

**Annex - 1**

Idling Emission Factors for Year 2033  
and Year 2048

**Population of diesel vehicle (Based on Emfac 4.3)**

Assessment Year : 2033

FirstRegYear	Age	Population of Diesel Vehicle																	
		01 - Private Cars (PC)	02 - Taxi	03 - Light Goods Vehicles<=2.5t	04 - Lt Goods Vehicles 2.5-3.5t	05 - Light Goods Vehicles>3.5t	06 - Medium & Heavy Goods Vehicles	07 - Medium & Heavy Goods Vehicles	08 - Public Light Buses	09 - Private Light Bus <=3.5t	10 - Private Light Bus >3.5t	11 - Non-franchised Bus<=6.4t	12 - Non-franchised Bus 6.4-15t	13 - Non-franchised Bus 15-24t	14 - Franchised Bus (SD)	15 - Franchised Bus (DD)	16 - Motorcycles (MC)	17 - Medium & Heavy Goods Vehicles	18 - Non-franchised Bus >24t
2033	1	929.93	0.00	41.07	4,883.17	1,906.08	1,191.24	2,065.35	364.79	40.03	334.46	174.45	129.60	278.91	28.00	822.96	0.00	561.74	0.14
2032	2	995.04	0.00	47.07	4,843.15	2,050.61	1,295.59	2,225.29	303.11	39.74	318.41	160.13	128.30	283.03	0.00	442.00	0.00	664.22	0.10
2031	3	1,044.77	0.00	42.94	5,016.28	2,049.50	1,232.00	2,318.93	306.82	40.89	310.96	170.92	127.02	318.31	25.00	439.98	0.00	753.73	0.06
2030	4	1,055.56	0.00	73.33	5,904.72	2,364.48	1,680.69	2,893.30	269.35	41.59	371.94	186.87	132.63	354.26	54.00	221.01	0.00	917.19	0.04
2029	5	1,018.37	0.00	83.75	6,159.89	1,997.42	1,477.62	2,867.30	238.14	40.28	366.70	201.36	145.44	387.41	49.00	280.99	0.00	764.06	0.02
2028	6	934.87	0.00	36.63	3,029.57	820.69	499.57	1,210.80	209.94	32.41	278.27	200.85	126.06	337.54	36.00	176.99	0.00	371.09	0.02
2027	7	817.81	0.00	40.91	3,130.72	784.15	502.94	1,202.67	210.95	30.23	287.41	219.10	136.10	345.97	46.00	47.00	0.00	381.96	0.18
2026	8	685.35	0.00	41.95	3,213.48	817.84	555.76	1,303.91	231.71	33.21	277.24	229.22	149.10	348.84	10.00	45.00	0.00	402.99	0.32
2025	9	554.94	0.00	40.63	3,242.98	848.37	596.15	1,351.74	271.25	30.19	251.80	224.87	147.84	327.86	8.00	64.01	0.00	399.35	0.31
2024	10	440.82	0.00	38.56	3,527.55	988.72	685.29	1,498.95	331.56	29.26	236.05	225.73	154.29	299.75	9.00	109.99	0.00	382.10	0.28
2023	11	265.11	0.00	30.98	3,819.15	1,304.13	868.42	1,869.76	299.75	31.52	228.55	217.89	160.79	260.85	5.00	49.01	0.00	370.60	0.25
2022	12	223.36	0.00	28.30	3,974.95	1,524.39	965.29	2,088.61	312.70	27.23	195.26	194.71	141.18	208.89	0.00	176.00	0.00	349.34	0.21
2021	13	199.24	0.00	17.17	2,398.17	1,107.34	649.02	1,341.56	246.45	20.16	117.37	80.18	59.16	86.35	0.00	190.01	0.00	211.56	0.08
2020	14	187.79	0.00	7.85	1,797.58	1,231.58	573.73	1,062.65	81.71	16.23	49.44	32.99	12.91	15.48	0.00	322.00	0.00	126.88	0.00
2019	15	184.56	0.00	7.21	1,277.04	952.49	442.89	818.75	70.20	11.97	41.97	25.59	8.62	11.60	0.00	294.97	0.00	107.25	0.00
2018	16	86.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	648.00	0.00	0.00	0.00
2017	17	1,066.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	678.00	0.00	0.00	0.00
2016	18	348.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	835.00	0.00	0.00	0.00
2015	19	215.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00
2014	20	151.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	21	24.19	0.00	13.14	953.20	209.32	226.36	386.85	0.99	0.15	56.00	1.45	4.82	9.53	0.00	0.00	0.00	130.07	0.00
2012	22	2.92	0.00	0.17	2.07	87.86	98.52	113.38	0.30	0.00	16.13	0.69	3.14	4.37	0.00	0.00	0.00	60.15	0.00
2011	23	3.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	24	4.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	25	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2006	28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2005	29	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	30	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	31	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	32	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	33	0.00	0.00	0.00	0.00	0.00	0.00	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	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1998	36	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	37	0.78	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
1996	38	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1995	39	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1994	40	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1993	41	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1992	42	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1991	43	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1990	44	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1989	45	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note

