	-	1.3				0.000E+00				0.000E+00
Euro V	26.1%		0.00E+00		0.00E+00										
Euro IV	0.4%		0.00E+00		0.00E+00										
Euro III	0.2%		0.00E+00		0.00E+00										

PLB (Diesel)

	Population	Idling Emission Factor				Mass Factor	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[2]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro VI	79%		2.00E-02		2.00E-02	-	1.3				4.336E-04				4.336E-04
Euro V	21%		2.00E-02		2.00E-02										
Euro IV	0.01%		1.60E-01		1.60E-01										
Euro III	0%		1.00E-01		1.00E-01										

PLB (LPG)

	Population	Idling Emission Factor				Mass Factor	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Average Idling Emission Factor (g/min)				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[5]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro V	89%		2.00E-02		2.00E-02	-	1.3				6.820E-04				6.820E-04
Euro IV	5%		1.60E-01		1.60E-01										
Euro III	6%		1.00E-01		1.00E-01										

FBDD

	Population	Idling Emission Factor				Mass Factor ^[7]	AC Factor ^[3]	Average Idling Emission Factor (g/min)							
		Cold Idling		Hot Idling				Cold Idling				Hot Idling			
		NOx (g/s)	PM (g/hr) ^[1]	NOx (g/hr)	PM (g/hr) ^[6]			NOx	NO	NO ₂	PM ^[4]	NOx	NO	NO ₂	PM ^[4]
Euro VI	25%		1.00E-02		1.00E-02	1.2	1.3				2.013E-03				2.013E-03
Euro V	74%		1.00E-01		1.00E-01										
Euro IV	0.2%		2.00E-01		2.00E-01										
Euro III	0%		1.29E+00		1.29E+00										

Remarks

[1] Due to the lack of information, RSP cold idling emission factor was referenced to the corresponding hot idling emission factor.

[2] Reference made to Table 43 of VEADV.

[3] Reference made to the approved *Liantang / Heung Yuen Wai Boundary Control Point and Associated Works EIA Report*.

[4] All TSP (PM) emissions were assumed for RSP and FSP as a conservative approach.

[5] Due to the lack of information, RSP hot idling emission factor for PLB(LPG) was referenced to hot idling emission factor for PLB(Diesel).

[6] Reference made to Table 46 of VEADV.

[7] Reference made to Table 27 of VEADV.

[8] The idling emission factor of TAXI is assumed to be 0 as the running emission factor is 0 in EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (TAXI)

Starting Emission

	Starting Emission Factor (g/trip)																	
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (TAXI)

Running Emission

Average Travelling Distance within PTI =	442	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	19			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	1			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	2			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	3			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	1			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	2			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	5			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	15			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	14			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	13			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	8			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	9			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	13			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	8			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	8			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	5			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	8			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	14			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	16			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	27			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	11			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	16			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	8			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	3			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Idling Emission

Idling Time =	2	min
---------------	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	9			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	1			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	11			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	11			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	2			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	1			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	2			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	6			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	5			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	2			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	1			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	3			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	5			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	7			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	17			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	7			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	14			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	5			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (TAXI)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2200 - 2300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2300 - 2400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour	No. of Cold Starts of Double-Deck Franchised Bus																	
	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	1
0100 - 0200	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600 - 0700	0	0	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
0700 - 0800	0	4	13	2	1	0	0	0	0	0	1	0	0	1	0	0	0	1
0800 - 0900	0	2	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	3	1	0	0	0	0	1	0	0	0	0	0	0	1	1
1100 - 1200	0	0	1	4	1	0	1	0	0	0	0	0	0	0	0	0	0	2
1200 - 1300	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1300 - 1400	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
1400 - 1500	0	0	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0	1
1500 - 1600	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1700 - 1800	0	2	1	0	0	0	0	0	1	0	1	0	1	2	0	0	0	1
1800 - 1900	0	1	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
2000 - 2100	0	1	0	1	0	0	0	0	2	3	0	0	0	0	0	0	0	1
2100 - 2200	0	1	3	0	0	0	0	0	1	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
2300 - 2400	0	0	0	0	0	0	2	1	1	0	0	0	0	0	1	0	0	0

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (Franchised Bus DD)

Cold Idling Emission

Idling Time for Terminating Buses =	2	min
Max. Idling Time for Adjusting Starting Emission =	1	min

Hour	Frequency	Double-Deck Franchised Bus										Double-Deck Franchised Bus										
		Cold Idling Emission Factor (g/min)					Cold Idling Emission (g)					Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)					
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	
0000 - 0100	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0200 - 0300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
0300 - 0400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0400 - 0500	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
0500 - 0600	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0600 - 0700	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	8			2.013E-03	2.013E-03	2.013E-03			3.220E-02	3.220E-02	3.220E-02
0700 - 0800	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02	20			2.013E-03	2.013E-03	2.013E-03			8.050E-02	8.050E-02	8.050E-02
0800 - 0900	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	8			2.013E-03	2.013E-03	2.013E-03			3.220E-02	3.220E-02	3.220E-02
0900 - 1000	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	5			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02
1000 - 1100	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
1100 - 1200	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02	6			2.013E-03	2.013E-03	2.013E-03			2.415E-02	2.415E-02	2.415E-02
1200 - 1300	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
1300 - 1400	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
1400 - 1500	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
1500 - 1600	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	5			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02
1600 - 1700	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
1700 - 1800	6			2.013E-03	2.013E-03	2.013E-03			2.415E-02	2.415E-02	2.415E-02	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
1800 - 1900	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
1900 - 2000	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	6			2.013E-03	2.013E-03	2.013E-03			2.415E-02	2.415E-02	2.415E-02	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
2100 - 2200	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
2200 - 2300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
2300 - 2400	5			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00

Average Distance from Starting Place to PTI Egress =	221	m
Average Spread Distance outside PTI =	479	m

Hour	Idling Emission (g)					Emission for Adjusting Starting Emission (g)					Adujusted Starting Emission Within PTI (g)					Adjusted Starting Emission Outside PTI (g)					Starting Emission Rate Outside PTI (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			8.050E-03	8.050E-03	8.050E-03			4.025E-03	4.025E-03	4.025E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			8.050E-03	8.050E-03	8.050E-03			4.025E-03	4.025E-03	4.025E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			3.220E-02	3.220E-02	3.220E-02			1.610E-02	1.610E-02	1.610E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			9.258E-02	9.258E-02	9.258E-02			4.629E-02	4.629E-02	4.629E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			3.220E-02	3.220E-02	3.220E-02			1.610E-02	1.610E-02	1.610E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			2.013E-02	2.013E-02	2.013E-02			1.006E-02	1.006E-02	1.006E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			2.818E-02	2.818E-02	2.818E-02			1.409E-02	1.409E-02	1.409E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			3.623E-02	3.623E-02	3.623E-02			1.811E-02	1.811E-02	1.811E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			2.013E-02	2.013E-02	2.013E-02			1.006E-02	1.006E-02	1.006E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			2.818E-02	2.818E-02	2.818E-02			1.409E-02	1.409E-02	1.409E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			2.013E-02	2.013E-02	2.013E-02			1.006E-02	1.006E-02	1.006E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			3.623E-02	3.623E-02	3.623E-02			1.811E-02	1.811E-02	1.811E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			2.013E-02	2.013E-02	2.013E-02			1.006E-02	1.006E-02	1.006E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			8.050E-03	8.050E-03	8.050E-03			4.025E-03	4.025E-03	4.025E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			3.220E-02	3.220E-02	3.220E-02			1.610E-02	1.610E-02	1.610E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200			2.013E-02																						

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	442	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	2			3.256E-01	2.995E-01	3.256E-01			2.878E-01	2.648E-01	2.878E-01
0100 - 0200	2			3.256E-01	2.995E-01	3.256E-01			2.878E-01	2.648E-01	2.878E-01
0200 - 0300	2			3.256E-01	2.995E-01	3.256E-01			2.878E-01	2.648E-01	2.878E-01
0300 - 0400	1			3.256E-01	2.995E-01	3.256E-01			1.439E-01	1.324E-01	1.439E-01
0400 - 0500	3			3.256E-01	2.995E-01	3.256E-01			4.317E-01	3.971E-01	4.317E-01
0500 - 0600	2			3.256E-01	2.995E-01	3.256E-01			2.878E-01	2.648E-01	2.878E-01
0600 - 0700	9			3.256E-01	2.995E-01	3.256E-01			1.295E+00	1.191E+00	1.295E+00
0700 - 0800	25			3.256E-01	2.995E-01	3.256E-01			3.598E+00	3.309E+00	3.598E+00
0800 - 0900	10			3.256E-01	2.995E-01	3.256E-01			1.439E+00	1.324E+00	1.439E+00
0900 - 1000	6			3.256E-01	2.995E-01	3.256E-01			8.635E-01	7.943E-01	8.635E-01
1000 - 1100	7			3.256E-01	2.995E-01	3.256E-01			1.007E+00	9.267E-01	1.007E+00
1100 - 1200	9			3.256E-01	2.995E-01	3.256E-01			1.295E+00	1.191E+00	1.295E+00
1200 - 1300	4			3.256E-01	2.995E-01	3.256E-01			5.757E-01	5.295E-01	5.757E-01
1300 - 1400	6			3.256E-01	2.995E-01	3.256E-01			8.635E-01	7.943E-01	8.635E-01
1400 - 1500	8			3.256E-01	2.995E-01	3.256E-01			1.151E+00	1.059E+00	1.151E+00
1500 - 1600	6			3.256E-01	2.995E-01	3.256E-01			8.635E-01	7.943E-01	8.635E-01
1600 - 1700	3			3.256E-01	2.995E-01	3.256E-01			4.317E-01	3.971E-01	4.317E-01
1700 - 1800	11			3.256E-01	2.995E-01	3.256E-01			1.583E+00	1.456E+00	1.583E+00
1800 - 1900	7			3.256E-01	2.995E-01	3.256E-01			1.007E+00	9.267E-01	1.007E+00
1900 - 2000	6			3.256E-01	2.995E-01	3.256E-01			8.635E-01	7.943E-01	8.635E-01
2000 - 2100	15			3.256E-01	2.995E-01	3.256E-01			2.159E+00	1.986E+00	2.159E+00
2100 - 2200	8			3.256E-01	2.995E-01	3.256E-01			1.151E+00	1.059E+00	1.151E+00
2200 - 2300	6			3.256E-01	2.995E-01	3.256E-01			8.635E-01	7.943E-01	8.635E-01
2300 - 2400	5			3.256E-01	2.995E-01	3.256E-01			7.196E-01	6.619E-01	7.196E-01

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0100 - 0200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0600 - 0700	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0700 - 0800	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0800 - 0900	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0900 - 1000	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
1000 - 1100	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
1300 - 1400	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
1400 - 1500	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
1500 - 1600	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
1600 - 1700	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
1800 - 1900	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
1900 - 2000	4			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
2000 - 2100	7			2.013E-03	2.013E-03	2.013E-03			1.409E-02	1.409E-02	1.409E-02
2100 - 2200	3			2.013E-03	2.013E-03	2.013E-03			6.038E-03	6.038E-03	6.038E-03
2200 - 2300	4			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
2300 - 2400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (Franchised Bus DD)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			2.939E-01	2.708E-01	2.939E-01			8.163E-05	7.522E-05	8.163E-05
0100 - 0200			2.959E-01	2.728E-01	2.959E-01			8.219E-05	7.578E-05	8.219E-05
0200 - 0300			2.959E-01	2.728E-01	2.959E-01			8.219E-05	7.578E-05	8.219E-05
0300 - 0400			1.479E-01	1.364E-01	1.479E-01			4.109E-05	3.789E-05	4.109E-05
0400 - 0500			4.438E-01	4.092E-01	4.438E-01			1.233E-04	1.137E-04	1.233E-04
0500 - 0600			2.939E-01	2.708E-01	2.939E-01			8.163E-05	7.522E-05	8.163E-05
0600 - 0700			1.329E+00	1.226E+00	1.329E+00			3.693E-04	3.405E-04	3.693E-04
0700 - 0800			3.694E+00	3.406E+00	3.694E+00			1.026E-03	9.461E-04	1.026E-03
0800 - 0900			1.475E+00	1.360E+00	1.475E+00			4.098E-04	3.778E-04	4.098E-04
0900 - 1000			8.856E-01	8.164E-01	8.856E-01			2.460E-04	2.268E-04	2.460E-04
1000 - 1100			1.036E+00	9.548E-01	1.036E+00			2.877E-04	2.652E-04	2.877E-04
1100 - 1200			1.331E+00	1.228E+00	1.331E+00			3.699E-04	3.410E-04	3.699E-04
1200 - 1300			5.897E-01	5.436E-01	5.897E-01			1.638E-04	1.510E-04	1.638E-04
1300 - 1400			8.856E-01	8.164E-01	8.856E-01			2.460E-04	2.268E-04	2.460E-04
1400 - 1500			1.182E+00	1.089E+00	1.182E+00			3.282E-04	3.026E-04	3.282E-04
1500 - 1600			8.856E-01	8.164E-01	8.856E-01			2.460E-04	2.268E-04	2.460E-04
1600 - 1700			4.438E-01	4.092E-01	4.438E-01			1.233E-04	1.137E-04	1.233E-04
1700 - 1800			1.623E+00	1.496E+00	1.623E+00			4.509E-04	4.157E-04	4.509E-04
1800 - 1900			1.032E+00	9.508E-01	1.032E+00			2.865E-04	2.641E-04	2.865E-04
1900 - 2000			8.796E-01	8.104E-01	8.796E-01			2.443E-04	2.251E-04	2.443E-04
2000 - 2100			2.205E+00	2.032E+00	2.205E+00			6.125E-04	5.644E-04	6.125E-04
2100 - 2200			1.177E+00	1.085E+00	1.177E+00			3.271E-04	3.014E-04	3.271E-04
2200 - 2300			8.796E-01	8.104E-01	8.796E-01			2.443E-04	2.251E-04	2.443E-04
2300 - 2400			7.397E-01	6.820E-01	7.397E-01			2.055E-04	1.895E-04	2.055E-04

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (PLB)

Starting Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] = 2.25

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour	No. of Cold Starts of Public Light Bus (Diesel)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
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
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
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
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
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
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
0600 - 0700	0.00	0.00	0.69	0.00	0.69	1.39	0.69	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	1.39	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	0.69	0.00	0.00	0.00	0.00	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	0.69	0.69	0.00	0.00	0.00	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	0.69	1.39	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	1.39	0.69	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	0.69	0.69	0.00	0.00	0.00	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	1.39	0.00	0.00	0.00	0.00	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	1.39	0.00	0.00	0.00	0.00	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	0.69	0.69	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	1.39	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	0.69	1.39	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	0.69	1.39	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	0.69	2.08	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	0.69	0.00	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	0.69	0.00	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	0.69	0.00	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	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
 [1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.
 [2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2026 data of EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (PLB)

Starting Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] = 2.25

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Public Light Bus (LPG)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
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
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
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
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
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
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
0600 - 0700	0.00	0.00	0.31	0.00	0.31	0.61	0.31	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	0.61	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	0.31	0.00	0.00	0.00	0.00	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	0.31	0.31	0.00	0.00	0.00	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	0.31	0.61	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	0.61	0.31	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	0.31	0.31	0.00	0.00	0.00	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	0.61	0.00	0.00	0.00	0.00	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	0.61	0.00	0.00	0.00	0.00	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	0.31	0.31	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	0.61	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	0.31	0.61	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	0.31	0.61	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	0.31	0.92	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	0.31	0.00	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	0.31	0.00	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	0.31	0.00	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	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2026 data of EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (PLB)

Running Emission

Average Travelling Distance within PTI =	442	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Public Light Bus (Diesel + LPG)									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	5			3.837E-02	3.533E-02	3.837E-02			8.481E-02	7.807E-02	8.481E-02
0700 - 0800	3			3.837E-02	3.533E-02	3.837E-02			5.088E-02	4.684E-02	5.088E-02
0800 - 0900	2			3.837E-02	3.533E-02	3.837E-02			3.392E-02	3.123E-02	3.392E-02
0900 - 1000	2			3.837E-02	3.533E-02	3.837E-02			3.392E-02	3.123E-02	3.392E-02
1000 - 1100	3			3.837E-02	3.533E-02	3.837E-02			5.088E-02	4.684E-02	5.088E-02
1100 - 1200	3			3.837E-02	3.533E-02	3.837E-02			5.088E-02	4.684E-02	5.088E-02
1200 - 1300	2			3.837E-02	3.533E-02	3.837E-02			3.392E-02	3.123E-02	3.392E-02
1300 - 1400	3			3.837E-02	3.533E-02	3.837E-02			5.088E-02	4.684E-02	5.088E-02
1400 - 1500	2			3.837E-02	3.533E-02	3.837E-02			3.392E-02	3.123E-02	3.392E-02
1500 - 1600	2			3.837E-02	3.533E-02	3.837E-02			3.392E-02	3.123E-02	3.392E-02
1600 - 1700	2			3.837E-02	3.533E-02	3.837E-02			3.392E-02	3.123E-02	3.392E-02
1700 - 1800	3			3.837E-02	3.533E-02	3.837E-02			5.088E-02	4.684E-02	5.088E-02
1800 - 1900	3			3.837E-02	3.533E-02	3.837E-02			5.088E-02	4.684E-02	5.088E-02
1900 - 2000	4			3.837E-02	3.533E-02	3.837E-02			6.785E-02	6.246E-02	6.785E-02
2000 - 2100	1			3.837E-02	3.533E-02	3.837E-02			1.696E-02	1.561E-02	1.696E-02
2100 - 2200	1			3.837E-02	3.533E-02	3.837E-02			1.696E-02	1.561E-02	1.696E-02
2200 - 2300	1			3.837E-02	3.533E-02	3.837E-02			1.696E-02	1.561E-02	1.696E-02
2300 - 2400	1			3.837E-02	3.533E-02	3.837E-02			1.696E-02	1.561E-02	1.696E-02

Idling Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] =	2.3
Idling Time for Non-terminating Public Light Buses =	1 min

Hour	Frequency	Public Light Bus (Diesel)										Public Light Bus (LPG)										
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)					Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)					
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	
0000 - 0100	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0.69			4.336E-04	4.336E-04	4.336E-04			3.003E-04	3.003E-04	3.003E-04	0.31			6.820E-04	6.820E-04	6.820E-04			4.724E-04	4.724E-04	4.724E-04
0800 - 0900	0.69			4.336E-04	4.336E-04	4.336E-04			3.003E-04	3.003E-04	3.003E-04	0.31			6.820E-04	6.820E-04	6.820E-04			4.724E-04	4.724E-04	4.724E-04
0900 - 1000	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0.69			4.336E-04	4.336E-04	4.336E-04			3.003E-04	3.003E-04	3.003E-04	0.31			6.820E-04	6.820E-04	6.820E-04			4.724E-04	4.724E-04	4.724E-04
1400 - 1500	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00