1. Only diesel vehicles are presented.
2. Population, Age and Technology Group Fraction are default figures from Emfac 4.3.

Age Population Profile

FirstReg Year	Age	% by Age																
		14 - FBSD	15 - FBDD	11 - NFB6	12 - NFB7	13 - NFB8	18 - NFB9	06 - HGV7	07 - HGV8	17 - HGV9	18 - NFB9	01 - PC	03 - LGV3	04 - LGV4	05 - LGV6	08 - Public Light Buses	09 - Private Light Bus <=3.5t	10 - Private Light Bus >3.5t
2033	1	10.18%	14.08%	6.85%	7.33%	7.19%	6.96%	8.80%	7.76%	8.08%	6.96%	8.12%	6.94%	8.54%	9.06%	9.73%	8.61%	8.95%
2032	2	0.00%	7.56%	6.29%	7.26%	7.30%	4.76%	9.57%	8.36%	9.55%	4.76%	8.69%	7.95%	8.47%	9.74%	8.08%	8.54%	8.52%
2031	3	9.09%	7.53%	6.71%	7.19%	8.21%	3.00%	9.10%	8.71%	10.84%	3.00%	9.13%	7.26%	8.77%	9.74%	8.18%	8.79%	8.32%
2030	4	19.64%	3.78%	7.34%	7.51%	9.13%	1.77%	12.41%	10.87%	13.19%	1.77%	9.22%	12.39%	10.33%	11.24%	7.18%	8.94%	9.95%
2029	5	17.82%	4.81%	7.91%	8.23%	9.99%	1.00%	10.91%	10.77%	10.99%	1.00%	8.90%	14.15%	10.77%	9.49%	6.35%	8.66%	9.81%
2028	6	13.09%	3.03%	7.89%	7.13%	8.70%	1.05%	3.69%	4.55%	5.34%	1.05%	8.17%	6.19%	5.30%	3.90%	5.60%	6.97%	7.44%
2027	7	16.73%	0.80%	8.60%	7.70%	8.92%	8.84%	3.71%	4.52%	5.49%	8.84%	7.14%	6.91%	5.48%	3.73%	5.63%	6.50%	7.69%
2026	8	3.64%	0.77%	9.00%	8.44%	8.99%	15.92%	4.10%	4.90%	5.79%	15.92%	5.99%	7.09%	5.62%	3.89%	6.18%	7.14%	7.42%
2025	9	2.91%	1.10%	8.83%	8.37%	8.45%	15.26%	4.40%	5.08%	5.74%	15.26%	4.85%	6.87%	5.67%	4.03%	7.23%	6.49%	6.74%
2024	10	3.27%	1.88%	8.86%	8.73%	7.73%	14.23%	5.06%	5.63%	5.49%	14.23%	3.85%	6.52%	6.17%	4.70%	8.84%	6.29%	6.31%
2023	11	1.82%	0.84%	8.55%	9.10%	6.72%	12.67%	6.41%	7.02%	5.33%	12.67%	2.32%	5.24%	6.68%	6.20%	7.99%	6.78%	6.11%
2022	12	0.00%	3.01%	7.64%	7.99%	5.39%	10.54%	7.13%	7.85%	5.02%	10.54%	1.95%	4.78%	6.95%	7.24%	8.34%	5.86%	5.22%
2021	13	0.00%	3.25%	3.15%	3.35%	2.23%	4.01%	4.79%	5.04%	3.04%	4.01%	1.74%	2.90%	4.19%	5.26%	6.57%	4.33%	3.14%
2020	14	0.00%	5.51%	1.30%	0.73%	0.40%	0.00%	4.24%	3.99%	1.82%	0.00%	1.64%	1.33%	3.14%	5.85%	2.18%	3.49%	1.32%
2019	15	0.00%	5.05%	1.00%	0.49%	0.30%	0.00%	3.27%	3.08%	1.54%	0.00%	1.61%	1.22%	2.23%	4.53%	1.87%	2.57%	1.12%
2018	16	0.00%	11.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2017	17	1.82%	11.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	18	0.00%	14.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	19	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.88%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	20	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.32%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	21	0.00%	0.00%	0.06%	0.27%	0.25%	0.00%	1.67%	1.45%	1.87%	0.00%	0.21%	2.22%	1.67%	0.99%	0.03%	0.03%	1.50%
2012	22	0.00%	0.00%	0.03%	0.18%	0.11%	0.00%	0.73%	0.43%	0.86%	0.00%	0.03%	0.03%	0.00%	0.42%	0.01%	0.00%	0.43%
2011	23	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	24	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2009	25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2008	26	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2007	27	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2006	28	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2005	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%	0.00%	0.00%	0.00%	0.00%	0.00%
2004	30	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2003	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%	0.00%
2002	32	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2001	33	0.00%	0.00%	0.00%	0.00%	0.00%	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	34	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1999	35	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1998	36	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1997	37	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1996	38	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1995	39	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1994	40	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1993	41	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1992	42	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1991	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%	0.00%
1990	44	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1989	45	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Note

1. Only diesel vehicles are presented.
2. Population, Age and Technology Group Fraction are default figures from Emfac 4.3.













Calculations of Composite Idling Emission Factors - Diesel Vehicles

Estimated Engine Type Distribution

Assessment Year : 2033

FirstRegYear	Age	Estimated engine type distribution								Estimated engine type distribution								Estimated engine type distribution								Estimated engine type distribution															
		FBSD								FBDD								NFB6								NFB7								NFB8							
		Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI
2033	1	10.18%	-	-	-	-	-	10.18%	14.08%	-	-	-	-	-	-	14.08%	6.85%	-	-	-	-	-	-	6.85%	7.33%	-	-	-	-	-	-	7.33%	7.19%	-	-	-	-	-	-	7.19%	
2032	2	0.00%	-	-	-	-	-	0.00%	7.56%	-	-	-	-	-	-	7.56%	6.29%	-	-	-	-	-	-	6.29%	7.26%	-	-	-	-	-	-	7.26%	7.30%	-	-	-	-	-	-	7.30%	
2031	3	9.09%	-	-	-	-	-	9.09%	7.53%	-	-	-	-	-	-	7.53%	6.71%	-	-	-	-	-	-	6.71%	7.19%	-	-	-	-	-	-	7.19%	8.21%	-	-	-	-	-	-	8.21%	
2030	4	19.64%	-	-	-	-	-	19.64%	3.78%	-	-	-	-	-	-	3.78%	7.34%	-	-	-	-	-	-	7.34%	7.51%	-	-	-	-	-	-	7.51%	9.13%	-	-	-	-	-	-	9.13%	
2029	5	17.82%	-	-	-	-	-	17.82%	4.81%	-	-	-	-	-	-	4.81%	7.91%	-	-	-	-	-	-	7.91%	8.23%	-	-	-	-	-	-	8.23%	9.99%	-	-	-	-	-	-	9.99%	
2028	6	13.09%	-	-	-	-	-	13.09%	3.03%	-	-	-	-	-	-	3.03%	7.89%	-	-	-	-	-	-	7.89%	7.13%	-	-	-	-	-	-	7.13%	8.70%	-	-	-	-	-	-	8.70%	
2027	7	16.73%	-	-	-	-	-	16.73%	0.80%	-	-	-	-	-	-	0.80%	8.60%	-	-	-	-	-	-	8.60%	7.70%	-	-	-	-	-	-	7.70%	8.92%	-	-	-	-	-	-	8.92%	
2026	8	3.64%	-	-	-	-	-	3.64%	0.77%	-	-	-	-	-	-	0.77%	9.00%	-	-	-	-	-	-	9.00%	8.44%	-	-	-	-	-	-	8.44%	8.99%	-	-	-	-	-	-	8.99%	
2025	9	2.91%	-	-	-	-	-	2.91%	1.10%	-	-	-	-	-	-	1.10%	8.83%	-	-	-	-	-	-	8.83%	8.37%	-	-	-	-	-	-	8.37%	8.45%	-	-	-	-	-	-	8.45%	
2024	10	3.27%	-	-	-	-	-	3.27%	1.88%	-	-	-	-	-	-	1.88%	8.86%	-	-	-	-	-	-	8.86%	8.73%	-	-	-	-	-	-	8.73%	7.73%	-	-	-	-	-	-	7.73%	
2023	11	1.82%	-	-	-	-	-	1.82%	0.84%	-	-	-	-	-	-	0.84%	8.55%	-	-	-	-	-	-	8.55%	9.10%	-	-	-	-	-	-	9.10%	6.72%	-	-	-	-	-	-	6.72%	
2022	12	0.00%	-	-	-	-	-	0.00%	3.01%	-	-	-	-	-	-	3.01%	7.64%	-	-	-	-	-	-	7.64%	7.99%	-	-	-	-	-	-	7.99%	5.39%	-	-	-	-	-	-	5.39%	
2021	13	0.00%	-	-	-	-	-	0.00%	3.25%	-	-	-	-	-	-	3.25%	3.15%	-	-	-	-	-	-	3.15%	2.62%	-	-	-	-	-	-	2.62%	3.35%	-	-	-	-	-	-	3.35%	
2020	14	0.00%	-	-	-	-	-	0.00%	5.51%	-	-	-	-	-	-	5.51%	1.30%	-	-	-	-	-	-	1.30%	0.22%	-	-	-	-	-	-	0.22%	3.12%	-	-	-	-	-	-	3.12%	