Remark:

[1] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2026 data of EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Lung Mun Oasis (PLB)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			8.991E-02	8.317E-02	8.991E-02			2.497E-05	2.310E-05	2.497E-05
0700 - 0800			5.370E-02	4.966E-02	5.370E-02			1.492E-05	1.379E-05	1.492E-05
0800 - 0900			3.572E-02	3.302E-02	3.572E-02			9.921E-06	9.173E-06	9.921E-06
0900 - 1000			3.596E-02	3.327E-02	3.596E-02			9.990E-06	9.241E-06	9.990E-06
1000 - 1100			5.394E-02	4.990E-02	5.394E-02			1.498E-05	1.386E-05	1.498E-05
1100 - 1200			5.394E-02	4.990E-02	5.394E-02			1.498E-05	1.386E-05	1.498E-05
1200 - 1300			3.596E-02	3.327E-02	3.596E-02			9.990E-06	9.241E-06	9.990E-06
1300 - 1400			5.370E-02	4.966E-02	5.370E-02			1.492E-05	1.379E-05	1.492E-05
1400 - 1500			3.596E-02	3.327E-02	3.596E-02			9.990E-06	9.241E-06	9.990E-06
1500 - 1600			3.596E-02	3.327E-02	3.596E-02			9.990E-06	9.241E-06	9.990E-06
1600 - 1700			3.596E-02	3.327E-02	3.596E-02			9.990E-06	9.241E-06	9.990E-06
1700 - 1800			5.394E-02	4.990E-02	5.394E-02			1.498E-05	1.386E-05	1.498E-05
1800 - 1900			5.394E-02	4.990E-02	5.394E-02			1.498E-05	1.386E-05	1.498E-05
1900 - 2000			7.193E-02	6.654E-02	7.193E-02			1.998E-05	1.848E-05	1.998E-05
2000 - 2100			1.798E-02	1.663E-02	1.798E-02			4.995E-06	4.621E-06	4.995E-06
2100 - 2200			1.798E-02	1.663E-02	1.798E-02			4.995E-06	4.621E-06	4.995E-06
2200 - 2300			1.798E-02	1.663E-02	1.798E-02			4.995E-06	4.621E-06	4.995E-06
2300 - 2400			1.798E-02	1.663E-02	1.798E-02			4.995E-06	4.621E-06	4.995E-06

**Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Pierhead Garden (Franchised Bus DD)**

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	1	2	2	4	1	1	0	0	0	0	0	0	0	0	0	0	6
0100 - 0200	0	1	1	2	1	0	0	2	0	0	0	0	0	0	0	0	0	2
0200 - 0300	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
0300 - 0400	0	0	0	0	0	0	0	2	3	3	0	0	0	0	0	0	0	1
0400 - 0500	0	0	1	0	0	0	0	2	0	0	1	0	0	0	0	0	0	2
0500 - 0600	0	0	2	1	1	1	0	0	0	0	3	4	0	0	0	0	0	3
0600 - 0700	0	2	8	7	3	0	1	0	0	0	1	0	4	0	0	0	0	4
0700 - 0800	0	3	13	5	1	1	0	4	1	0	0	0	2	3	0	0	0	4
0800 - 0900	0	9	9	2	1	0	1	6	2	0	0	0	0	0	2	0	0	5
0900 - 1000	0	4	4	3	0	0	3	4	5	1	0	0	0	0	0	0	0	4
1000 - 1100	0	2	8	1	2	2	1	9	2	0	0	0	0	0	0	1	1	4
1100 - 1200	0	2	6	0	1	1	1	11	2	2	1	0	0	0	0	0	0	3
1200 - 1300	0	1	8	5	0	0	1	7	1	0	1	0	1	0	0	0	0	7
1300 - 1400	0	2	2	6	1	0	4	8	3	1	0	0	0	0	0	0	1	3
1400 - 1500	0	2	3	6	1	3	2	7	7	1	0	0	0	0	0	2	0	2
1500 - 1600	0	0	9	4	0	1	3	8	1	0	0	0	0	0	0	0	0	0
1600 - 1700	0	2	5	5	3	0	0	8	6	0	0	0	0	1	0	0	0	1
1700 - 1800	0	3	4	4	1	0	1	9	4	2	1	0	0	0	0	0	0	1
1800 - 1900	0	6	4	3	1	2	2	9	7	2	1	2	0	0	0	0	0	0
1900 - 2000	0	2	5	3	5	2	1	11	3	2	2	1	0	0	0	0	0	2
2000 - 2100	0	0	8	1	0	3	2	12	3	2	0	0	2	0	0	0	0	1
2100 - 2200	0	1	6	3	1	2	2	7	11	1	1	0	1	0	0	0	0	2
2200 - 2300	0	2	9	2	1	1	0	13	3	0	0	0	1	0	0	0	0	0
2300 - 2400	0	2	3	2	0	2	5	7	2	0	0	0	0	0	0	0	0	3

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Pierhead Garden (Franchised Bus DD)

Cold Idling Emission

Idling Time for Terminating Buses =	2	min
Max. Idling Time for Adjusting Starting Emission =	1	min

Hour	Frequency	Double-Deck Franchised Bus										Double-Deck Franchised Bus										
		Cold Idling Emission Factor (g/min)					Cold Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	7			2.013E-03	2.013E-03	2.013E-03			2.818E-02	2.818E-02	2.818E-02	10			2.013E-03	2.013E-03	2.013E-03			4.025E-02	4.025E-02	4.025E-02
0100 - 0200	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02	5			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02
0200 - 0300	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0300 - 0400	9			2.013E-03	2.013E-03	2.013E-03			3.623E-02	3.623E-02	3.623E-02	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	5			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0500 - 0600	10			2.013E-03	2.013E-03	2.013E-03			4.025E-02	4.025E-02	4.025E-02	5			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02
0600 - 0700	10			2.013E-03	2.013E-03	2.013E-03			4.025E-02	4.025E-02	4.025E-02	20			2.013E-03	2.013E-03	2.013E-03			8.050E-02	8.050E-02	8.050E-02
0700 - 0800	14			2.013E-03	2.013E-03	2.013E-03			5.635E-02	5.635E-02	5.635E-02	23			2.013E-03	2.013E-03	2.013E-03			9.258E-02	9.258E-02	9.258E-02
0800 - 0900	16			2.013E-03	2.013E-03	2.013E-03			6.440E-02	6.440E-02	6.440E-02	21			2.013E-03	2.013E-03	2.013E-03			8.453E-02	8.453E-02	8.453E-02
0900 - 1000	17			2.013E-03	2.013E-03	2.013E-03			6.843E-02	6.843E-02	6.843E-02	11			2.013E-03	2.013E-03	2.013E-03			4.428E-02	4.428E-02	4.428E-02
1000 - 1100	18			2.013E-03	2.013E-03	2.013E-03			7.245E-02	7.245E-02	7.245E-02	15			2.013E-03	2.013E-03	2.013E-03			6.038E-02	6.038E-02	6.038E-02
1100 - 1200	20			2.013E-03	2.013E-03	2.013E-03			8.050E-02	8.050E-02	8.050E-02	10			2.013E-03	2.013E-03	2.013E-03			4.025E-02	4.025E-02	4.025E-02
1200 - 1300	18			2.013E-03	2.013E-03	2.013E-03			7.245E-02	7.245E-02	7.245E-02	14			2.013E-03	2.013E-03	2.013E-03			5.635E-02	5.635E-02	5.635E-02
1300 - 1400	20			2.013E-03	2.013E-03	2.013E-03			8.050E-02	8.050E-02	8.050E-02	11			2.013E-03	2.013E-03	2.013E-03			4.428E-02	4.428E-02	4.428E-02
1400 - 1500	21			2.013E-03	2.013E-03	2.013E-03			8.453E-02	8.453E-02	8.453E-02	15			2.013E-03	2.013E-03	2.013E-03			6.038E-02	6.038E-02	6.038E-02
1500 - 1600	12			2.013E-03	2.013E-03	2.013E-03			4.830E-02	4.830E-02	4.830E-02	14			2.013E-03	2.013E-03	2.013E-03			5.635E-02	5.635E-02	5.635E-02
1600 - 1700	16			2.013E-03	2.013E-03	2.013E-03			6.440E-02	6.440E-02	6.440E-02	15			2.013E-03	2.013E-03	2.013E-03			6.038E-02	6.038E-02	6.038E-02
1700 - 1800	18			2.013E-03	2.013E-03	2.013E-03			7.245E-02	7.245E-02	7.245E-02	12			2.013E-03	2.013E-03	2.013E-03			4.830E-02	4.830E-02	4.830E-02
1800 - 1900	23			2.013E-03	2.013E-03	2.013E-03			9.258E-02	9.258E-02	9.258E-02	16			2.013E-03	2.013E-03	2.013E-03			6.440E-02	6.440E-02	6.440E-02
1900 - 2000	22			2.013E-03	2.013E-03	2.013E-03			8.855E-02	8.855E-02	8.855E-02	17			2.013E-03	2.013E-03	2.013E-03			6.843E-02	6.843E-02	6.843E-02
2000 - 2100	22			2.013E-03	2.013E-03	2.013E-03			8.855E-02	8.855E-02	8.855E-02	12			2.013E-03	2.013E-03	2.013E-03			4.830E-02	4.830E-02	4.830E-02
2100 - 2200	25			2.013E-03	2.013E-03	2.013E-03			1.006E-01	1.006E-01	1.006E-01	13			2.013E-03	2.013E-03	2.013E-03			5.233E-02	5.233E-02	5.233E-02
2200 - 2300	17			2.013E-03	2.013E-03	2.013E-03			6.843E-02	6.843E-02	6.843E-02	15			2.013E-03	2.013E-03	2.013E-03			6.038E-02	6.038E-02	6.038E-02
2300 - 2400	17			2.013E-03	2.013E-03	2.013E-03			6.843E-02	6.843E-02	6.843E-02	9			2.013E-03	2.013E-03	2.013E-03			3.623E-02	3.623E-02	3.623E-02

Average Distance from Starting Place to PTI Egress =	208	m
Average Spread Distance outside PTI =	492	m

Hour	Idling Emission (g)					Emission for Adjusting Starting Emission (g)					Adjusted Starting Emission Within PTI (g)					Adjusted Starting Emission Outside PTI (g)					Starting Emission Rate Outside PTI (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			6.843E-02	6.843E-02	6.843E-02			3.421E-02	3.421E-02	3.421E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			3.623E-02	3.623E-02	3.623E-02			1.811E-02	1.811E-02	1.811E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			2.013E-02	2.013E-02	2.013E-02			1.006E-02	1.006E-02	1.006E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			3.623E-02	3.623E-02	3.623E-02			1.811E-02	1.811E-02	1.811E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			2.415E-02	2.415E-02	2.415E-02			1.208E-02	1.208E-02	1.208E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			6.038E-02	6.038E-02	6.038E-02			3.019E-02	3.019E-02	3.019E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			1.208E-01	1.208E-01	1.208E-01			6.038E-02	6.038E-02	6.038E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			1.489E-01	1.489E-01	1.489E-01			7.446E-02	7.446E-02	7.446E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			1.489E-01	1.489E-01	1.489E-01			7.446E-02	7.446E-02	7.446E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			1.127E-01	1.127E-01	1.127E-01			5.635E-02	5.635E-02	5.635E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			1.328E-01	1.328E-01	1.328E-01			6.641E-02	6.641E-02	6.641E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			1.208E-01	1.208E-01	1.208E-01			6.038E-02	6.038E-02	6.038E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			1.288E-01	1.288E-01	1.288E-01			6.440E-02	6.440E-02	6.440E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			1.248E-01	1.248E-01	1.248E-01			6.239E-02	6.239E-02	6.239E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			1.449E-01	1.449E-01	1.449E-01			7.245E-02	7.245E-02	7.245E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			1.047E-01	1.047E-01	1.047E-01			5.233E-02	5.233E-02	5.233E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			1.248E-01	1.248E-01	1.248E-01			6.239E-02	6.239E-02	6.239E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			1.208E-01	1.208E-01	1.208E-01			6.038E-02	6.038E-02	6.038E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			1.570E-01	1.570E-01	1.570E-01			7.849E-02	7.849E-02	7.849E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			1.570E-01	1.570E-01	1.570E-01			7.849E-02	7.849E-02	7.849E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			1.369E-01	1.369E-01	1.369E-01			6.843E-02	6.843E-02	6.843E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200			1																						

**Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Pierhead Garden (Franchised Bus DD)**

Running Emission

Average Travelling Distance within PTI =	416	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	27			3.256E-01	2.995E-01	3.256E-01			3.657E+00	3.364E+00	3.657E+00
0100 - 0200	10			3.256E-01	2.995E-01	3.256E-01			1.354E+00	1.246E+00	1.354E+00
0200 - 0300	5			3.256E-01	2.995E-01	3.256E-01			6.772E-01	6.230E-01	6.772E-01
0300 - 0400	10			3.256E-01	2.995E-01	3.256E-01			1.354E+00	1.246E+00	1.354E+00
0400 - 0500	6			3.256E-01	2.995E-01	3.256E-01			8.127E-01	7.476E-01	8.127E-01
0500 - 0600	16			3.256E-01	2.995E-01	3.256E-01			2.167E+00	1.993E+00	2.167E+00
0600 - 0700	33			3.256E-01	2.995E-01	3.256E-01			4.470E+00	4.112E+00	4.470E+00
0700 - 0800	37			3.256E-01	2.995E-01	3.256E-01			5.012E+00	4.610E+00	5.012E+00
0800 - 0900	39			3.256E-01	2.995E-01	3.256E-01			5.283E+00	4.859E+00	5.283E+00
0900 - 1000	34			3.256E-01	2.995E-01	3.256E-01			4.605E+00	4.236E+00	4.605E+00
1000 - 1100	37			3.256E-01	2.995E-01	3.256E-01			5.012E+00	4.610E+00	5.012E+00
1100 - 1200	35			3.256E-01	2.995E-01	3.256E-01			4.741E+00	4.361E+00	4.741E+00
1200 - 1300	35			3.256E-01	2.995E-01	3.256E-01			4.741E+00	4.361E+00	4.741E+00
1300 - 1400	35			3.256E-01	2.995E-01	3.256E-01			4.741E+00	4.361E+00	4.741E+00
1400 - 1500	37			3.256E-01	2.995E-01	3.256E-01			5.012E+00	4.610E+00	5.012E+00
1500 - 1600	29			3.256E-01	2.995E-01	3.256E-01			3.928E+00	3.613E+00	3.928E+00
1600 - 1700	33			3.256E-01	2.995E-01	3.256E-01			4.470E+00	4.112E+00	4.470E+00
1700 - 1800	36			3.256E-01	2.995E-01	3.256E-01			4.876E+00	4.485E+00	4.876E+00
1800 - 1900	48			3.256E-01	2.995E-01	3.256E-01			6.502E+00	5.980E+00	6.502E+00
1900 - 2000	47			3.256E-01	2.995E-01	3.256E-01			6.366E+00	5.856E+00	6.366E+00
2000 - 2100	42			3.256E-01	2.995E-01	3.256E-01			5.689E+00	5.233E+00	5.689E+00
2100 - 2200	44			3.256E-01	2.995E-01	3.256E-01			5.960E+00	5.482E+00	5.960E+00
2200 - 2300	38			3.256E-01	2.995E-01	3.256E-01			5.147E+00	4.734E+00	5.147E+00
2300 - 2400	31			3.256E-01	2.995E-01	3.256E-01			4.199E+00	3.862E+00	4.199E+00

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	10			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02
0100 - 0200	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0200 - 0300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0400 - 0500	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0600 - 0700	3			2.013E-03	2.013E-03	2.013E-03			6.038E-03	6.038E-03	6.038E-03
0700 - 0800	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0900 - 1000	6			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
1000 - 1100	4			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
1100 - 1200	5			2.013E-03	2.013E-03	2.013E-03			1.006E-02	1.006E-02	1.006E-02
1200 - 1300	3			2.013E-03	2.013E-03	2.013E-03			6.038E-03	6.038E-03	6.038E-03
1300 - 1400	4			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
1400 - 1500	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
1500 - 1600	3			2.013E-03	2.013E-03	2.013E-03			6.038E-03	6.038E-03	6.038E-03
1600 - 1700	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
1700 - 1800	6			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
1800 - 1900	9			2.013E-03	2.013E-03	2.013E-03			1.811E-02	1.811E-02	1.811E-02
1900 - 2000	8			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
2000 - 2100	8			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
2100 - 2200	6			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
2200 - 2300	6			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
2300 - 2400	5			2.013E-03	2.013E-03	2.013E-03			1.006E-02	1.006E-02	1.006E-02

**Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Pierhead Garden (Franchised Bus DD)**

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			3.746E+00	3.453E+00	3.746E+00			1.040E-03	9.590E-04	1.040E-03
0100 - 0200			1.393E+00	1.284E+00	1.393E+00			3.869E-04	3.567E-04	3.869E-04
0200 - 0300			6.974E-01	6.431E-01	6.974E-01			1.937E-04	1.786E-04	1.937E-04
0300 - 0400			1.393E+00	1.284E+00	1.393E+00			3.869E-04	3.567E-04	3.869E-04
0400 - 0500			8.368E-01	7.717E-01	8.368E-01			2.325E-04	2.144E-04	2.325E-04
0500 - 0600			2.230E+00	2.056E+00	2.230E+00			6.193E-04	5.711E-04	6.193E-04
0600 - 0700			4.597E+00	4.238E+00	4.597E+00			1.277E-03	1.177E-03	1.277E-03
0700 - 0800			5.161E+00	4.759E+00	5.161E+00			1.433E-03	1.322E-03	1.433E-03
0800 - 0900			5.435E+00	5.012E+00	5.435E+00			1.510E-03	1.392E-03	1.510E-03
0900 - 1000			4.730E+00	4.361E+00	4.730E+00			1.314E-03	1.211E-03	1.314E-03
1000 - 1100			5.153E+00	4.751E+00	5.153E+00			1.431E-03	1.320E-03	1.431E-03
1100 - 1200			4.872E+00	4.492E+00	4.872E+00			1.353E-03	1.248E-03	1.353E-03
1200 - 1300			4.876E+00	4.496E+00	4.876E+00			1.354E-03	1.249E-03	1.354E-03
1300 - 1400			4.874E+00	4.494E+00	4.874E+00			1.354E-03	1.248E-03	1.354E-03
1400 - 1500			5.159E+00	4.757E+00	5.159E+00			1.433E-03	1.321E-03	1.433E-03
1500 - 1600			4.039E+00	3.724E+00	4.039E+00			1.122E-03	1.034E-03	1.122E-03
1600 - 1700			4.599E+00	4.240E+00	4.599E+00			1.277E-03	1.178E-03	1.277E-03
1700 - 1800			5.009E+00	4.618E+00	5.009E+00			1.391E-03	1.283E-03	1.391E-03
1800 - 1900			6.677E+00	6.156E+00	6.677E+00			1.855E-03	1.710E-03	1.855E-03
1900 - 2000			6.539E+00	6.029E+00	6.539E+00			1.816E-03	1.675E-03	1.816E-03
2000 - 2100			5.842E+00	5.386E+00	5.842E+00			1.623E-03	1.496E-03	1.623E-03
2100 - 2200			6.125E+00	5.647E+00	6.125E+00			1.701E-03	1.569E-03	1.701E-03
2200 - 2300			5.288E+00	4.875E+00	5.288E+00			1.469E-03	1.354E-03	1.469E-03
2300 - 2400			4.314E+00	3.977E+00	4.314E+00			1.198E-03	1.105E-03	1.198E-03

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Ferry Pier Minibus Terminus (PLB)

Starting Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio^[1] = 2.25

Starting Emission Factor (g/trip)																		
NO																		
NO₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour	No. of Cold Starts of Public Light Bus (Diesel)																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
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
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
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
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
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
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	0.69
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
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
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	0.00	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	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	0.00	0.00	0.00	0.00	0.00	0.69
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
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
1300 - 1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.69	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	0.00	0.00	0.00	0.69	0.69	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	0.00	0.00	0.69	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	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	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	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	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	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

[2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2026 data of EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Ferry Pier Minibus Terminus (PLB)

Starting Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] = 2.25

Starting Emission Factor (g/trip)																				
NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	

Hour Sitting Time (min)	No. of Cold Starts of Public Light Bus (LPG)																		
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
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
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
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
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
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
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	0.31
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
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
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	0.00	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.31
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
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
1300 - 1400	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.31	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	0.00	0.00	0.00	0.31	0.31	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	0.00	0.00	0.31	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	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	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	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	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	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
 [1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.
 [2] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2026 data of EMFAC-HK.

**Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Tuen Mun Ferry Pier Minibus Terminus (PLB)**

Running Emission

Average Travelling Distance within PTI =	64	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Public Light Bus (Diesel + LPG)									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	1			3.837E-02	3.533E-02	3.837E-02			2.456E-03	2.261E-03	2.456E-03
0600 - 0700	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	1			3.837E-02	3.533E-02	3.837E-02			2.456E-03	2.261E-03	2.456E-03
1000 - 1100	1			3.837E-02	3.533E-02	3.837E-02			2.456E-03	2.261E-03	2.456E-03
1100 - 1200	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	2			3.837E-02	3.533E-02	3.837E-02			4.912E-03	4.522E-03	4.912E-03
1400 - 1500	2			3.837E-02	3.533E-02	3.837E-02			4.912E-03	4.522E-03	4.912E-03
1500 - 1600	1			3.837E-02	3.533E-02	3.837E-02			2.456E-03	2.261E-03	2.456E-03
1600 - 1700	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00

Idling Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] =	2.3
Idling Time for Non-terminating Buses =	1 min

Hour	Frequency	Public Light Bus (Diesel)										Public Light Bus (LPG)										
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)					Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)					
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	
0000 - 0100	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0.69			4.336E-04	4.336E-04	4.336E-04			3.003E-04	3.003E-04	3.003E-04	0.31			6.820E-04	6.820E-04	6.820E-04			4.724E-04	4.724E-04	4.724E-04
1000 - 1100	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00

Remark:

[1] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2026 data of EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Ferry Pier Minibus Terminus (PLB)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			3.476E-03	3.281E-03	3.476E-03			9.655E-07	9.113E-07	9.655E-07
0600 - 0700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			3.229E-03	3.034E-03	3.229E-03			8.969E-07	8.427E-07	8.969E-07
1000 - 1100			3.476E-03	3.281E-03	3.476E-03			9.655E-07	9.113E-07	9.655E-07
1100 - 1200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			6.952E-03	6.562E-03	6.952E-03			1.931E-06	1.823E-06	1.931E-06
1400 - 1500			6.952E-03	6.562E-03	6.952E-03			1.931E-06	1.823E-06	1.931E-06
1500 - 1600			3.476E-03	3.281E-03	3.476E-03			9.655E-07	9.113E-07	9.655E-07
1600 - 1700			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2200 - 2300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2300 - 2400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Yau Oi (South) Bus Terminus (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour	No. of Cold Starts of Double-Deck Franchised Bus																	
	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	1	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0
0600 - 0700	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
0700 - 0800	0	0	4	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0800 - 0900	0	2	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
0900 - 1000	0	2	2	1	0	0	0	2	0	1	0	0	0	0	0	0	0	0
1000 - 1100	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0
1200 - 1300	0	1	0	1	1	1	2	2	0	0	0	0	0	0	0	0	0	1
1300 - 1400	0	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0
1400 - 1500	0	1	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	2	1	0	0	0	2	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0
1700 - 1800	0	0	4	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	3	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
1900 - 2000	0	2	3	1	0	0	0	0	1	0	2	2	0	0	0	0	0	0
2000 - 2100	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	1	0	0	2	1	0	0	0	0	0	0	0	0	0
2200 - 2300	0	1	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0
2300 - 2400	0	0	0	0	0	0	0	2	1	0	1	0	0	0	0	0	0	0

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark: [1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Yau Oi (South) Bus Terminus (Franchised Bus DD)

Cold Idling Emission

Idling Time for Terminating Buses =	2	min
Max. Idling Time for Adjusting Starting Emission =	1	min

Hour	Frequency	Double-Deck Franchised Bus					Double-Deck Franchised Bus															
		Cold Idling Emission Factor (g/min)					Cold Idling Emission (g)					Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)					
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	
0000 - 0100	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0200 - 0300	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0700 - 0800	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	6			2.013E-03	2.013E-03	2.013E-03			2.415E-02	2.415E-02	2.415E-02
0800 - 0900	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
0900 - 1000	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02	5			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02
1000 - 1100	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
1100 - 1200	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	5			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
1300 - 1400	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
1400 - 1500	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
1500 - 1600	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
1600 - 1700	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
1700 - 1800	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03	5			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02
1800 - 1900	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
1900 - 2000	5			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02	6			2.013E-03	2.013E-03	2.013E-03			2.415E-02	2.415E-02	2.415E-02
2000 - 2100	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
2100 - 2200	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
2200 - 2300	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
2300 - 2400	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00

Average Distance from Starting Place to PTI Egress =	51	m
Average Spread Distance outside PTI =	649	m

Hour	Idling Emission (g)					Emission for Adjusting Starting Emission (g)					Adjusted Starting Emission Within PTI (g)					Adjusted Starting Emission Outside PTI (g)					Starting Emission Rate Outside PTI (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			8.050E-03	8.050E-03	8.050E-03			4.025E-03	4.025E-03	4.025E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			2.818E-02	2.818E-02	2.818E-02			1.409E-02	1.409E-02	1.409E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			2.415E-02	2.415E-02	2.415E-02			1.208E-02	1.208E-02	1.208E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			3.220E-02	3.220E-02	3.220E-02			1.610E-02	1.610E-02	1.610E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			3.623E-02	3.623E-02	3.623E-02			1.811E-02	1.811E-02	1.811E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			2.013E-02	2.013E-02	2.013E-02			1.006E-02	1.006E-02	1.006E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			2.013E-02	2.013E-02	2.013E-02			1.006E-02	1.006E-02	1.006E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			2.013E-02	2.013E-02	2.013E-02			1.006E-02	1.006E-02	1.006E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			1.610E-02	1.610E-02	1.610E-02			8.050E-03	8.050E-03	8.050E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			2.818E-02	2.818E-02	2.818E-02			1.409E-02	1.409E-02	1.409E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			2.818E-02	2.818E-02	2.818E-02			1.409E-02	1.409E-02	1.409E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			4.428E-02	4.428E-02	4.428E-02			2.214E-02	2.214E-02	2.214E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200			1.610E-0																						

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Yau Oi (South) Bus Terminus (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	102	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	2			3.256E-01	2.995E-01	3.256E-01			6.642E-02	6.110E-02	6.642E-02
0100 - 0200	3			3.256E-01	2.995E-01	3.256E-01			9.963E-02	9.165E-02	9.963E-02
0200 - 0300	2			3.256E-01	2.995E-01	3.256E-01			6.642E-02	6.110E-02	6.642E-02
0300 - 0400	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	1			3.256E-01	2.995E-01	3.256E-01			3.321E-02	3.055E-02	3.321E-02
0600 - 0700	4			3.256E-01	2.995E-01	3.256E-01			1.328E-01	1.222E-01	1.328E-01
0700 - 0800	13			3.256E-01	2.995E-01	3.256E-01			4.317E-01	3.971E-01	4.317E-01
0800 - 0900	10			3.256E-01	2.995E-01	3.256E-01			3.321E-01	3.055E-01	3.321E-01
0900 - 1000	9			3.256E-01	2.995E-01	3.256E-01			2.989E-01	2.749E-01	2.989E-01
1000 - 1100	4			3.256E-01	2.995E-01	3.256E-01			1.328E-01	1.222E-01	1.328E-01
1100 - 1200	3			3.256E-01	2.995E-01	3.256E-01			9.963E-02	9.165E-02	9.963E-02
1200 - 1300	10			3.256E-01	2.995E-01	3.256E-01			3.321E-01	3.055E-01	3.321E-01
1300 - 1400	6			3.256E-01	2.995E-01	3.256E-01			1.993E-01	1.833E-01	1.993E-01
1400 - 1500	5			3.256E-01	2.995E-01	3.256E-01			1.661E-01	1.527E-01	1.661E-01
1500 - 1600	5			3.256E-01	2.995E-01	3.256E-01			1.661E-01	1.527E-01	1.661E-01
1600 - 1700	4			3.256E-01	2.995E-01	3.256E-01			1.328E-01	1.222E-01	1.328E-01
1700 - 1800	7			3.256E-01	2.995E-01	3.256E-01			2.325E-01	2.138E-01	2.325E-01
1800 - 1900	7			3.256E-01	2.995E-01	3.256E-01			2.325E-01	2.138E-01	2.325E-01
1900 - 2000	14			3.256E-01	2.995E-01	3.256E-01			4.650E-01	4.277E-01	4.650E-01
2000 - 2100	3			3.256E-01	2.995E-01	3.256E-01			9.963E-02	9.165E-02	9.963E-02
2100 - 2200	4			3.256E-01	2.995E-01	3.256E-01			1.328E-01	1.222E-01	1.328E-01
2200 - 2300	9			3.256E-01	2.995E-01	3.256E-01			2.989E-01	2.749E-01	2.989E-01
2300 - 2400	7			3.256E-01	2.995E-01	3.256E-01			2.325E-01	2.138E-01	2.325E-01

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0100 - 0200	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0200 - 0300	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0300 - 0400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0700 - 0800	6			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
0800 - 0900	4			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
0900 - 1000	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
1000 - 1100	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
1100 - 1200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
1300 - 1400	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
1400 - 1500	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	3			2.013E-03	2.013E-03	2.013E-03			6.038E-03	6.038E-03	6.038E-03
2000 - 2100	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	4			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
2300 - 2400	3			2.013E-03	2.013E-03	2.013E-03			6.038E-03	6.038E-03	6.038E-03

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Yau Oi (South) Bus Terminus (Franchised Bus DD)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			7.246E-02	6.714E-02	7.246E-02			2.013E-05	1.865E-05	2.013E-05
0100 - 0200			1.097E-01	1.017E-01	1.097E-01			3.047E-05	2.825E-05	3.047E-05
0200 - 0300			7.246E-02	6.714E-02	7.246E-02			2.013E-05	1.865E-05	2.013E-05
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			3.724E-02	3.457E-02	3.724E-02			1.034E-05	9.604E-06	1.034E-05
0600 - 0700			1.469E-01	1.363E-01	1.469E-01			4.081E-05	3.786E-05	4.081E-05
0700 - 0800			4.720E-01	4.374E-01	4.720E-01			1.311E-04	1.215E-04	1.311E-04
0800 - 0900			3.643E-01	3.377E-01	3.643E-01			1.012E-04	9.380E-05	1.012E-04
0900 - 1000			3.331E-01	3.092E-01	3.331E-01			9.253E-05	8.588E-05	9.253E-05
1000 - 1100			1.469E-01	1.363E-01	1.469E-01			4.081E-05	3.786E-05	4.081E-05
1100 - 1200			1.117E-01	1.037E-01	1.117E-01			3.103E-05	2.881E-05	3.103E-05
1200 - 1300			3.704E-01	3.437E-01	3.704E-01			1.029E-04	9.548E-05	1.029E-04
1300 - 1400			2.214E-01	2.054E-01	2.214E-01			6.150E-05	5.706E-05	6.150E-05
1400 - 1500			1.862E-01	1.729E-01	1.862E-01			5.172E-05	4.802E-05	5.172E-05
1500 - 1600			1.862E-01	1.729E-01	1.862E-01			5.172E-05	4.802E-05	5.172E-05
1600 - 1700			1.489E-01	1.383E-01	1.489E-01			4.137E-05	3.842E-05	4.137E-05
1700 - 1800			2.607E-01	2.420E-01	2.607E-01			7.240E-05	6.723E-05	7.240E-05
1800 - 1900			2.607E-01	2.420E-01	2.607E-01			7.240E-05	6.723E-05	7.240E-05
1900 - 2000			5.153E-01	4.780E-01	5.153E-01			1.431E-04	1.328E-04	1.431E-04
2000 - 2100			1.117E-01	1.037E-01	1.117E-01			3.103E-05	2.881E-05	3.103E-05
2100 - 2200			1.489E-01	1.383E-01	1.489E-01			4.137E-05	3.842E-05	4.137E-05
2200 - 2300			3.271E-01	3.031E-01	3.271E-01			9.085E-05	8.420E-05	9.085E-05
2300 - 2400			2.546E-01	2.360E-01	2.546E-01			7.073E-05	6.555E-05	7.073E-05

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Tuen Mun LRT depot Bus Terminus (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	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	3	0	0	0	1	0	0	0	0	0	0
0700 - 0800	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	0
0900 - 1000	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0
1200 - 1300	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
1300 - 1400	0	0	0	0	0	0	1	3	1	0	0	1	0	0	0	0	0	0
1400 - 1500	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0
1500 - 1600	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0
1600 - 1700	0	0	0	0	0	0	2	1	0	0	0	0	0	1	0	0	0	0
1700 - 1800	0	0	0	0	0	0	2	3	1	0	0	0	0	0	0	0	0	0
1800 - 1900	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0
1900 - 2000	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0
2000 - 2100	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0
2100 - 2200	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0
2200 - 2300	0	0	0	0	0	0	2	2	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 Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
 [1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

**Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
Tuen Mun LRT depot Bus Terminus (Franchised Bus DD)**

Running Emission

Average Travelling Distance within PTI =	192	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	4			3.256E-01	2.995E-01	3.256E-01			2.501E-01	2.300E-01	2.501E-01
0700 - 0800	4			3.256E-01	2.995E-01	3.256E-01			2.501E-01	2.300E-01	2.501E-01
0800 - 0900	6			3.256E-01	2.995E-01	3.256E-01			3.751E-01	3.450E-01	3.751E-01
0900 - 1000	4			3.256E-01	2.995E-01	3.256E-01			2.501E-01	2.300E-01	2.501E-01
1000 - 1100	4			3.256E-01	2.995E-01	3.256E-01			2.501E-01	2.300E-01	2.501E-01
1100 - 1200	6			3.256E-01	2.995E-01	3.256E-01			3.751E-01	3.450E-01	3.751E-01
1200 - 1300	4			3.256E-01	2.995E-01	3.256E-01			2.501E-01	2.300E-01	2.501E-01
1300 - 1400	6			3.256E-01	2.995E-01	3.256E-01			3.751E-01	3.450E-01	3.751E-01
1400 - 1500	5			3.256E-01	2.995E-01	3.256E-01			3.126E-01	2.875E-01	3.126E-01
1500 - 1600	5			3.256E-01	2.995E-01	3.256E-01			3.126E-01	2.875E-01	3.126E-01
1600 - 1700	4			3.256E-01	2.995E-01	3.256E-01			2.501E-01	2.300E-01	2.501E-01
1700 - 1800	6			3.256E-01	2.995E-01	3.256E-01			3.751E-01	3.450E-01	3.751E-01
1800 - 1900	4			3.256E-01	2.995E-01	3.256E-01			2.501E-01	2.300E-01	2.501E-01
1900 - 2000	4			3.256E-01	2.995E-01	3.256E-01			2.501E-01	2.300E-01	2.501E-01
2000 - 2100	4			3.256E-01	2.995E-01	3.256E-01			2.501E-01	2.300E-01	2.501E-01
2100 - 2200	4			3.256E-01	2.995E-01	3.256E-01			2.501E-01	2.300E-01	2.501E-01
2200 - 2300	4			3.256E-01	2.995E-01	3.256E-01			2.501E-01	2.300E-01	2.501E-01
2300 - 2400	2			3.256E-01	2.995E-01	3.256E-01			1.250E-01	1.150E-01	1.250E-01