2019	15	0.00%	-	-	-	-	-	0.00%	5.05%	-	-	-	-	-	-	5.05%	1.00%	-	-	-	-	-	-	1.00%	0.49%	-	-	-	-	-	-	0.49%	0.29%	-	-	-	-	-	-	0.29%	
2018	16	0.00%	-	-	-	-	-	0.00%	11.09%	-	-	-	-	-	-	11.09%	1.68%	-	-	-	-	-	-	1.68%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2017	17	1.82%	-	-	-	-	-	1.82%	11.80%	-	-	-	-	-	-	11.80%	0.02%	-	-	-	-	-	-	0.02%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2016	18	0.00%	-	-	-	-	-	0.00%	14.29%	-	-	-	-	-	-	14.29%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2015	19	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2014	20	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2013	21	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.06%	-	-	-	-	-	-	0.06%	0.27%	-	-	-	-	-	-	0.27%	0.25%	-	-	-	-	-	-	0.25%	
2012	22	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.03%	-	-	-	-	-	-	0.03%	0.02%	-	-	-	-	-	-	0.02%	0.18%	-	-	-	-	-	-	0.18%	
2011	23	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2010	24	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2009	25	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2008	26	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2007	27	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2006	28	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2005	29	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2004	30	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2003	31	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2002	32	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2001	33	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
2000	34	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
1999	35	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
1998	36	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
1997	37	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
1996	38	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
1995	39	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
1994	40	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
1993	41	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
1992	42	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
1991	43	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
1990	44	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
1989	45	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	
<b>Total</b>		<b>100.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>																																			

Calculations of Composite Idling Emission Factors - Diesel Vehicles

Estimated Engine Type Distribution

Assessment Year : 2033

FirstRegYear	Age	Estimated engine type distribution NFB9								Estimated engine type distribution HGV7						Estimated engine type distribution HGV8						Estimated engine type distribution HGV9										
		Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V
2033	1	6.96%	-	-	-	-	-	6.96%	8.80%	-	-	-	-	-	-	8.80%	7.76%	-	-	-	-	-	-	7.76%	8.08%	-	-	-	-	-	8.08%	
2032	2	4.76%	-	-	-	-	-	4.76%	9.57%	-	-	-	-	-	-	9.57%	8.36%	-	-	-	-	-	-	8.36%	9.55%	-	-	-	-	-	9.55%	
2031	3	3.00%	-	-	-	-	-	3.00%	9.10%	-	-	-	-	-	-	9.10%	8.71%	-	-	-	-	-	-	8.71%	10.84%	-	-	-	-	-	10.84%	
2030	4	1.77%	-	-	-	-	-	1.77%	12.41%	-	-	-	-	-	-	12.41%	10.87%	-	-	-	-	-	-	10.87%	13.19%	-	-	-	-	-	13.19%	
2029	5	1.00%	-	-	-	-	-	1.00%	10.91%	-	-	-	-	-	-	10.91%	10.77%	-	-	-	-	-	-	10.77%	10.99%	-	-	-	-	-	10.99%	
2028	6	1.05%	-	-	-	-	-	1.05%	3.69%	-	-	-	-	-	-	3.69%	4.55%	-	-	-	-	-	-	4.55%	5.34%	-	-	-	-	-	5.34%	
2027	7	8.84%	-	-	-	-	-	8.84%	3.71%	-	-	-	-	-	-	3.71%	4.52%	-	-	-	-	-	-	4.52%	5.49%	-	-	-	-	-	5.49%	
2026	8	15.92%	-	-	-	-	-	15.92%	4.10%	-	-	-	-	-	-	4.10%	4.90%	-	-	-	-	-	-	4.90%	5.79%	-	-	-	-	-	5.79%	
2025	9	15.26%	-	-	-	-	-	15.26%	4.40%	-	-	-	-	-	-	4.40%	5.08%	-	-	-	-	-	-	5.08%	5.74%	-	-	-	-	-	5.74%	
2024	10	14.23%	-	-	-	-	-	14.23%	5.06%	-	-	-	-	-	-	5.06%	5.63%	-	-	-	-	-	-	5.63%	5.49%	-	-	-	-	-	5.49%	
2023	11	12.67%	-	-	-	-	-	12.67%	6.41%	-	-	-	-	-	-	6.41%	7.02%	-	-	-	-	-	-	7.02%	5.33%	-	-	-	-	-	5.33%	
2022	12	10.54%	-	-	-	-	-	10.54%	7.13%	-	-	-	-	-	-	7.13%	7.85%	-	-	-	-	-	-	7.85%	5.02%	-	-	-	-	-	5.02%	
2021	13	4.01%	-	-	-	-	-	4.01%	4.79%	-	-	-	-	-	-	4.79%	5.04%	-	-	-	-	-	-	5.04%	3.04%	-	-	-	-	-	3.04%	
2020	14	0.00%	-	-	-	-	-	0.00%	4.24%	-	-	-	-	-	-	4.24%	3.99%	-	-	-	-	-	-	3.99%	1.82%	-	-	-	-	-	1.82%	
2019	15	0.00%	-	-	-	-	-	0.00%	3.27%	-	-	-	-	-	-	3.27%	3.08%	-	-	-	-	-	-	3.08%	1.54%	-	-	-	-	-	1.54%	
2018	16	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	
2017	17	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	
2016	18	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	
2015	19	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	
2014	20	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	
2013	21	0.00%	-	-	-	-	-	0.00%	1.67%	-	-	-	-	-	1.67%	1.45%	0.18%	0.25%	-	-	-	-	0.00%	0.00%	0.00%	0.36%	0.50%	-	-	-	1.87%	
2012	22	0.00%	-	-	-	-	0.00%	0.00%	0.29%	0.44%	-	-	-	-	0.43%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
2011	23	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
2010	24	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
2009	25	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
2008	26	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
2007	27	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
2006	28	0.00%	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
2005	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%	0.00%	0.00%	0.00%	-	-	-	0.00%	
2004	30	0.00%	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
2003	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%	
2002	32	0.00%	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
2001	33	0.00%	-	-	-	0.00%	0.00%	0.00%	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	34	0.00%	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
1999	35	0.00%	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
1998	36	0.00%	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
1997	37	0.00%	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
1996	38	0.00%	-	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
1995	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%	0.00%	0.00%	-	-	-	0.00%	
1994	40	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
1993	41	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
1992	42	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
1991	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%	0.00%	0.00%	-	-	-	0.00%	
1990	44	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
1989	45	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	-	-	-	-	0.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	0.00%	
<b>Total</b>		<b>100.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.29%</b>	<b>2.11%</b>	<b>97.60%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.18%</b>	<b>1.70%</b>	<b>98.12%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.36%</b>	<b>2.37%</b>	<b>97.26%</b>