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0700 - 0800	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun LRT depot Bus Terminus (Franchised Bus DD)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			2.662E-01	2.461E-01	2.662E-01			7.393E-05	6.837E-05	7.393E-05
0700 - 0800			2.662E-01	2.461E-01	2.662E-01			7.393E-05	6.837E-05	7.393E-05
0800 - 0900			3.992E-01	3.692E-01	3.992E-01			1.109E-04	1.025E-04	1.109E-04
0900 - 1000			2.662E-01	2.461E-01	2.662E-01			7.393E-05	6.837E-05	7.393E-05
1000 - 1100			2.662E-01	2.461E-01	2.662E-01			7.393E-05	6.837E-05	7.393E-05
1100 - 1200			3.992E-01	3.692E-01	3.992E-01			1.109E-04	1.025E-04	1.109E-04
1200 - 1300			2.662E-01	2.461E-01	2.662E-01			7.393E-05	6.837E-05	7.393E-05
1300 - 1400			3.992E-01	3.692E-01	3.992E-01			1.109E-04	1.025E-04	1.109E-04
1400 - 1500			3.327E-01	3.076E-01	3.327E-01			9.242E-05	8.546E-05	9.242E-05
1500 - 1600			3.327E-01	3.076E-01	3.327E-01			9.242E-05	8.546E-05	9.242E-05
1600 - 1700			2.662E-01	2.461E-01	2.662E-01			7.393E-05	6.837E-05	7.393E-05
1700 - 1800			3.992E-01	3.692E-01	3.992E-01			1.109E-04	1.025E-04	1.109E-04
1800 - 1900			2.662E-01	2.461E-01	2.662E-01			7.393E-05	6.837E-05	7.393E-05
1900 - 2000			2.662E-01	2.461E-01	2.662E-01			7.393E-05	6.837E-05	7.393E-05
2000 - 2100			2.662E-01	2.461E-01	2.662E-01			7.393E-05	6.837E-05	7.393E-05
2100 - 2200			2.662E-01	2.461E-01	2.662E-01			7.393E-05	6.837E-05	7.393E-05
2200 - 2300			2.662E-01	2.461E-01	2.662E-01			7.393E-05	6.837E-05	7.393E-05
2300 - 2400			1.331E-01	1.231E-01	1.331E-01			3.697E-05	3.418E-05	3.697E-05

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

CityBus Tuen Mun Depot (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	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	0	1	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	1	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	1	0	0	0	0	1	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	1	0	0	0	0	0	0	0	0	0	0
0500 - 0600	0	2	2	0	0	0	1	1	0	4	1	7	0	0	0	0	0	0
0600 - 0700	0	2	1	0	1	1	1	2	1	0	2	5	12	0	0	0	0	0
0700 - 0800	0	0	0	0	0	2	0	1	0	0	1	1	5	28	0	0	0	0
0800 - 0900	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0900 - 1000	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
1000 - 1100	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
1100 - 1200	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	1
1200 - 1300	0	0	1	0	0	0	1	1	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	1	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	1	0	1	0
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1900 - 2000	0	0	0	0	0	1	0	0	0	0	6	0	0	0	0	0	0	7
2000 - 2100	0	0	1	0	0	0	0	0	0	18	0	0	0	0	0	0	0	12
2100 - 2200	0	0	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	5
2200 - 2300	0	1	1	0	0	0	0	3	1	1	0	1	2	0	0	0	0	5
2300 - 2400	0	1	0	1	1	0	1	0	0	1	1	0	0	0	0	0	0	3

Remark:

[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

CityBus Tuen Mun Depot (Franchised Bus DD)

Cold Idling Emission

Idling Time for Terminating Buses =	2	min
Max. Idling Time for Adjusting Starting Emission =	1	min

Hour	Frequency	Double-Deck Franchised Bus										Double-Deck Franchised Bus									
		Cold Idling Emission Factor (g/min)					Cold Idling Emission (g)					Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
0100 - 0200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			2.013E-03	2.013E-03	2.013E-03			2.818E-02	2.818E-02	2.818E-02
0200 - 0300	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0300 - 0400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	14			2.013E-03	2.013E-03	2.013E-03			5.635E-02	5.635E-02	5.635E-02			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
0600 - 0700	23			2.013E-03	2.013E-03	2.013E-03			9.258E-02	9.258E-02	9.258E-02			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02
0700 - 0800	36			2.013E-03	2.013E-03	2.013E-03			1.449E-01	1.449E-01	1.449E-01			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
0800 - 0900	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0900 - 1000	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
1300 - 1400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	13			2.013E-03	2.013E-03	2.013E-03			5.233E-02	5.233E-02	5.233E-02			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
2000 - 2100	30			2.013E-03	2.013E-03	2.013E-03			1.208E-01	1.208E-01	1.208E-01			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
2100 - 2200	12			2.013E-03	2.013E-03	2.013E-03			4.830E-02	4.830E-02	4.830E-02			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
2200 - 2300	13			2.013E-03	2.013E-03	2.013E-03			5.233E-02	5.233E-02	5.233E-02			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
2300 - 2400	6			2.013E-03	2.013E-03	2.013E-03			2.415E-02	2.415E-02	2.415E-02			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02

Average Distance from Starting Place to PTI Egress =	214	m
Average Spread Distance outside PTI =	486	m

Hour	Idling Emission (g)					Emission for Adjusting Starting Emission (g)					Adjusted Starting Emission Within PTI (g)					Adjusted Starting Emission Outside PTI (g)					Starting Emission Rate Outside PTI (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			2.818E-02	2.818E-02	2.818E-02			1.409E-02	1.409E-02	1.409E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			8.050E-03	8.050E-03	8.050E-03			4.025E-03	4.025E-03	4.025E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			7.245E-02	7.245E-02	7.245E-02			3.623E-02	3.623E-02	3.623E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			1.127E-01	1.127E-01	1.127E-01			5.635E-02	5.635E-02	5.635E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			1.530E-01	1.530E-01	1.530E-01			7.648E-02	7.648E-02	7.648E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			8.050E-03	8.050E-03	8.050E-03			4.025E-03	4.025E-03	4.025E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			8.050E-03	8.050E-03	8.050E-03			4.025E-03	4.025E-03	4.025E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			1.610E-02	1.610E-02	1.610E-02			8.050E-03	8.050E-03	8.050E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			8.050E-03	8.050E-03	8.050E-03			4.025E-03	4.025E-03	4.025E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			5.635E-02	5.635E-02	5.635E-02			2.818E-02	2.818E-02	2.818E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			1.248E-01	1.248E-01	1.248E-01			6.239E-02	6.239E-02	6.239E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200			5.233E-02	5.233E-02	5.233E-02			2.616E-02	2.616E-02	2.616E-02			0.000E+00	0.000E+00	0.000E+00		</								

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

CityBus Tuen Mun Depot (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	428	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	4			3.256E-01	2.995E-01	3.256E-01			5.574E-01	5.127E-01	5.574E-01
0100 - 0200	7			3.256E-01	2.995E-01	3.256E-01			9.755E-01	8.973E-01	9.755E-01
0200 - 0300	2			3.256E-01	2.995E-01	3.256E-01			2.787E-01	2.564E-01	2.787E-01
0300 - 0400	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	1			3.256E-01	2.995E-01	3.256E-01			1.394E-01	1.282E-01	1.394E-01
0500 - 0600	18			3.256E-01	2.995E-01	3.256E-01			2.508E+00	2.307E+00	2.508E+00
0600 - 0700	30			3.256E-01	2.995E-01	3.256E-01			4.181E+00	3.846E+00	4.181E+00
0700 - 0800	38			3.256E-01	2.995E-01	3.256E-01			5.296E+00	4.871E+00	5.296E+00
0800 - 0900	2			3.256E-01	2.995E-01	3.256E-01			2.787E-01	2.564E-01	2.787E-01
0900 - 1000	2			3.256E-01	2.995E-01	3.256E-01			2.787E-01	2.564E-01	2.787E-01
1000 - 1100	3			3.256E-01	2.995E-01	3.256E-01			4.181E-01	3.846E-01	4.181E-01
1100 - 1200	4			3.256E-01	2.995E-01	3.256E-01			5.574E-01	5.127E-01	5.574E-01
1200 - 1300	3			3.256E-01	2.995E-01	3.256E-01			4.181E-01	3.846E-01	4.181E-01
1300 - 1400	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	1			3.256E-01	2.995E-01	3.256E-01			1.394E-01	1.282E-01	1.394E-01
1500 - 1600	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	2			3.256E-01	2.995E-01	3.256E-01			2.787E-01	2.564E-01	2.787E-01
1700 - 1800	1			3.256E-01	2.995E-01	3.256E-01			1.394E-01	1.282E-01	1.394E-01
1800 - 1900	3			3.256E-01	2.995E-01	3.256E-01			4.181E-01	3.846E-01	4.181E-01
1900 - 2000	14			3.256E-01	2.995E-01	3.256E-01			1.951E+00	1.795E+00	1.951E+00
2000 - 2100	31			3.256E-01	2.995E-01	3.256E-01			4.320E+00	3.974E+00	4.320E+00
2100 - 2200	13			3.256E-01	2.995E-01	3.256E-01			1.812E+00	1.666E+00	1.812E+00
2200 - 2300	15			3.256E-01	2.995E-01	3.256E-01			2.090E+00	1.923E+00	2.090E+00
2300 - 2400	10			3.256E-01	2.995E-01	3.256E-01			1.394E+00	1.282E+00	1.394E+00

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0100 - 0200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0600 - 0700	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0700 - 0800	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0800 - 0900	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1100 - 1200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1200 - 1300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1300 - 1400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1400 - 1500	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1500 - 1600	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1600 - 1700	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1700 - 1800	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1900 - 2000	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2100 - 2200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2300 - 2400	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

CityBus Tuen Mun Depot (Franchised Bus DD)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			5.715E-01	5.268E-01	5.715E-01			1.588E-04	1.463E-04	1.588E-04
0100 - 0200			1.004E+00	9.255E-01	1.004E+00			2.788E-04	2.571E-04	2.788E-04
0200 - 0300			2.868E-01	2.644E-01	2.868E-01			7.966E-05	7.345E-05	7.966E-05
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			1.434E-01	1.322E-01	1.434E-01			3.983E-05	3.673E-05	3.983E-05
0500 - 0600			2.581E+00	2.380E+00	2.581E+00			7.169E-04	6.611E-04	7.169E-04
0600 - 0700			4.297E+00	3.962E+00	4.297E+00			1.194E-03	1.101E-03	1.194E-03
0700 - 0800			5.449E+00	5.024E+00	5.449E+00			1.513E-03	1.396E-03	1.513E-03
0800 - 0900			2.868E-01	2.644E-01	2.868E-01			7.966E-05	7.345E-05	7.966E-05
0900 - 1000			2.868E-01	2.644E-01	2.868E-01			7.966E-05	7.345E-05	7.966E-05
1000 - 1100			4.301E-01	3.966E-01	4.301E-01			1.195E-04	1.102E-04	1.195E-04
1100 - 1200			5.735E-01	5.288E-01	5.735E-01			1.593E-04	1.469E-04	1.593E-04
1200 - 1300			4.301E-01	3.966E-01	4.301E-01			1.195E-04	1.102E-04	1.195E-04
1300 - 1400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			1.434E-01	1.322E-01	1.434E-01			3.983E-05	3.673E-05	3.983E-05
1500 - 1600			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			2.868E-01	2.644E-01	2.868E-01			7.966E-05	7.345E-05	7.966E-05
1700 - 1800			1.434E-01	1.322E-01	1.434E-01			3.983E-05	3.673E-05	3.983E-05
1800 - 1900			4.301E-01	3.966E-01	4.301E-01			1.195E-04	1.102E-04	1.195E-04
1900 - 2000			2.007E+00	1.851E+00	2.007E+00			5.576E-04	5.142E-04	5.576E-04
2000 - 2100			4.445E+00	4.099E+00	4.445E+00			1.235E-03	1.138E-03	1.235E-03
2100 - 2200			1.864E+00	1.719E+00	1.864E+00			5.178E-04	4.774E-04	5.178E-04
2200 - 2300			2.151E+00	1.983E+00	2.151E+00			5.974E-04	5.509E-04	5.974E-04
2300 - 2400			1.432E+00	1.320E+00	1.432E+00			3.977E-04	3.667E-04	3.977E-04

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

KMB Tuen Mun Depot (Franchised Bus DD)

Cold Idling Emission

Idling Time for Terminating Buses =	2	min
Max. Idling Time for Adjusting Starting Emission =	1	min

Hour	Frequency	Double-Deck Franchised Bus										Double-Deck Franchised Bus										
		Cold Idling Emission Factor (g/min)					Cold Idling Emission (g)					Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)					
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	
0000 - 0100	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
0100 - 0200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
0200 - 0300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	6			2.013E-03	2.013E-03	2.013E-03			2.415E-02	2.415E-02	2.415E-02	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	30			2.013E-03	2.013E-03	2.013E-03			1.208E-01	1.208E-01	1.208E-01	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
0600 - 0700	31			2.013E-03	2.013E-03	2.013E-03			1.248E-01	1.248E-01	1.248E-01	7			2.013E-03	2.013E-03	2.013E-03			2.818E-02	2.818E-02	2.818E-02
0700 - 0800	19			2.013E-03	2.013E-03	2.013E-03			7.648E-02	7.648E-02	7.648E-02	6			2.013E-03	2.013E-03	2.013E-03			2.415E-02	2.415E-02	2.415E-02
0800 - 0900	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	10			2.013E-03	2.013E-03	2.013E-03			4.025E-02	4.025E-02	4.025E-02	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	21			2.013E-03	2.013E-03	2.013E-03			8.453E-02	8.453E-02	8.453E-02	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
1100 - 1200	31			2.013E-03	2.013E-03	2.013E-03			1.248E-01	1.248E-01	1.248E-01	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
1200 - 1300	25			2.013E-03	2.013E-03	2.013E-03			1.006E-01	1.006E-01	1.006E-01	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
1300 - 1400	25			2.013E-03	2.013E-03	2.013E-03			1.006E-01	1.006E-01	1.006E-01	4			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
1400 - 1500	31			2.013E-03	2.013E-03	2.013E-03			1.248E-01	1.248E-01	1.248E-01	5			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02
1500 - 1600	42			2.013E-03	2.013E-03	2.013E-03			1.691E-01	1.691E-01	1.691E-01	8			2.013E-03	2.013E-03	2.013E-03			3.220E-02	3.220E-02	3.220E-02
1600 - 1700	26			2.013E-03	2.013E-03	2.013E-03			1.047E-01	1.047E-01	1.047E-01	5			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02
1700 - 1800	7			2.013E-03	2.013E-03	2.013E-03			2.818E-02	2.818E-02	2.818E-02	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
1800 - 1900	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	6			2.013E-03	2.013E-03	2.013E-03			2.415E-02	2.415E-02	2.415E-02
1900 - 2000	7			2.013E-03	2.013E-03	2.013E-03			2.818E-02	2.818E-02	2.818E-02	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	14			2.013E-03	2.013E-03	2.013E-03			5.635E-02	5.635E-02	5.635E-02	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
2100 - 2200	9			2.013E-03	2.013E-03	2.013E-03			3.623E-02	3.623E-02	3.623E-02	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
2200 - 2300	18			2.013E-03	2.013E-03	2.013E-03			7.245E-02	7.245E-02	7.245E-02	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
2300 - 2400	12			2.013E-03	2.013E-03	2.013E-03			4.830E-02	4.830E-02	4.830E-02	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00

Average Distance from Starting Place to PTI Egress =	361	m
Average Spread Distance outside PTI =	339	m

Hour	Idling Emission (g)					Emission for Adjusting Starting Emission (g)					Adjusted Starting Emission Within PTI (g)					Adjusted Starting Emission Outside PTI (g)					Starting Emission Rate Outside PTI (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			2.415E-02	2.415E-02	2.415E-02			1.208E-02	1.208E-02	1.208E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			1.328E-01	1.328E-01	1.328E-01			6.641E-02	6.641E-02	6.641E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			1.530E-01	1.530E-01	1.530E-01			7.648E-02	7.648E-02	7.648E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			1.006E-01	1.006E-01	1.006E-01			5.031E-02	5.031E-02	5.031E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			4.025E-02	4.025E-02	4.025E-02			2.013E-02	2.013E-02	2.013E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			8.855E-02	8.855E-02	8.855E-02			4.428E-02	4.428E-02	4.428E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			1.409E-01	1.409E-01	1.409E-01			7.044E-02	7.044E-02	7.044E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			1.127E-01	1.127E-01	1.127E-01			5.635E-02	5.635E-02	5.635E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			1.167E-01	1.167E-01	1.167E-01			5.836E-02	5.836E-02	5.836E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			1.449E-01	1.449E-01	1.449E-01			7.245E-02	7.245E-02	7.245E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			2.013E-01	2.013E-01	2.013E-01			1.006E-01	1.006E-01	1.006E-01			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			1.248E-01	1.248E-01	1.248E-01			6.239E-02	6.239E-02	6.239E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			3.623E-02	3.623E-02	3.623E-02			1.811E-02	1.811E-02	1.811E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			2.818E-02	2.818E-02	2.818E-02			1.409E-02	1.409E-02	1.409E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			2.818E-02	2.818E-02	2.818E-02			1.409E-02	1.409E-02	1.409E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			6.440E-02	6.440E-02	6.440E-02			3.220E-02	3.220E-02	3.220E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2100 - 2200			4.428E-02	4.428E-02	4.42																				

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

KMB Tuen Mun Depot (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	722	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	3			3.256E-01	2.995E-01	3.256E-01			7.052E-01	6.487E-01	7.052E-01
0100 - 0200	5			3.256E-01	2.995E-01	3.256E-01			1.175E+00	1.081E+00	1.175E+00
0200 - 0300	1			3.256E-01	2.995E-01	3.256E-01			2.351E-01	2.162E-01	2.351E-01
0300 - 0400	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	9			3.256E-01	2.995E-01	3.256E-01			2.116E+00	1.946E+00	2.116E+00
0500 - 0600	41			3.256E-01	2.995E-01	3.256E-01			9.638E+00	8.866E+00	9.638E+00
0600 - 0700	46			3.256E-01	2.995E-01	3.256E-01			1.081E+01	9.947E+00	1.081E+01
0700 - 0800	28			3.256E-01	2.995E-01	3.256E-01			6.582E+00	6.055E+00	6.582E+00
0800 - 0900	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	10			3.256E-01	2.995E-01	3.256E-01			2.351E+00	2.162E+00	2.351E+00
1000 - 1100	23			3.256E-01	2.995E-01	3.256E-01			5.407E+00	4.973E+00	5.407E+00
1100 - 1200	40			3.256E-01	2.995E-01	3.256E-01			9.403E+00	8.650E+00	9.403E+00
1200 - 1300	31			3.256E-01	2.995E-01	3.256E-01			7.288E+00	6.703E+00	7.288E+00
1300 - 1400	31			3.256E-01	2.995E-01	3.256E-01			7.288E+00	6.703E+00	7.288E+00
1400 - 1500	39			3.256E-01	2.995E-01	3.256E-01			9.168E+00	8.433E+00	9.168E+00
1500 - 1600	52			3.256E-01	2.995E-01	3.256E-01			1.222E+01	1.124E+01	1.222E+01
1600 - 1700	35			3.256E-01	2.995E-01	3.256E-01			8.228E+00	7.568E+00	8.228E+00
1700 - 1800	9			3.256E-01	2.995E-01	3.256E-01			2.116E+00	1.946E+00	2.116E+00
1800 - 1900	8			3.256E-01	2.995E-01	3.256E-01			1.881E+00	1.730E+00	1.881E+00
1900 - 2000	7			3.256E-01	2.995E-01	3.256E-01			1.646E+00	1.514E+00	1.646E+00
2000 - 2100	18			3.256E-01	2.995E-01	3.256E-01			4.231E+00	3.892E+00	4.231E+00
2100 - 2200	11			3.256E-01	2.995E-01	3.256E-01			2.586E+00	2.379E+00	2.586E+00
2200 - 2300	22			3.256E-01	2.995E-01	3.256E-01			5.172E+00	4.757E+00	5.172E+00
2300 - 2400	14			3.256E-01	2.995E-01	3.256E-01			3.291E+00	3.027E+00	3.291E+00

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0200 - 0300	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0300 - 0400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	3			2.013E-03	2.013E-03	2.013E-03			6.038E-03	6.038E-03	6.038E-03
0500 - 0600	8			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
0600 - 0700	8			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
0700 - 0800	3			2.013E-03	2.013E-03	2.013E-03			6.038E-03	6.038E-03	6.038E-03
0800 - 0900	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0900 - 1000	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1000 - 1100	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
1100 - 1200	5			2.013E-03	2.013E-03	2.013E-03			1.006E-02	1.006E-02	1.006E-02
1200 - 1300	3			2.013E-03	2.013E-03	2.013E-03			6.038E-03	6.038E-03	6.038E-03
1300 - 1400	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
1400 - 1500	3			2.013E-03	2.013E-03	2.013E-03			6.038E-03	6.038E-03	6.038E-03
1500 - 1600	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
1600 - 1700	4			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
1700 - 1800	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
1800 - 1900	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
1900 - 2000	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2000 - 2100	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
2100 - 2200	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
2200 - 2300	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
2300 - 2400	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03

**Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini
KMB Tuen Mun Depot (Franchised Bus DD)**

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			7.173E-01	6.608E-01	7.173E-01			1.993E-04	1.836E-04	1.993E-04
0100 - 0200			1.192E+00	1.097E+00	1.192E+00			3.310E-04	3.048E-04	3.310E-04
0200 - 0300			2.371E-01	2.183E-01	2.371E-01			6.586E-05	6.063E-05	6.586E-05
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			2.146E+00	1.976E+00	2.146E+00			5.961E-04	5.490E-04	5.961E-04
0500 - 0600			9.787E+00	9.015E+00	9.787E+00			2.719E-03	2.504E-03	2.719E-03
0600 - 0700			1.098E+01	1.012E+01	1.098E+01			3.051E-03	2.810E-03	3.051E-03
0700 - 0800			6.689E+00	6.161E+00	6.689E+00			1.858E-03	1.711E-03	1.858E-03
0800 - 0900			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			2.391E+00	2.203E+00	2.391E+00			6.642E-04	6.118E-04	6.642E-04
1000 - 1100			5.497E+00	5.064E+00	5.497E+00			1.527E-03	1.407E-03	1.527E-03
1100 - 1200			9.554E+00	8.801E+00	9.554E+00			2.654E-03	2.445E-03	2.654E-03
1200 - 1300			7.406E+00	6.822E+00	7.406E+00			2.057E-03	1.895E-03	2.057E-03
1300 - 1400			7.408E+00	6.824E+00	7.408E+00			2.058E-03	1.896E-03	2.058E-03
1400 - 1500			9.319E+00	8.584E+00	9.319E+00			2.589E-03	2.385E-03	2.589E-03
1500 - 1600			1.243E+01	1.145E+01	1.243E+01			3.453E-03	3.180E-03	3.453E-03
1600 - 1700			8.361E+00	7.701E+00	8.361E+00			2.322E-03	2.139E-03	2.322E-03
1700 - 1800			2.152E+00	1.982E+00	2.152E+00			5.978E-04	5.507E-04	5.978E-04
1800 - 1900			1.911E+00	1.760E+00	1.911E+00			5.308E-04	4.889E-04	5.308E-04
1900 - 2000			1.674E+00	1.542E+00	1.674E+00			4.649E-04	4.283E-04	4.649E-04
2000 - 2100			4.300E+00	3.961E+00	4.300E+00			1.194E-03	1.100E-03	1.194E-03
2100 - 2200			2.630E+00	2.423E+00	2.630E+00			7.306E-04	6.730E-04	7.306E-04
2200 - 2300			5.256E+00	4.842E+00	5.256E+00			1.460E-03	1.345E-03	1.460E-03
2300 - 2400			3.343E+00	3.080E+00	3.343E+00			9.287E-04	8.555E-04	9.287E-04

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	0
0500 - 0600	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0
0600 - 0700	0	4	7	4	1	0	1	0	0	0	0	1	4	0	0	0	0	0
0700 - 0800	0	3	16	9	2	3	1	3	2	0	0	0	1	2	0	0	0	2
0800 - 0900	0	5	5	8	3	1	1	4	0	0	0	0	0	0	0	0	0	5
0900 - 1000	0	3	6	0	2	3	1	6	1	0	0	0	0	0	0	1	0	2
1000 - 1100	0	2	4	3	2	2	0	6	2	1	0	0	1	0	0	0	0	0
1100 - 1200	0	0	7	0	3	3	1	8	0	1	1	0	0	0	0	0	0	0
1200 - 1300	0	1	1	2	0	0	1	8	0	1	2	0	0	0	0	0	0	3
1300 - 1400	0	1	2	3	0	1	1	9	1	1	0	1	1	1	0	0	3	2
1400 - 1500	0	1	5	2	0	0	1	7	0	0	0	0	0	0	0	1	1	0
1500 - 1600	0	0	5	3	1	2	0	4	5	3	1	1	0	0	1	0	0	3
1600 - 1700	0	8	3	3	6	0	4	9	3	0	1	0	0	4	1	0	0	2
1700 - 1800	0	4	9	4	2	1	2	4	3	1	0	0	0	0	0	0	0	0
1800 - 1900	0	6	5	3	3	1	3	9	1	1	0	1	0	0	0	0	0	0
1900 - 2000	0	5	7	2	0	2	3	7	2	1	1	0	0	0	0	0	0	0
2000 - 2100	0	1	3	1	7	0	1	8	3	0	0	0	0	0	0	0	0	1
2100 - 2200	0	0	6	7	2	1	2	9	3	0	0	1	0	0	0	0	0	0
2200 - 2300	0	1	4	3	4	0	1	8	4	0	0	0	0	0	0	0	0	0
2300 - 2400	0	1	4	2	1	1	0	4	1	1	0	0	0	0	0	0	0	0

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (Franchised Bus DD)

Cold Idling Emission

Idling Time for Terminating Buses =	2	min
Max. Idling Time for Adjusting Starting Emission =	1	min

Hour	Frequency	Double-Deck Franchised Bus										Double-Deck Franchised Bus													
		Cold Idling Emission Factor (g/min)					Cold Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)							
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP			
0000 - 0100	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	8			2.013E-03	2.013E-03	2.013E-03						3.220E-02	3.220E-02	3.220E-02
0100 - 0200	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	0			2.013E-03	2.013E-03	2.013E-03						0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	0			2.013E-03	2.013E-03	2.013E-03						0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	0			2.013E-03	2.013E-03	2.013E-03						0.000E+00	0.000E+00	0.000E+00
0400 - 0500	1			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03	0			2.013E-03	2.013E-03	2.013E-03						0.000E+00	0.000E+00	0.000E+00
0500 - 0600	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02	1			2.013E-03	2.013E-03	2.013E-03						4.025E-03	4.025E-03	4.025E-03
0600 - 0700	6			2.013E-03	2.013E-03	2.013E-03			2.415E-02	2.415E-02	2.415E-02	16			2.013E-03	2.013E-03	2.013E-03						6.440E-02	6.440E-02	6.440E-02
0700 - 0800	11			2.013E-03	2.013E-03	2.013E-03			4.428E-02	4.428E-02	4.428E-02	33			2.013E-03	2.013E-03	2.013E-03						1.328E-01	1.328E-01	1.328E-01
0800 - 0900	10			2.013E-03	2.013E-03	2.013E-03			4.025E-02	4.025E-02	4.025E-02	22			2.013E-03	2.013E-03	2.013E-03						8.855E-02	8.855E-02	8.855E-02
0900 - 1000	11			2.013E-03	2.013E-03	2.013E-03			4.428E-02	4.428E-02	4.428E-02	14			2.013E-03	2.013E-03	2.013E-03						5.635E-02	5.635E-02	5.635E-02
1000 - 1100	10			2.013E-03	2.013E-03	2.013E-03			4.025E-02	4.025E-02	4.025E-02	13			2.013E-03	2.013E-03	2.013E-03						5.233E-02	5.233E-02	5.233E-02
1100 - 1200	11			2.013E-03	2.013E-03	2.013E-03			4.428E-02	4.428E-02	4.428E-02	13			2.013E-03	2.013E-03	2.013E-03						5.233E-02	5.233E-02	5.233E-02
1200 - 1300	15			2.013E-03	2.013E-03	2.013E-03			6.038E-02	6.038E-02	6.038E-02	4			2.013E-03	2.013E-03	2.013E-03						1.610E-02	1.610E-02	1.610E-02
1300 - 1400	20			2.013E-03	2.013E-03	2.013E-03			8.050E-02	8.050E-02	8.050E-02	7			2.013E-03	2.013E-03	2.013E-03						2.818E-02	2.818E-02	2.818E-02
1400 - 1500	10			2.013E-03	2.013E-03	2.013E-03			4.025E-02	4.025E-02	4.025E-02	8			2.013E-03	2.013E-03	2.013E-03						3.220E-02	3.220E-02	3.220E-02
1500 - 1600	18			2.013E-03	2.013E-03	2.013E-03			7.245E-02	7.245E-02	7.245E-02	11			2.013E-03	2.013E-03	2.013E-03						4.428E-02	4.428E-02	4.428E-02
1600 - 1700	24			2.013E-03	2.013E-03	2.013E-03			9.660E-02	9.660E-02	9.660E-02	20			2.013E-03	2.013E-03	2.013E-03						8.050E-02	8.050E-02	8.050E-02
1700 - 1800	10			2.013E-03	2.013E-03	2.013E-03			4.025E-02	4.025E-02	4.025E-02	20			2.013E-03	2.013E-03	2.013E-03						8.050E-02	8.050E-02	8.050E-02
1800 - 1900	15			2.013E-03	2.013E-03	2.013E-03			6.038E-02	6.038E-02	6.038E-02	18			2.013E-03	2.013E-03	2.013E-03						7.245E-02	7.245E-02	7.245E-02
1900 - 2000	14			2.013E-03	2.013E-03	2.013E-03			5.635E-02	5.635E-02	5.635E-02	16			2.013E-03	2.013E-03	2.013E-03						6.440E-02	6.440E-02	6.440E-02
2000 - 2100	13			2.013E-03	2.013E-03	2.013E-03			5.233E-02	5.233E-02	5.233E-02	12			2.013E-03	2.013E-03	2.013E-03						4.830E-02	4.830E-02	4.830E-02
2100 - 2200	15			2.013E-03	2.013E-03	2.013E-03			6.038E-02	6.038E-02	6.038E-02	16			2.013E-03	2.013E-03	2.013E-03						6.440E-02	6.440E-02	6.440E-02
2200 - 2300	13			2.013E-03	2.013E-03	2.013E-03			5.233E-02	5.233E-02	5.233E-02	12			2.013E-03	2.013E-03	2.013E-03						4.830E-02	4.830E-02	4.830E-02
2300 - 2400	6			2.013E-03	2.013E-03	2.013E-03			2.415E-02	2.415E-02	2.415E-02	9			2.013E-03	2.013E-03	2.013E-03						3.623E-02	3.623E-02	3.623E-02

Average Distance from Starting Place to PTI Egress =	122	m
Average Spread Distance outside PTI =	578	m

Hour	Idling Emission (g)					Emission for Adjusting Starting Emission (g)					Adjusted Starting Emission Within PTI (g)					Adjusted Starting Emission Outside PTI (g)					Starting Emission Rate Outside PTI (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			3.220E-02	3.220E-02	3.220E-02			1.610E-02	1.610E-02	1.610E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			4.025E-03	4.025E-03	4.025E-03			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			1.610E-02	1.610E-02	1.610E-02			8.050E-03	8.050E-03	8.050E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			8.855E-02	8.855E-02	8.855E-02			4.428E-02	4.428E-02	4.428E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			1.771E-01	1.771E-01	1.771E-01			8.855E-02	8.855E-02	8.855E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			1.288E-01	1.288E-01	1.288E-01			6.440E-02	6.440E-02	6.440E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			1.006E-01	1.006E-01	1.006E-01			5.031E-02	5.031E-02	5.031E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			9.258E-02	9.258E-02	9.258E-02			4.629E-02	4.629E-02	4.629E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			9.660E-02	9.660E-02	9.660E-02			4.830E-02	4.830E-02	4.830E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			7.648E-02	7.648E-02	7.648E-02			3.824E-02	3.824E-02	3.824E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			1.087E-01	1.087E-01	1.087E-01			5.434E-02	5.434E-02	5.434E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			7.245E-02	7.245E-02	7.245E-02			3.623E-02	3.623E-02	3.623E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			1.167E-01	1.167E-01	1.167E-01			5.836E-02	5.836E-02	5.836E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			1.771E-01	1.771E-01	1.771E-01			8.855E-02	8.855E-02	8.855E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			1.208E-01	1.208E-01	1.208E-01			6.038E-02	6.038E-02	6.038E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			1.328E-01	1.328E-01	1.328E-01			6.641E-02	6.641E-02	6.641E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			1.208E-01	1.208E-01	1.208E-01			6.038E-02	6.038E-02	6.038E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+0	

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	244	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	16			3.256E-01	2.995E-01	3.256E-01			1.271E+00	1.169E+00	1.271E+00
0100 - 0200	6			3.256E-01	2.995E-01	3.256E-01			4.767E-01	4.385E-01	4.767E-01
0200 - 0300	3			3.256E-01	2.995E-01	3.256E-01			2.383E-01	2.192E-01	2.383E-01
0300 - 0400	0			3.256E-01	2.995E-01	3.256E-01			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	5			3.256E-01	2.995E-01	3.256E-01			3.972E-01	3.654E-01	3.972E-01
0500 - 0600	10			3.256E-01	2.995E-01	3.256E-01			7.945E-01	7.308E-01	7.945E-01
0600 - 0700	33			3.256E-01	2.995E-01	3.256E-01			2.622E+00	2.412E+00	2.622E+00
0700 - 0800	58			3.256E-01	2.995E-01	3.256E-01			4.608E+00	4.239E+00	4.608E+00
0800 - 0900	47			3.256E-01	2.995E-01	3.256E-01			3.734E+00	3.435E+00	3.734E+00
0900 - 1000	34			3.256E-01	2.995E-01	3.256E-01			2.701E+00	2.485E+00	2.701E+00
1000 - 1100	34			3.256E-01	2.995E-01	3.256E-01			2.701E+00	2.485E+00	2.701E+00
1100 - 1200	38			3.256E-01	2.995E-01	3.256E-01			3.019E+00	2.777E+00	3.019E+00
1200 - 1300	27			3.256E-01	2.995E-01	3.256E-01			2.145E+00	1.973E+00	2.145E+00
1300 - 1400	31			3.256E-01	2.995E-01	3.256E-01			2.463E+00	2.265E+00	2.463E+00
1400 - 1500	26			3.256E-01	2.995E-01	3.256E-01			2.066E+00	1.900E+00	2.066E+00
1500 - 1600	36			3.256E-01	2.995E-01	3.256E-01			2.860E+00	2.631E+00	2.860E+00
1600 - 1700	54			3.256E-01	2.995E-01	3.256E-01			4.290E+00	3.946E+00	4.290E+00
1700 - 1800	41			3.256E-01	2.995E-01	3.256E-01			3.257E+00	2.996E+00	3.257E+00
1800 - 1900	40			3.256E-01	2.995E-01	3.256E-01			3.178E+00	2.923E+00	3.178E+00
1900 - 2000	45			3.256E-01	2.995E-01	3.256E-01			3.575E+00	3.289E+00	3.575E+00
2000 - 2100	32			3.256E-01	2.995E-01	3.256E-01			2.542E+00	2.338E+00	2.542E+00
2100 - 2200	33			3.256E-01	2.995E-01	3.256E-01			2.622E+00	2.412E+00	2.622E+00
2200 - 2300	31			3.256E-01	2.995E-01	3.256E-01			2.463E+00	2.265E+00	2.463E+00
2300 - 2400	20			3.256E-01	2.995E-01	3.256E-01			1.589E+00	1.462E+00	1.589E+00

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	8			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
0100 - 0200	5			2.013E-03	2.013E-03	2.013E-03			1.006E-02	1.006E-02	1.006E-02
0200 - 0300	3			2.013E-03	2.013E-03	2.013E-03			6.038E-03	6.038E-03	6.038E-03
0300 - 0400	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	4			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
0500 - 0600	6			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
0600 - 0700	11			2.013E-03	2.013E-03	2.013E-03			2.214E-02	2.214E-02	2.214E-02
0700 - 0800	14			2.013E-03	2.013E-03	2.013E-03			2.818E-02	2.818E-02	2.818E-02
0800 - 0900	15			2.013E-03	2.013E-03	2.013E-03			3.019E-02	3.019E-02	3.019E-02
0900 - 1000	9			2.013E-03	2.013E-03	2.013E-03			1.811E-02	1.811E-02	1.811E-02
1000 - 1100	11			2.013E-03	2.013E-03	2.013E-03			2.214E-02	2.214E-02	2.214E-02
1100 - 1200	14			2.013E-03	2.013E-03	2.013E-03			2.818E-02	2.818E-02	2.818E-02
1200 - 1300	8			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
1300 - 1400	4			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03
1400 - 1500	8			2.013E-03	2.013E-03	2.013E-03			1.610E-02	1.610E-02	1.610E-02
1500 - 1600	7			2.013E-03	2.013E-03	2.013E-03			1.409E-02	1.409E-02	1.409E-02
1600 - 1700	10			2.013E-03	2.013E-03	2.013E-03			2.013E-02	2.013E-02	2.013E-02
1700 - 1800	11			2.013E-03	2.013E-03	2.013E-03			2.214E-02	2.214E-02	2.214E-02
1800 - 1900	7			2.013E-03	2.013E-03	2.013E-03			1.409E-02	1.409E-02	1.409E-02
1900 - 2000	15			2.013E-03	2.013E-03	2.013E-03			3.019E-02	3.019E-02	3.019E-02
2000 - 2100	7			2.013E-03	2.013E-03	2.013E-03			1.409E-02	1.409E-02	1.409E-02
2100 - 2200	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
2200 - 2300	6			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02
2300 - 2400	5			2.013E-03	2.013E-03	2.013E-03			1.006E-02	1.006E-02	1.006E-02