**Warm Idling**

**Summary of Engine Type Distribution (Year 2033)**

Euro Standard	Estimated engine type distribution								
	FBSD	FBDD	NFB6	NFB7	NFB8	NFB9	HGV7	HGV8	HGV9
pre-Euro	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro I	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro II	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro III	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro IV	0.00%	0.00%	0.01%	0.05%	0.04%	0.00%	0.29%	0.18%	0.36%
Euro V	0.00%	35.29%	2.90%	1.11%	0.31%	0.00%	2.11%	1.70%	2.37%
Euro VI	100.00%	64.71%	97.09%	98.84%	99.64%	100.00%	97.60%	98.12%	97.26%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Basic Idling Emission Factors**

Euro Standard	Truck/bus		Light Duty	
	NOx (g/h)	PM (g/h)	NOx (g/h)	PM (g/h)
pre-Euro	40.56	6.62	6.52	1.59
Euro I	32.6	5.53	5.88	0.63
Euro II	40.58	1.43	5.53	0.54
Euro III	42.08	1.29	4.12	0.1
Euro IV	7.51	0.2	3.62	0.16
Euro V	11.71	0.1	3.6	0.02
Euro VI	1.75	0.01	1.28	0.02

Source : Road tunnels: Vehicle emission and air demand for ventilation, PIARC, 2019

**Mass Factors**

Pollutant	Mass Factor		
	15t	23t	32t
NOx	0.9	1	1.2
PM	0.9	1	1.2

Source : Road tunnels: Vehicle emission and air demand for ventilation, PIARC, 2019

**Composite Idling Emission Factors**

Euro Standard	Composite Idling Emission Factors (g/h)																		
	FBSD		FBDD		NFB6		NFB7		NFB8		NFB9		HGV7		HGV8		HGV9		
	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	
pre-Euro	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Euro I	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Euro II	0.00E+00	0.00E+00	7.14E-09	2.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.43E-04	1.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-05	1.22E-06	0.00E+00	0.00E+00	0.00E+00
Euro III	2.60E-10	7.97E-12	6.82E-10	2.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Euro IV	1.88E-10	5.02E-12	1.81E-11	4.83E-13	7.43E-04	1.98E-05	3.76E-03	1.00E-04	3.32E-03	8.85E-05	0.00E+00	0.00E+00	2.19E-02	5.84E-04	1.35E-02	3.59E-04	2.74E-02	7.30E-04	2.78E-01
Euro V	1.19E-04	1.02E-06	4.13E+00	3.53E-02	3.39E-01	2.90E-03	1.30E-01	1.11E-03	3.68E-02	3.14E-04	0.00E+00	0.00E+00	2.47E-01	2.11E-03	1.99E-01	1.70E-03	2.78E-01	2.37E-03	2.78E-01
Euro VI	1.75E+00	1.00E-02	1.13E+00	6.47E-03	1.70E+00	9.71E-03	1.73E+00	9.88E-03	1.74E+00	9.96E-03	1.75E+00	1.00E-02	1.71E+00	9.76E-03	1.72E+00	9.81E-03	1.70E+00	9.73E-03	9.73E-03
<i>Composite Emission Factors(g/h)</i>	<i>1.75E+00</i>	<i>1.00E-02</i>	<i>6.32E+00</i>	<i>5.01E-02</i>	<i>1.84E+00</i>	<i>1.14E-02</i>	<i>1.68E+00</i>	<i>9.99E-03</i>	<i>1.78E+00</i>	<i>1.04E-02</i>	<i>2.10E+00</i>	<i>1.20E-02</i>	<i>1.78E+00</i>	<i>1.12E-02</i>	<i>1.93E+00</i>	<i>1.19E-02</i>	<i>2.41E+00</i>	<i>1.54E-02</i>	<i>1.54E-02</i>
<b>Composite Emission Factors (g/s)</b>	<b>4.86E-04</b>	<b>2.78E-06</b>	<b>1.76E-03</b>	<b>1.39E-05</b>	<b>5.10E-04</b>	<b>3.16E-06</b>	<b>4.66E-04</b>	<b>2.77E-06</b>	<b>4.96E-04</b>	<b>2.88E-06</b>	<b>5.83E-04</b>	<b>3.33E-06</b>	<b>4.94E-04</b>	<b>3.11E-06</b>	<b>5.36E-04</b>	<b>3.30E-06</b>	<b>6.69E-04</b>	<b>4.28E-06</b>	<b>4.28E-06</b>

Mass influence factor for 32t is assumed for NFB (9) and HGV(9) for conservative assessment.