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (Franchised Bus DD)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			1.319E+00	1.218E+00	1.319E+00			3.665E-04	3.382E-04	3.665E-04
0100 - 0200			4.908E-01	4.526E-01	4.908E-01			1.363E-04	1.257E-04	1.363E-04
0200 - 0300			2.444E-01	2.253E-01	2.444E-01			6.788E-05	6.258E-05	6.788E-05
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			4.093E-01	3.775E-01	4.093E-01			1.137E-04	1.049E-04	1.137E-04
0500 - 0600			8.226E-01	7.590E-01	8.226E-01			2.285E-04	2.108E-04	2.285E-04
0600 - 0700			2.732E+00	2.522E+00	2.732E+00			7.590E-04	7.006E-04	7.590E-04
0700 - 0800			4.813E+00	4.444E+00	4.813E+00			1.337E-03	1.234E-03	1.337E-03
0800 - 0900			3.893E+00	3.594E+00	3.893E+00			1.081E-03	9.982E-04	1.081E-03
0900 - 1000			2.820E+00	2.603E+00	2.820E+00			7.833E-04	7.232E-04	7.833E-04
1000 - 1100			2.816E+00	2.599E+00	2.816E+00			7.822E-04	7.220E-04	7.822E-04
1100 - 1200			3.144E+00	2.902E+00	3.144E+00			8.733E-04	8.060E-04	8.733E-04
1200 - 1300			2.238E+00	2.066E+00	2.238E+00			6.216E-04	5.738E-04	6.216E-04
1300 - 1400			2.580E+00	2.382E+00	2.580E+00			7.165E-04	6.617E-04	7.165E-04
1400 - 1500			2.154E+00	1.989E+00	2.154E+00			5.984E-04	5.524E-04	5.984E-04
1500 - 1600			2.991E+00	2.762E+00	2.991E+00			8.308E-04	7.671E-04	8.308E-04
1600 - 1700			4.487E+00	4.143E+00	4.487E+00			1.246E-03	1.151E-03	1.246E-03
1700 - 1800			3.400E+00	3.139E+00	3.400E+00			9.445E-04	8.720E-04	9.445E-04
1800 - 1900			3.325E+00	3.070E+00	3.325E+00			9.235E-04	8.528E-04	9.235E-04
1900 - 2000			3.726E+00	3.439E+00	3.726E+00			1.035E-03	9.554E-04	1.035E-03
2000 - 2100			2.657E+00	2.453E+00	2.657E+00			7.381E-04	6.814E-04	7.381E-04
2100 - 2200			2.751E+00	2.540E+00	2.751E+00			7.640E-04	7.057E-04	7.640E-04
2200 - 2300			2.576E+00	2.378E+00	2.576E+00			7.154E-04	6.606E-04	7.154E-04
2300 - 2400			1.659E+00	1.532E+00	1.659E+00			4.609E-04	4.256E-04	4.609E-04

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (PLB)

Cold Idling Emission

Idling Time for Terminating Buses =	2	min
Max. Idling Time for Adjusting Starting Emission =	1	min

Hour	Frequency	Public Light Bus (Diesel)										Public Light Bus (Diesel)										
		Cold Idling Emission Factor (g/min)					Cold Idling Emission (g)					Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)					
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	Frequency	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0.69			4.336E-04	4.336E-04	4.336E-04			6.007E-04	6.007E-04	6.007E-04	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	2.08			4.336E-04	4.336E-04	4.336E-04			1.802E-03	1.802E-03	1.802E-03
0500 - 0600	2.77			4.336E-04	4.336E-04	4.336E-04			2.403E-03	2.403E-03	2.403E-03	5.54			4.336E-04	4.336E-04	4.336E-04			4.805E-03	4.805E-03	4.805E-03
0600 - 0700	6.23			4.336E-04	4.336E-04	4.336E-04			5.406E-03	5.406E-03	5.406E-03	11.78			4.336E-04	4.336E-04	4.336E-04			1.021E-02	1.021E-02	1.021E-02
0700 - 0800	7.62			4.336E-04	4.336E-04	4.336E-04			6.607E-03	6.607E-03	6.607E-03	9.70			4.336E-04	4.336E-04	4.336E-04			8.409E-03	8.409E-03	8.409E-03
0800 - 0900	13.85			4.336E-04	4.336E-04	4.336E-04			1.201E-02	1.201E-02	1.201E-02	10.39			4.336E-04	4.336E-04	4.336E-04			9.010E-03	9.010E-03	9.010E-03
0900 - 1000	9.70			4.336E-04	4.336E-04	4.336E-04			8.409E-03	8.409E-03	8.409E-03	14.55			4.336E-04	4.336E-04	4.336E-04			1.261E-02	1.261E-02	1.261E-02
1000 - 1100	12.47			4.336E-04	4.336E-04	4.336E-04			1.081E-02	1.081E-02	1.081E-02	12.47			4.336E-04	4.336E-04	4.336E-04			1.081E-02	1.081E-02	1.081E-02
1100 - 1200	6.93			4.336E-04	4.336E-04	4.336E-04			6.007E-03	6.007E-03	6.007E-03	10.39			4.336E-04	4.336E-04	4.336E-04			9.010E-03	9.010E-03	9.010E-03
1200 - 1300	9.70			4.336E-04	4.336E-04	4.336E-04			8.409E-03	8.409E-03	8.409E-03	11.78			4.336E-04	4.336E-04	4.336E-04			1.021E-02	1.021E-02	1.021E-02
1300 - 1400	22.86			4.336E-04	4.336E-04	4.336E-04			1.982E-02	1.982E-02	1.982E-02	18.70			4.336E-04	4.336E-04	4.336E-04			1.622E-02	1.622E-02	1.622E-02
1400 - 1500	9.00			4.336E-04	4.336E-04	4.336E-04			7.809E-03	7.809E-03	7.809E-03	9.00			4.336E-04	4.336E-04	4.336E-04			7.809E-03	7.809E-03	7.809E-03
1500 - 1600	11.08			4.336E-04	4.336E-04	4.336E-04			9.611E-03	9.611E-03	9.611E-03	4.85			4.336E-04	4.336E-04	4.336E-04			4.205E-03	4.205E-03	4.205E-03
1600 - 1700	11.78			4.336E-04	4.336E-04	4.336E-04			1.021E-02	1.021E-02	1.021E-02	7.62			4.336E-04	4.336E-04	4.336E-04			6.607E-03	6.607E-03	6.607E-03
1700 - 1800	6.23			4.336E-04	4.336E-04	4.336E-04			5.406E-03	5.406E-03	5.406E-03	16.62			4.336E-04	4.336E-04	4.336E-04			1.442E-02	1.442E-02	1.442E-02
1800 - 1900	8.31			4.336E-04	4.336E-04	4.336E-04			7.208E-03	7.208E-03	7.208E-03	5.54			4.336E-04	4.336E-04	4.336E-04			4.805E-03	4.805E-03	4.805E-03
1900 - 2000	10.39			4.336E-04	4.336E-04	4.336E-04			9.010E-03	9.010E-03	9.010E-03	8.31			4.336E-04	4.336E-04	4.336E-04			7.208E-03	7.208E-03	7.208E-03
2000 - 2100	8.31			4.336E-04	4.336E-04	4.336E-04			7.208E-03	7.208E-03	7.208E-03	0.69			4.336E-04	4.336E-04	4.336E-04			6.007E-04	6.007E-04	6.007E-04
2100 - 2200	6.23			4.336E-04	4.336E-04	4.336E-04			5.406E-03	5.406E-03	5.406E-03	1.39			4.336E-04	4.336E-04	4.336E-04			1.201E-03	1.201E-03	1.201E-03
2200 - 2300	8.31			4.336E-04	4.336E-04	4.336E-04			7.208E-03	7.208E-03	7.208E-03	2.08			4.336E-04	4.336E-04	4.336E-04			1.802E-03	1.802E-03	1.802E-03
2300 - 2400	1.39			4.336E-04	4.336E-04	4.336E-04			1.201E-03	1.201E-03	1.201E-03	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00

Average Distance from Starting Place to PTI Egress =	122	m
Average Spread Distance outside PTI =	578	m

Hour	Idling Emission (g)					Emission for Adjusting Starting Emission (g)					Adjusted Starting Emission Within PTI (g)					Adjusted Starting Emission Outside PTI (g)					Starting Emission Rate Outside PTI (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			6.007E-04	6.007E-04	6.007E-04			3.003E-04	3.003E-04	3.003E-04			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			1.802E-03	1.802E-03	1.802E-03			9.010E-04	9.010E-04	9.010E-04			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			7.208E-03	7.208E-03	7.208E-03			3.604E-03	3.604E-03	3.604E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			1.562E-02	1.562E-02	1.562E-02			7.809E-03	7.809E-03	7.809E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			1.502E-02	1.502E-02	1.502E-02			7.508E-03	7.508E-03	7.508E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			2.102E-02	2.102E-02	2.102E-02			1.051E-02	1.051E-02	1.051E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			2.102E-02	2.102E-02	2.102E-02			1.051E-02	1.051E-02	1.051E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			2.162E-02	2.162E-02	2.162E-02			1.081E-02	1.081E-02	1.081E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			1.502E-02	1.502E-02	1.502E-02			7.508E-03	7.508E-03	7.508E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			1.862E-02	1.862E-02	1.862E-02			9.310E-03	9.310E-03	9.310E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			3.604E-02	3.604E-02	3.604E-02			1.802E-02	1.802E-02	1.802E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			1.562E-02	1.562E-02	1.562E-02			7.809E-03	7.809E-03	7.809E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			1.382E-02	1.382E-02	1.382E-02			6.908E-03	6.908E-03	6.908E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			1.682E-02	1.682E-02	1.682E-02			8.409E-03	8.409E-03	8.409E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			1.982E-02	1.982E-02	1.982E-02			9.911E-03	9.911E-03	9.911E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			1.201E-02	1.201E-02	1.201E-02			6.007E-03	6.007E-03	6.007E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			1.622E-02	1.622E-02	1.622E-02			8.109E-03	8.109E-03	8.109E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			7.809E-03	7.809E-03	7.809E-03			3.904E-03	3.904E-03	3.904E-03			0.000E+00	0.000E											

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (PLB)

Cold Idling Emission

Idling Time for Terminating Buses =	2	min
Max. Idling Time for Adjusting Starting Emission =	1	min

Hour	Frequency	Public Light Bus (LPG)										Public Light Bus (LPG)										
		Cold Idling Emission Factor (g/min)					Cold Idling Emission (g)					Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)					
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	Frequency	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0100 - 0200	0.31			6.820E-04	6.820E-04	6.820E-04			4.192E-04	4.192E-04	4.192E-04	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00	0.92			6.820E-04	6.820E-04	6.820E-04			1.258E-03	1.258E-03	1.258E-03
0500 - 0600	1.23			6.820E-04	6.820E-04	6.820E-04			1.677E-03	1.677E-03	1.677E-03	2.46			6.820E-04	6.820E-04	6.820E-04			3.353E-03	3.353E-03	3.353E-03
0600 - 0700	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00	7.99			6.820E-04	6.820E-04	6.820E-04			1.090E-02	1.090E-02	1.090E-02
0700 - 0800	1.23			6.820E-04	6.820E-04	6.820E-04			1.677E-03	1.677E-03	1.677E-03	6.45			6.820E-04	6.820E-04	6.820E-04			8.803E-03	8.803E-03	8.803E-03
0800 - 0900	2.46			6.820E-04	6.820E-04	6.820E-04			3.353E-03	3.353E-03	3.353E-03	8.30			6.820E-04	6.820E-04	6.820E-04			1.132E-02	1.132E-02	1.132E-02
0900 - 1000	0.92			6.820E-04	6.820E-04	6.820E-04			1.258E-03	1.258E-03	1.258E-03	9.83			6.820E-04	6.820E-04	6.820E-04			1.341E-02	1.341E-02	1.341E-02
1000 - 1100	0.92			6.820E-04	6.820E-04	6.820E-04			1.258E-03	1.258E-03	1.258E-03	10.14			6.820E-04	6.820E-04	6.820E-04			1.383E-02	1.383E-02	1.383E-02
1100 - 1200	0.31			6.820E-04	6.820E-04	6.820E-04			4.192E-04	4.192E-04	4.192E-04	7.38			6.820E-04	6.820E-04	6.820E-04			1.006E-02	1.006E-02	1.006E-02
1200 - 1300	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00	9.53			6.820E-04	6.820E-04	6.820E-04			1.299E-02	1.299E-02	1.299E-02
1300 - 1400	3.38			6.820E-04	6.820E-04	6.820E-04			4.611E-03	4.611E-03	4.611E-03	15.06			6.820E-04	6.820E-04	6.820E-04			2.054E-02	2.054E-02	2.054E-02
1400 - 1500	0.92			6.820E-04	6.820E-04	6.820E-04			1.258E-03	1.258E-03	1.258E-03	7.07			6.820E-04	6.820E-04	6.820E-04			9.641E-03	9.641E-03	9.641E-03
1500 - 1600	0.92			6.820E-04	6.820E-04	6.820E-04			1.258E-03	1.258E-03	1.258E-03	6.15			6.820E-04	6.820E-04	6.820E-04			8.383E-03	8.383E-03	8.383E-03
1600 - 1700	0.61			6.820E-04	6.820E-04	6.820E-04			8.383E-04	8.383E-04	8.383E-04	7.99			6.820E-04	6.820E-04	6.820E-04			1.090E-02	1.090E-02	1.090E-02
1700 - 1800	0.31			6.820E-04	6.820E-04	6.820E-04			4.192E-04	4.192E-04	4.192E-04	9.83			6.820E-04	6.820E-04	6.820E-04			1.341E-02	1.341E-02	1.341E-02
1800 - 1900	0.92			6.820E-04	6.820E-04	6.820E-04			1.258E-03	1.258E-03	1.258E-03	5.22			6.820E-04	6.820E-04	6.820E-04			7.126E-03	7.126E-03	7.126E-03
1900 - 2000	1.23			6.820E-04	6.820E-04	6.820E-04			1.677E-03	1.677E-03	1.677E-03	7.07			6.820E-04	6.820E-04	6.820E-04			9.641E-03	9.641E-03	9.641E-03
2000 - 2100	1.54			6.820E-04	6.820E-04	6.820E-04			2.096E-03	2.096E-03	2.096E-03	2.46			6.820E-04	6.820E-04	6.820E-04			3.353E-03	3.353E-03	3.353E-03
2100 - 2200	0.31			6.820E-04	6.820E-04	6.820E-04			4.192E-04	4.192E-04	4.192E-04	3.07			6.820E-04	6.820E-04	6.820E-04			4.192E-03	4.192E-03	4.192E-03
2200 - 2300	0.92			6.820E-04	6.820E-04	6.820E-04			1.258E-03	1.258E-03	1.258E-03	3.69			6.820E-04	6.820E-04	6.820E-04			5.030E-03	5.030E-03	5.030E-03
2300 - 2400	0.31			6.820E-04	6.820E-04	6.820E-04			4.192E-04	4.192E-04	4.192E-04	0.31			6.820E-04	6.820E-04	6.820E-04			4.192E-04	4.192E-04	4.192E-04

Average Distance from Starting Place to PTI Egress =	122	m
Average Spread Distance outside PTI =	28	m

Hour	Idling Emission (g)					Emission for Adjusting Starting Emission (g)					Adjusted Starting Emission Within PTI (g)					Adjusted Starting Emission Outside PTI (g)					Starting Emission Rate Outside PTI (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			4.192E-04	4.192E-04	4.192E-04			2.096E-04	2.096E-04	2.096E-04			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			1.258E-03	1.258E-03	1.258E-03			6.288E-04	6.288E-04	6.288E-04			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			5.030E-03	5.030E-03	5.030E-03			2.515E-03	2.515E-03	2.515E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			1.090E-02	1.090E-02	1.090E-02			5.449E-03	5.449E-03	5.449E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			1.048E-02	1.048E-02	1.048E-02			5.240E-03	5.240E-03	5.240E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			1.467E-02	1.467E-02	1.467E-02			7.336E-03	7.336E-03	7.336E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			1.467E-02	1.467E-02	1.467E-02			7.336E-03	7.336E-03	7.336E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			1.509E-02	1.509E-02	1.509E-02			7.545E-03	7.545E-03	7.545E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			1.048E-02	1.048E-02	1.048E-02			5.240E-03	5.240E-03	5.240E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			1.299E-02	1.299E-02	1.299E-02			6.497E-03	6.497E-03	6.497E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			2.515E-02	2.515E-02	2.515E-02			1.258E-02	1.258E-02	1.258E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			1.090E-02	1.090E-02	1.090E-02			5.449E-03	5.449E-03	5.449E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			9.641E-03	9.641E-03	9.641E-03			4.820E-03	4.820E-03	4.820E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			1.174E-02	1.174E-02	1.174E-02			5.868E-03	5.868E-03	5.868E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			1.383E-02	1.383E-02	1.383E-02			6.916E-03	6.916E-03	6.916E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			8.383E-03	8.383E-03	8.383E-03			4.192E-03	4.192E-03	4.192E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			1.132E-02	1.132E-02	1.132E-02			5.659E-03	5.659E-03	5.659E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
2000 - 2100			5.449E-03	5.449E-03	5.449E-03			2.725E-03	2.725E-03	2.725E-03			0.000E+00	0.000E+00	0.000										

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (PLB)

Running Emission

Average Travelling Distance within PTI =	244	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Public Light Bus (Diesel + LPG)									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	1			3.837E-02	3.533E-02	3.837E-02			9.363E-03	8.620E-03	9.363E-03
0100 - 0200	1			3.837E-02	3.533E-02	3.837E-02			9.363E-03	8.620E-03	9.363E-03
0200 - 0300	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0			3.837E-02	3.533E-02	3.837E-02			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	3			3.837E-02	3.533E-02	3.837E-02			2.809E-02	2.586E-02	2.809E-02
0500 - 0600	17			3.837E-02	3.533E-02	3.837E-02			1.592E-01	1.465E-01	1.592E-01
0600 - 0700	41			3.837E-02	3.533E-02	3.837E-02			3.839E-01	3.534E-01	3.839E-01
0700 - 0800	42			3.837E-02	3.533E-02	3.837E-02			3.933E-01	3.620E-01	3.933E-01
0800 - 0900	49			3.837E-02	3.533E-02	3.837E-02			4.588E-01	4.224E-01	4.588E-01
0900 - 1000	49			3.837E-02	3.533E-02	3.837E-02			4.588E-01	4.224E-01	4.588E-01
1000 - 1100	46			3.837E-02	3.533E-02	3.837E-02			4.307E-01	3.965E-01	4.307E-01
1100 - 1200	32			3.837E-02	3.533E-02	3.837E-02			2.996E-01	2.758E-01	2.996E-01
1200 - 1300	37			3.837E-02	3.533E-02	3.837E-02			3.464E-01	3.189E-01	3.464E-01
1300 - 1400	75			3.837E-02	3.533E-02	3.837E-02			7.023E-01	6.465E-01	7.023E-01
1400 - 1500	34			3.837E-02	3.533E-02	3.837E-02			3.184E-01	2.931E-01	3.184E-01
1500 - 1600	31			3.837E-02	3.533E-02	3.837E-02			2.903E-01	2.672E-01	2.903E-01
1600 - 1700	35			3.837E-02	3.533E-02	3.837E-02			3.277E-01	3.017E-01	3.277E-01
1700 - 1800	48			3.837E-02	3.533E-02	3.837E-02			4.494E-01	4.137E-01	4.494E-01
1800 - 1900	33			3.837E-02	3.533E-02	3.837E-02			3.090E-01	2.845E-01	3.090E-01
1900 - 2000	34			3.837E-02	3.533E-02	3.837E-02			3.184E-01	2.931E-01	3.184E-01
2000 - 2100	16			3.837E-02	3.533E-02	3.837E-02			1.498E-01	1.379E-01	1.498E-01
2100 - 2200	16			3.837E-02	3.533E-02	3.837E-02			1.498E-01	1.379E-01	1.498E-01
2200 - 2300	19			3.837E-02	3.533E-02	3.837E-02			1.779E-01	1.638E-01	1.779E-01
2300 - 2400	2			3.837E-02	3.533E-02	3.837E-02			1.873E-02	1.724E-02	1.873E-02

Idling Emission

No. of PLB (Diesel) to No. of PLB (LPG) Ratio ^[1] =	2.3
Idling Time for Non-terminating Buses =	1 min

Hour	Frequency	Public Light Bus (Diesel)										Frequency	Public Light Bus (LPG)									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)						Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	0.69			4.336E-04	4.336E-04	4.336E-04			3.003E-04	3.003E-04	3.003E-04	0.31			6.820E-04	6.820E-04	6.820E-04			4.724E-04	4.724E-04	4.724E-04
0100 - 0200	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0200 - 0300	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0300 - 0400	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0400 - 0500	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00
0500 - 0600	3.46			4.336E-04	4.336E-04	4.336E-04			1.502E-03	1.502E-03	1.502E-03	1.54			6.820E-04	6.820E-04	6.820E-04			2.362E-03	2.362E-03	2.362E-03
0600 - 0700	10.39			4.336E-04	4.336E-04	4.336E-04			4.505E-03	4.505E-03	4.505E-03	4.61			6.820E-04	6.820E-04	6.820E-04			7.086E-03	7.086E-03	7.086E-03
0700 - 0800	11.78			4.336E-04	4.336E-04	4.336E-04			5.106E-03	5.106E-03	5.106E-03	5.22			6.820E-04	6.820E-04	6.820E-04			8.031E-03	8.031E-03	8.031E-03
0800 - 0900	9.70			4.336E-04	4.336E-04	4.336E-04			4.205E-03	4.205E-03	4.205E-03	4.30			6.820E-04	6.820E-04	6.820E-04			6.614E-03	6.614E-03	6.614E-03
0900 - 1000	9.70			4.336E-04	4.336E-04	4.336E-04			4.205E-03	4.205E-03	4.205E-03	4.30			6.820E-04	6.820E-04	6.820E-04			6.614E-03	6.614E-03	6.614E-03
1000 - 1100	6.93			4.336E-04	4.336E-04	4.336E-04			3.003E-03	3.003E-03	3.003E-03	3.07			6.820E-04	6.820E-04	6.820E-04			4.724E-03	4.724E-03	4.724E-03
1100 - 1200	4.85			4.336E-04	4.336E-04	4.336E-04			2.102E-03	2.102E-03	2.102E-03	2.15			6.820E-04	6.820E-04	6.820E-04			3.307E-03	3.307E-03	3.307E-03
1200 - 1300	4.16			4.336E-04	4.336E-04	4.336E-04			1.802E-03	1.802E-03	1.802E-03	1.84			6.820E-04	6.820E-04	6.820E-04			2.834E-03	2.834E-03	2.834E-03
1300 - 1400	10.39			4.336E-04	4.336E-04	4.336E-04			4.505E-03	4.505E-03	4.505E-03	4.61			6.820E-04	6.820E-04	6.820E-04			7.086E-03	7.086E-03	7.086E-03
1400 - 1500	5.54			4.336E-04	4.336E-04	4.336E-04			2.403E-03	2.403E-03	2.403E-03	2.46			6.820E-04	6.820E-04	6.820E-04			3.779E-03	3.779E-03	3.779E-03
1500 - 1600	5.54			4.336E-04	4.336E-04	4.336E-04			2.403E-03	2.403E-03	2.403E-03	2.46			6.820E-04	6.820E-04	6.820E-04			3.779E-03	3.779E-03	3.779E-03
1600 - 1700	4.85			4.336E-04	4.336E-04	4.336E-04			2.102E-03	2.102E-03	2.102E-03	2.15			6.820E-04	6.820E-04	6.820E-04			3.307E-03	3.307E-03	3.307E-03
1700 - 1800	10.39			4.336E-04	4.336E-04	4.336E-04			4.505E-03	4.505E-03	4.505E-03	4.61			6.820E-04	6.820E-04	6.820E-04			7.086E-03	7.086E-03	7.086E-03
1800 - 1900	9.00			4.336E-04	4.336E-04	4.336E-04			3.904E-03	3.904E-03	3.904E-03	4.00			6.820E-04	6.820E-04	6.820E-04			6.141E-03	6.141E-03	6.141E-03
1900 - 2000	4.85			4.336E-04	4.336E-04	4.336E-04			2.102E-03	2.102E-03	2.102E-03	2.15			6.820E-04	6.820E-04	6.820E-04			3.307E-03	3.307E-03	3.307E-03
2000 - 2100	2.08			4.336E-04	4.336E-04	4.336E-04			9.010E-04	9.010E-04	9.010E-04	0.92			6.820E-04	6.820E-04	6.820E-04			1.417E-03	1.417E-03	1.417E-03
2100 - 2200	3.46			4.336E-04	4.336E-04	4.336E-04			1.502E-03	1.502E-03	1.502E-03	1.54			6.820E-04	6.820E-04	6.820E-04			2.362E-03	2.362E-03	2.362E-03
2200 - 2300	2.77			4.336E-04	4.336E-04	4.336E-04			1.201E-03	1.201E-03	1.201E-03	1.23			6.820E-04	6.820E-04	6.820E-04			1.890E-03	1.890E-03	1.890E-03
2300 - 2400	0.00			4.336E-04	4.336E-04	4.336E-04			0.000E+00	0.000E+00	0.000E+00	0.00			6.820E-04	6.820E-04	6.820E-04			0.000E+00	0.000E+00	0.000E+00

Remark:

[1] Population ratio of PLB (Diesel) to PLB (LPG) was extracted from Year 2026 data of EMFAC-HK.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Station Terminus (PLB)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			1.014E-02	9.392E-03	1.014E-02			2.816E-06	2.609E-06	2.816E-06
0100 - 0200			1.038E-02	9.640E-03	1.038E-02			2.884E-06	2.678E-06	2.884E-06
0200 - 0300			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			3.115E-02	2.892E-02	3.115E-02			8.653E-06	8.033E-06	8.653E-06
0500 - 0600			1.753E-01	1.626E-01	1.753E-01			4.869E-05	4.518E-05	4.869E-05
0600 - 0700			4.220E-01	3.915E-01	4.220E-01			1.172E-04	1.088E-04	1.172E-04
0700 - 0800			4.319E-01	4.007E-01	4.319E-01			1.200E-04	1.113E-04	1.200E-04
0800 - 0900			5.053E-01	4.689E-01	5.053E-01			1.404E-04	1.302E-04	1.404E-04
0900 - 1000			5.053E-01	4.689E-01	5.053E-01			1.404E-04	1.302E-04	1.404E-04
1000 - 1100			4.752E-01	4.409E-01	4.752E-01			1.320E-04	1.225E-04	1.320E-04
1100 - 1200			3.305E-01	3.067E-01	3.305E-01			9.182E-05	8.520E-05	9.182E-05
1200 - 1300			3.827E-01	3.552E-01	3.827E-01			1.063E-04	9.866E-05	1.063E-04
1300 - 1400			7.750E-01	7.193E-01	7.750E-01			2.153E-04	1.998E-04	2.153E-04
1400 - 1500			3.511E-01	3.258E-01	3.511E-01			9.751E-05	9.049E-05	9.751E-05
1500 - 1600			3.199E-01	2.969E-01	3.199E-01			8.886E-05	8.246E-05	8.886E-05
1600 - 1700			3.617E-01	3.357E-01	3.617E-01			1.005E-04	9.324E-05	1.005E-04
1700 - 1800			4.947E-01	4.590E-01	4.947E-01			1.374E-04	1.275E-04	1.374E-04
1800 - 1900			3.394E-01	3.149E-01	3.394E-01			9.429E-05	8.747E-05	9.429E-05
1900 - 2000			3.513E-01	3.260E-01	3.513E-01			9.758E-05	9.056E-05	9.758E-05
2000 - 2100			1.654E-01	1.535E-01	1.654E-01			4.594E-05	4.264E-05	4.594E-05
2100 - 2200			1.649E-01	1.530E-01	1.649E-01			4.580E-05	4.250E-05	4.580E-05
2200 - 2300			1.963E-01	1.822E-01	1.963E-01			5.453E-05	5.060E-05	5.453E-05
2300 - 2400			2.077E-02	1.928E-02	2.077E-02			5.768E-06	5.355E-06	5.768E-06

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Central Bus Terminus (Franchised Bus DD)

Starting Emission

Starting Emission Factor (g/trip)																		
NO																		
NO ₂																		
RSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TSP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Hour Sitting Time (min)	No. of Cold Starts of Double-Deck Franchised Bus																	
	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0000 - 0100	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1
0500 - 0600	0	4	2	3	3	1	0	0	0	0	3	2	0	0	0	0	0	2
0600 - 0700	0	1	6	6	2	0	1	1	0	0	2	1	3	0	0	1	0	1
0700 - 0800	0	8	16	7	3	3	3	1	4	1	1	0	1	3	0	0	0	3
0800 - 0900	0	5	11	3	0	0	0	4	4	1	0	0	0	0	0	0	0	2
0900 - 1000	0	1	5	4	4	1	0	4	5	2	0	0	0	0	0	1	0	1
1000 - 1100	0	2	6	2	2	0	1	5	3	2	1	0	0	0	0	1	2	1
1100 - 1200	0	1	2	2	6	1	2	6	1	2	0	0	0	0	0	0	0	6
1200 - 1300	0	1	3	4	2	1	5	12	1	3	1	0	1	0	0	0	0	4
1300 - 1400	0	0	1	3	3	1	1	8	4	3	4	1	0	0	0	0	2	2
1400 - 1500	0	3	9	2	4	3	1	7	2	2	1	1	1	0	0	1	0	2
1500 - 1600	0	3	1	6	3	2	2	5	4	1	2	1	0	1	3	0	0	0
1600 - 1700	0	1	6	7	4	1	4	5	2	4	0	0	1	2	0	0	0	2
1700 - 1800	0	3	11	3	1	0	2	7	3	4	1	0	3	1	0	0	0	2
1800 - 1900	0	5	10	3	1	0	1	4	5	6	0	1	0	0	0	0	0	4
1900 - 2000	0	4	6	7	3	1	7	3	3	5	3	2	1	0	1	0	0	3
2000 - 2100	0	2	6	1	1	0	3	11	5	6	1	2	0	0	0	0	0	1
2100 - 2200	0	0	4	4	1	2	3	15	3	4	2	1	0	0	0	0	0	2
2200 - 2300	0	4	3	1	1	1	4	17	5	1	0	1	0	0	0	0	0	1
2300 - 2400	0	4	5	3	2	2	2	8	8	1	0	0	0	0	0	0	0	2

Total Starting Emission (g)				
NO	NO ₂	RSP	FSP	TSP
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0

Remark:
[1] Number of cold starts were derived based on on-site observations at the PTIs and operators' published schedules, while sitting time were obtained based on on-site observations at PTIs.

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Central Bus Terminus (Franchised Bus DD)

Cold Idling Emission

Idling Time for Terminating Buses =	2	min
Max. Idling Time for Adjusting Starting Emission =	1	min

Hour	Frequency	Double-Deck Franchised Bus										Double-Deck Franchised Bus													
		Cold Idling Emission Factor (g/min)					Cold Idling Emission (g)					Frequency	Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)							
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP			
0000 - 0100	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	3			2.013E-03	2.013E-03	2.013E-03						1.208E-02	1.208E-02	1.208E-02
0100 - 0200	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03	2			2.013E-03	2.013E-03	2.013E-03						8.050E-03	8.050E-03	8.050E-03
0200 - 0300	0			2.013E-03	2.013E-03	2.013E-03			0.000E+00	0.000E+00	0.000E+00	3			2.013E-03	2.013E-03	2.013E-03						1.208E-02	1.208E-02	1.208E-02
0300 - 0400	2			2.013E-03	2.013E-03	2.013E-03			8.050E-03	8.050E-03	8.050E-03	0			2.013E-03	2.013E-03	2.013E-03						0.000E+00	0.000E+00	0.000E+00
0400 - 0500	3			2.013E-03	2.013E-03	2.013E-03			1.208E-02	1.208E-02	1.208E-02	0			2.013E-03	2.013E-03	2.013E-03						0.000E+00	0.000E+00	0.000E+00
0500 - 0600	7			2.013E-03	2.013E-03	2.013E-03			2.818E-02	2.818E-02	2.818E-02	13			2.013E-03	2.013E-03	2.013E-03						5.233E-02	5.233E-02	5.233E-02
0600 - 0700	10			2.013E-03	2.013E-03	2.013E-03			4.025E-02	4.025E-02	4.025E-02	15			2.013E-03	2.013E-03	2.013E-03						6.038E-02	6.038E-02	6.038E-02
0700 - 0800	17			2.013E-03	2.013E-03	2.013E-03			6.843E-02	6.843E-02	6.843E-02	37			2.013E-03	2.013E-03	2.013E-03						1.489E-01	1.489E-01	1.489E-01
0800 - 0900	11			2.013E-03	2.013E-03	2.013E-03			4.428E-02	4.428E-02	4.428E-02	19			2.013E-03	2.013E-03	2.013E-03						7.648E-02	7.648E-02	7.648E-02
0900 - 1000	13			2.013E-03	2.013E-03	2.013E-03			5.233E-02	5.233E-02	5.233E-02	15			2.013E-03	2.013E-03	2.013E-03						6.038E-02	6.038E-02	6.038E-02
1000 - 1100	16			2.013E-03	2.013E-03	2.013E-03			6.440E-02	6.440E-02	6.440E-02	12			2.013E-03	2.013E-03	2.013E-03						4.830E-02	4.830E-02	4.830E-02
1100 - 1200	17			2.013E-03	2.013E-03	2.013E-03			6.843E-02	6.843E-02	6.843E-02	12			2.013E-03	2.013E-03	2.013E-03						4.830E-02	4.830E-02	4.830E-02
1200 - 1300	27			2.013E-03	2.013E-03	2.013E-03			1.087E-01	1.087E-01	1.087E-01	11			2.013E-03	2.013E-03	2.013E-03						4.428E-02	4.428E-02	4.428E-02
1300 - 1400	25			2.013E-03	2.013E-03	2.013E-03			1.006E-01	1.006E-01	1.006E-01	8			2.013E-03	2.013E-03	2.013E-03						3.220E-02	3.220E-02	3.220E-02
1400 - 1500	18			2.013E-03	2.013E-03	2.013E-03			7.245E-02	7.245E-02	7.245E-02	21			2.013E-03	2.013E-03	2.013E-03						8.453E-02	8.453E-02	8.453E-02
1500 - 1600	19			2.013E-03	2.013E-03	2.013E-03			7.648E-02	7.648E-02	7.648E-02	15			2.013E-03	2.013E-03	2.013E-03						6.038E-02	6.038E-02	6.038E-02
1600 - 1700	20			2.013E-03	2.013E-03	2.013E-03			8.050E-02	8.050E-02	8.050E-02	19			2.013E-03	2.013E-03	2.013E-03						7.648E-02	7.648E-02	7.648E-02
1700 - 1800	23			2.013E-03	2.013E-03	2.013E-03			9.258E-02	9.258E-02	9.258E-02	18			2.013E-03	2.013E-03	2.013E-03						7.245E-02	7.245E-02	7.245E-02
1800 - 1900	21			2.013E-03	2.013E-03	2.013E-03			8.453E-02	8.453E-02	8.453E-02	19			2.013E-03	2.013E-03	2.013E-03						7.648E-02	7.648E-02	7.648E-02
1900 - 2000	28			2.013E-03	2.013E-03	2.013E-03			1.127E-01	1.127E-01	1.127E-01	21			2.013E-03	2.013E-03	2.013E-03						8.453E-02	8.453E-02	8.453E-02
2000 - 2100	29			2.013E-03	2.013E-03	2.013E-03			1.167E-01	1.167E-01	1.167E-01	10			2.013E-03	2.013E-03	2.013E-03						4.025E-02	4.025E-02	4.025E-02
2100 - 2200	30			2.013E-03	2.013E-03	2.013E-03			1.208E-01	1.208E-01	1.208E-01	11			2.013E-03	2.013E-03	2.013E-03						4.428E-02	4.428E-02	4.428E-02
2200 - 2300	29			2.013E-03	2.013E-03	2.013E-03			1.167E-01	1.167E-01	1.167E-01	10			2.013E-03	2.013E-03	2.013E-03						4.025E-02	4.025E-02	4.025E-02
2300 - 2400	21			2.013E-03	2.013E-03	2.013E-03			8.453E-02	8.453E-02	8.453E-02	16			2.013E-03	2.013E-03	2.013E-03						6.440E-02	6.440E-02	6.440E-02