Mass influence factor for 23t is assumed for NFB (8) and HGV(8) for conservative assessment.

Mass influence factor for 15t is assumed for HGV(7), NFB(6) and NFB(7) for conservative assessment.

For conservative assessment, mass factor of 1 and 1.2 are used for FBSD (assuming >15 ton) and FBDD (assuming >23 ton) respectively.

**Cold Idling for diesel vehicles with SCR****Summary of Engine Type Distribution (Year 2033)**

Euro Standard	Estimated engine type distribution								
	FBSD	FBDD	NFB6	NFB7	NFB8	NFB9	HGV7	HGV8	HGV9
pre-Euro	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro I	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro II	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro III	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro IV	0.00%	0.00%	0.01%	0.05%	0.04%	0.00%	0.29%	0.18%	0.36%
Euro V	0.00%	35.29%	2.90%	1.11%	0.31%	0.00%	2.11%	1.70%	2.37%
Euro VI	100.00%	64.71%	97.09%	98.84%	99.64%	100.00%	97.60%	98.12%	97.26%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Basic Idling Emission Factors**

Euro Standard	FBSD		FBDD		NFB6		NFB7		NFB8		NFB9		HGV7		HGV8		HGV9	
	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)
pre-Euro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro III	0.0737	-	0.0737	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro IV	0.0573	-	0.1535	-	0.0573	-	0.0573	-	0.0573	-	0.0573	-	0.0144	-	0.0144	-	0.0144	-
Euro V	0.0474	-	0.1535	-	0.0474	-	0.0474	-	0.0474	-	0.0474	-	0.0059	-	0.023	-	0.023	-
Euro VI	0.0077	-	0.0225	-	0.0010	-	0.0077	-	0.0077	-	0.0077	-	0.0059	-	0.0037	-	0.0037	-

Source : EPD Technical Note on "Calculation of Start Emissions in Air Quality Impact Assessment" ([https://www.epd.gov.hk/epd/sites/default/files/epd/Technical\\_Note\\_on\\_Calculation\\_of\\_Start\\_Emissions\\_in\\_Air\\_Quality\\_Impact\\_Assessment.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/Technical_Note_on_Calculation_of_Start_Emissions_in_Air_Quality_Impact_Assessment.pdf).)

For Euro III of FBSD, no emission factor has been provided, emission factor is assumed the same as FBDD for conservative assessments.

For Euro IV and V of NFB6, no emission factor has been provided, emission factor is assumed the same as NFB8/9 for conservative assessments.

For Euro V of NFB7, no emission factor has been provided, emission factor is assumed the same as NFB8/9 for conservative assessments.

For Euro IV of HGV7, no emission factor has been provided, emission factor is assumed the same as HGV8/9 for conservative assessments.

**Composite Idling Emission Factors**

Euro Standard	Composite Idling Emission Factors (g/s)																	
	FBSD		FBDD		NFB6		NFB7		NFB8		NFB9		HGV7		HGV8		HGV9	
	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM
pre-Euro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro III	4.56E-13	-	1.20E-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro IV	1.44E-12	-	3.70E-13	-	5.67E-06	-	2.87E-05	-	2.54E-05	-	0.00E+00	-	4.20E-05	-	2.59E-05	-	5.25E-05	-
Euro V	4.83E-07	-	5.42E-02	-	1.37E-03	-	5.27E-04	-	1.49E-04	-	0.00E+00	-	1.24E-04	-	3.91E-04	-	5.45E-04	-
Euro VI	7.70E-03	-	1.46E-02	-	9.71E-04	-	7.61E-03	-	7.67E-03	-	7.70E-03	-	5.76E-03	-	3.63E-03	-	3.60E-03	-
<b>Composite Emission Factors(g/s)</b>	<b>7.70E-03</b>	<b>-</b>	<b>6.87E-02</b>	<b>-</b>	<b>2.35E-03</b>	<b>-</b>	<b>8.17E-03</b>	<b>-</b>	<b>7.85E-03</b>	<b>-</b>	<b>7.70E-03</b>	<b>-</b>	<b>5.92E-03</b>	<b>-</b>	<b>4.05E-03</b>	<b>-</b>	<b>4.20E-03</b>	<b>-</b>