Average Distance from Starting Place to PTI Egress =	104	m
Average Spread Distance outside PTI =	596	m

Hour	Idling Emission (g)					Emission for Adjusting Starting Emission (g)					Adjusted Starting Emission Within PTI (g)					Adjusted Starting Emission Outside PTI (g)					Starting Emission Rate Outside PTI (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0100 - 0200			1.610E-02	1.610E-02	1.610E-02			8.050E-03	8.050E-03	8.050E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0200 - 0300			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0300 - 0400			8.050E-03	8.050E-03	8.050E-03			4.025E-03	4.025E-03	4.025E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0400 - 0500			1.208E-02	1.208E-02	1.208E-02			6.038E-03	6.038E-03	6.038E-03			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0500 - 0600			8.050E-02	8.050E-02	8.050E-02			4.025E-02	4.025E-02	4.025E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0600 - 0700			1.006E-01	1.006E-01	1.006E-01			5.031E-02	5.031E-02	5.031E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0700 - 0800			2.174E-01	2.174E-01	2.174E-01			1.087E-01	1.087E-01	1.087E-01			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0800 - 0900			1.208E-01	1.208E-01	1.208E-01			6.038E-02	6.038E-02	6.038E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
0900 - 1000			1.127E-01	1.127E-01	1.127E-01			5.635E-02	5.635E-02	5.635E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1000 - 1100			1.127E-01	1.127E-01	1.127E-01			5.635E-02	5.635E-02	5.635E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1100 - 1200			1.167E-01	1.167E-01	1.167E-01			5.836E-02	5.836E-02	5.836E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1200 - 1300			1.530E-01	1.530E-01	1.530E-01			7.648E-02	7.648E-02	7.648E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1300 - 1400			1.328E-01	1.328E-01	1.328E-01			6.641E-02	6.641E-02	6.641E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1400 - 1500			1.570E-01	1.570E-01	1.570E-01			7.849E-02	7.849E-02	7.849E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1500 - 1600			1.369E-01	1.369E-01	1.369E-01			6.843E-02	6.843E-02	6.843E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1600 - 1700			1.570E-01	1.570E-01	1.570E-01			7.849E-02	7.849E-02	7.849E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1700 - 1800			1.650E-01	1.650E-01	1.650E-01			8.251E-02	8.251E-02	8.251E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1800 - 1900			1.610E-01	1.610E-01	1.610E-01			8.050E-02	8.050E-02	8.050E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00
1900 - 2000			1.972E-01	1.972E-01	1.972E-01			9.861E-02	9.861E-02	9.861E-02			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.000E+00	0.000E+00			0.000E+00	0.	

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Central Bus Terminus (Franchised Bus DD)

Running Emission

Average Travelling Distance within PTI =	208	m
Average Travelling Speed =	15	km/h

Hour	Frequency	Double-Deck Franchised Bus									
		Running Emission Factor (g/km-vehicle)					Running Emission Within PTI (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	24			3.256E-01	2.995E-01	3.256E-01			1.625E+00	1.495E+00	1.625E+00
0100 - 0200	11			3.256E-01	2.995E-01	3.256E-01			7.450E-01	6.853E-01	7.450E-01
0200 - 0300	4			3.256E-01	2.995E-01	3.256E-01			2.709E-01	2.492E-01	2.709E-01
0300 - 0400	4			3.256E-01	2.995E-01	3.256E-01			2.709E-01	2.492E-01	2.709E-01
0400 - 0500	12			3.256E-01	2.995E-01	3.256E-01			8.127E-01	7.476E-01	8.127E-01
0500 - 0600	31			3.256E-01	2.995E-01	3.256E-01			2.099E+00	1.931E+00	2.099E+00
0600 - 0700	51			3.256E-01	2.995E-01	3.256E-01			3.454E+00	3.177E+00	3.454E+00
0700 - 0800	112			3.256E-01	2.995E-01	3.256E-01			7.585E+00	6.977E+00	7.585E+00
0800 - 0900	67			3.256E-01	2.995E-01	3.256E-01			4.538E+00	4.174E+00	4.538E+00
0900 - 1000	66			3.256E-01	2.995E-01	3.256E-01			4.470E+00	4.112E+00	4.470E+00
1000 - 1100	59			3.256E-01	2.995E-01	3.256E-01			3.996E+00	3.675E+00	3.996E+00
1100 - 1200	61			3.256E-01	2.995E-01	3.256E-01			4.131E+00	3.800E+00	4.131E+00
1200 - 1300	69			3.256E-01	2.995E-01	3.256E-01			4.673E+00	4.298E+00	4.673E+00
1300 - 1400	65			3.256E-01	2.995E-01	3.256E-01			4.402E+00	4.049E+00	4.402E+00
1400 - 1500	74			3.256E-01	2.995E-01	3.256E-01			5.012E+00	4.610E+00	5.012E+00
1500 - 1600	67			3.256E-01	2.995E-01	3.256E-01			4.538E+00	4.174E+00	4.538E+00
1600 - 1700	77			3.256E-01	2.995E-01	3.256E-01			5.215E+00	4.797E+00	5.215E+00
1700 - 1800	72			3.256E-01	2.995E-01	3.256E-01			4.876E+00	4.485E+00	4.876E+00
1800 - 1900	65			3.256E-01	2.995E-01	3.256E-01			4.402E+00	4.049E+00	4.402E+00
1900 - 2000	71			3.256E-01	2.995E-01	3.256E-01			4.808E+00	4.423E+00	4.808E+00
2000 - 2100	65			3.256E-01	2.995E-01	3.256E-01			4.402E+00	4.049E+00	4.402E+00
2100 - 2200	59			3.256E-01	2.995E-01	3.256E-01			3.996E+00	3.675E+00	3.996E+00
2200 - 2300	63			3.256E-01	2.995E-01	3.256E-01			4.267E+00	3.925E+00	4.267E+00
2300 - 2400	51			3.256E-01	2.995E-01	3.256E-01			3.454E+00	3.177E+00	3.454E+00

Idling Emission

Idling Time for Non-terminating Buses =	1	min
---	---	-----

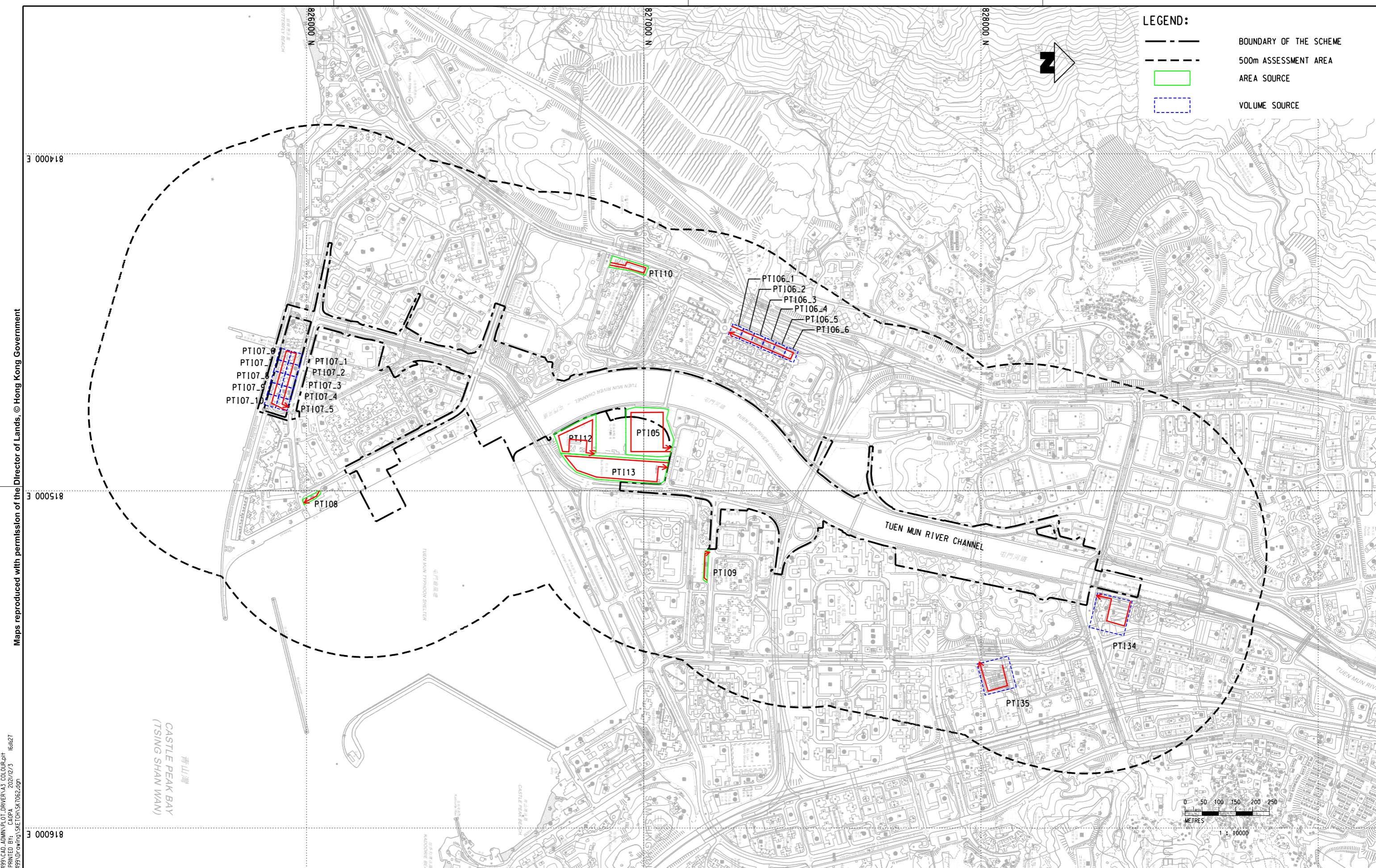
Hour	Frequency	Double-Deck Franchised Bus									
		Hot Idling Emission Factor (g/min)					Hot Idling Emission (g)				
		NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100	21			2.013E-03	2.013E-03	2.013E-03			4.226E-02	4.226E-02	4.226E-02
0100 - 0200	7			2.013E-03	2.013E-03	2.013E-03			1.409E-02	1.409E-02	1.409E-02
0200 - 0300	1			2.013E-03	2.013E-03	2.013E-03			2.013E-03	2.013E-03	2.013E-03
0300 - 0400	2			2.013E-03	2.013E-03	2.013E-03			4.025E-03	4.025E-03	4.025E-03
0400 - 0500	9			2.013E-03	2.013E-03	2.013E-03			1.811E-02	1.811E-02	1.811E-02
0500 - 0600	11			2.013E-03	2.013E-03	2.013E-03			2.214E-02	2.214E-02	2.214E-02
0600 - 0700	26			2.013E-03	2.013E-03	2.013E-03			5.233E-02	5.233E-02	5.233E-02
0700 - 0800	58			2.013E-03	2.013E-03	2.013E-03			1.167E-01	1.167E-01	1.167E-01
0800 - 0900	37			2.013E-03	2.013E-03	2.013E-03			7.446E-02	7.446E-02	7.446E-02
0900 - 1000	38			2.013E-03	2.013E-03	2.013E-03			7.648E-02	7.648E-02	7.648E-02
1000 - 1100	31			2.013E-03	2.013E-03	2.013E-03			6.239E-02	6.239E-02	6.239E-02
1100 - 1200	32			2.013E-03	2.013E-03	2.013E-03			6.440E-02	6.440E-02	6.440E-02
1200 - 1300	31			2.013E-03	2.013E-03	2.013E-03			6.239E-02	6.239E-02	6.239E-02
1300 - 1400	32			2.013E-03	2.013E-03	2.013E-03			6.440E-02	6.440E-02	6.440E-02
1400 - 1500	35			2.013E-03	2.013E-03	2.013E-03			7.044E-02	7.044E-02	7.044E-02
1500 - 1600	33			2.013E-03	2.013E-03	2.013E-03			6.641E-02	6.641E-02	6.641E-02
1600 - 1700	38			2.013E-03	2.013E-03	2.013E-03			7.648E-02	7.648E-02	7.648E-02
1700 - 1800	31			2.013E-03	2.013E-03	2.013E-03			6.239E-02	6.239E-02	6.239E-02
1800 - 1900	25			2.013E-03	2.013E-03	2.013E-03			5.031E-02	5.031E-02	5.031E-02
1900 - 2000	22			2.013E-03	2.013E-03	2.013E-03			4.428E-02	4.428E-02	4.428E-02
2000 - 2100	26			2.013E-03	2.013E-03	2.013E-03			5.233E-02	5.233E-02	5.233E-02
2100 - 2200	18			2.013E-03	2.013E-03	2.013E-03			3.623E-02	3.623E-02	3.623E-02
2200 - 2300	24			2.013E-03	2.013E-03	2.013E-03			4.830E-02	4.830E-02	4.830E-02
2300 - 2400	14			2.013E-03	2.013E-03	2.013E-03			2.818E-02	2.818E-02	2.818E-02

Appendix 3.5 Calculation of Emissions Associated with Bus and Minibus Termini

Tuen Mun Central Bus Terminus (Franchised Bus DD)

Total Hourly Emission

Hour	Emission Within PTI									
	Total Emission (g) (Running + Idling + Starting)					Total Emission Rate (g/s)				
	NO	NO ₂	RSP	FSP	TSP	NO	NO ₂	RSP	FSP	TSP
0000 - 0100			1.680E+00	1.549E+00	1.680E+00			4.666E-04	4.304E-04	4.666E-04
0100 - 0200			7.752E-01	7.154E-01	7.752E-01			2.153E-04	1.987E-04	2.153E-04
0200 - 0300			2.850E-01	2.633E-01	2.850E-01			7.916E-05	7.313E-05	7.916E-05
0300 - 0400			2.830E-01	2.613E-01	2.830E-01			7.860E-05	7.257E-05	7.860E-05
0400 - 0500			8.429E-01	7.777E-01	8.429E-01			2.341E-04	2.160E-04	2.341E-04
0500 - 0600			2.202E+00	2.034E+00	2.202E+00			6.117E-04	5.649E-04	6.117E-04
0600 - 0700			3.607E+00	3.330E+00	3.607E+00			1.002E-03	9.250E-04	1.002E-03
0700 - 0800			7.919E+00	7.311E+00	7.919E+00			2.200E-03	2.031E-03	2.200E-03
0800 - 0900			4.733E+00	4.369E+00	4.733E+00			1.315E-03	1.214E-03	1.315E-03
0900 - 1000			4.659E+00	4.301E+00	4.659E+00			1.294E-03	1.195E-03	1.294E-03
1000 - 1100			4.171E+00	3.851E+00	4.171E+00			1.159E-03	1.070E-03	1.159E-03
1100 - 1200			4.312E+00	3.981E+00	4.312E+00			1.198E-03	1.106E-03	1.198E-03
1200 - 1300			4.888E+00	4.514E+00	4.888E+00			1.358E-03	1.254E-03	1.358E-03
1300 - 1400			4.599E+00	4.246E+00	4.599E+00			1.278E-03	1.180E-03	1.278E-03
1400 - 1500			5.239E+00	4.837E+00	5.239E+00			1.455E-03	1.344E-03	1.455E-03
1500 - 1600			4.741E+00	4.377E+00	4.741E+00			1.317E-03	1.216E-03	1.317E-03
1600 - 1700			5.448E+00	5.030E+00	5.448E+00			1.513E-03	1.397E-03	1.513E-03
1700 - 1800			5.104E+00	4.713E+00	5.104E+00			1.418E-03	1.309E-03	1.418E-03
1800 - 1900			4.613E+00	4.261E+00	4.613E+00			1.282E-03	1.183E-03	1.282E-03
1900 - 2000			5.050E+00	4.665E+00	5.050E+00			1.403E-03	1.296E-03	1.403E-03
2000 - 2100			4.611E+00	4.259E+00	4.611E+00			1.281E-03	1.183E-03	1.281E-03
2100 - 2200			4.197E+00	3.877E+00	4.197E+00			1.166E-03	1.077E-03	1.166E-03
2200 - 2300			4.472E+00	4.130E+00	4.472E+00			1.242E-03	1.147E-03	1.242E-03
2300 - 2400			3.631E+00	3.354E+00	3.631E+00			1.009E-03	9.317E-04	1.009E-03



LEGEND:

- BOUNDARY OF THE SCHEME
- - - 500m ASSESSMENT AREA
- AREA SOURCE
- VOLUME SOURCE

Maps reproduced with permission of the Director of Lands, © Hong Kong Government

P:\PROJECTS\6064699\CAD_ADMIN\PLOT_DRIVER\A3_COLOUR.dwg
 DRAWN BY: CADPA 2021/7/23 16:27
 MODEL NAME: P:\PROJECTS\6064699\drawing_SHEETS\SK7062.dgn

DRAWN DESIGNED CHECKED APPROVED DATE								TUEN MUN SOUTH EXTENSION				C1502 TUEN MUN SOUTH EXTENSION LOCATION OF BUS AND MINIBUS TERMINI			
DO NOT SCALE DRAWINGS. ALL DIMENSIONS SHALL BE VERIFIED ON SITE. © MTR CORPORATION LIMITED 2008 COPYRIGHT IN RESPECT OF THIS DRAWING / DOCUMENT IS OWNED BY THE MTR CORPORATION LIMITED OF HONG KONG. NO REPRODUCTION OF THE DRAWING / DOCUMENT OR ANY PART BY WHATEVER MEANS IS PERMITTED WITHOUT THE PRIOR WRITTEN CONSENT OF THE MTR CORPORATION LIMITED.				ORIGINATOR AECOM				SCALE 1 : 10000 (A3)				FIGURE NO. SK7062			
CADD REF. SK7062.dgn								REV.							
REV	DESCRIPTION	BY	DATE	APPROVED	REV	DESCRIPTION	BY	DATE	APPROVED	REV	DESCRIPTION	BY	DATE	APPROVED	REV