Calculations of Composite Idling Emission Factors—Light Buses

Estimated Engine Type Distribution

Assessment Year : 2033

FirstRegYear	Age	Estimated engine type distribution									Estimated engine type distribution							Estimated engine type distribution							Estimated engine type distribution								
		PVS-LPG									FLB-Petrol							PVA-Petrol							PVS-Petrol								
		Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI		Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V
2033	1	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2032	2	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2031	3	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2030	4	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2029	5	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2028	6	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2027	7	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2026	8	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2025	9	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2024	10	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2023	11	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2022	12	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2021	13	2.47%	-	-	-	-	-	-	-	2.47%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	4.76%	-	-	-	-	-	0.01%	4.75%
2020	14	8.73%	-	-	-	-	-	-	-	8.73%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	16.80%	-	-	-	-	-	-	16.80%
2019	15	7.41%	-	-	-	-	-	-	-	7.41%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	14.26%	-	-	-	-	-	-	14.26%
2018	16	12.06%	-	-	-	-	-	-	-	12.06%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	23.21%	-	-	-	-	-	-	23.21%
2017	17	8.88%	-	-	-	-	-	-	-	8.88%	-	-	-	-	-	-	-	10.39%	-	-	-	-	-	-	-	10.39%	-	-	-	-	-	-	10.39%
2016	18	9.54%	-	-	-	-	-	-	-	9.54%	-	-	-	-	-	-	-	10.98%	-	-	-	-	-	-	-	10.98%	-	-	-	-	-	-	10.98%
2015	19	9.30%	-	-	-	-	-	-	-	9.30%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2014	20	6.70%	-	-	-	-	-	-	-	6.70%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2013	21	4.69%	-	-	-	-	-	-	-	4.69%	-	-	-	-	-	-	-	1.23%	-	-	-	-	-	-	-	1.23%	-	-	-	-	-	-	1.23%
2012	22	3.22%	-	-	-	-	-	-	-	0.87%	2.35%	-	-	-	-	-	-	28.87%	-	-	-	-	-	-	-	12.74%	16.14%	-	-	-	-	-	0.00%
2011	23	2.91%	-	-	-	-	-	-	-	2.91%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2010	24	3.36%	-	-	-	-	-	-	-	3.36%	-	-	-	-	-	-	-	0.50%	-	-	-	-	-	-	-	0.50%	-	-	-	-	-	-	0.00%
2009	25	3.28%	-	-	-	-	-	-	-	3.28%	-	-	-	-	-	-	-	18.35%	-	-	-	-	-	-	-	18.35%	-	-	-	-	-	-	0.00%
2008	26	5.09%	-	-	-	-	-	-	-	5.09%	-	-	-	-	-	-	-	9.46%	-	-	-	-	-	-	-	9.46%	-	-	-	-	-	-	5.35%
2007	27	4.53%	-	-	-	-	-	-	-	4.53%	-	-	-	-	-	-	-	3.26%	-	-	-	-	-	-	-	3.26%	-	-	-	-	-	-	0.00%
2006	28	2.17%	-	-	-	-	-	-	-	1.77%	0.39%	-	-	-	-	-	-	1.09%	-	-	-	-	-	-	-	1.09%	-	-	-	-	-	-	12.34%
2005	29	1.27%	-	-	-	-	-	-	-	1.27%	-	-	-	-	-	-	-	6.09%	-	-	-	-	-	-	-	6.09%	-	-	-	-	-	-	0.00%
2004	30	1.87%	-	-	-	-	-	-	-	1.87%	-	-	-	-	-	-	-	3.44%	-	-	-	-	-	-	-	3.44%	-	-	-	-	-	-	0.00%
2003	31	0.95%	-	-	-	-	-	-	-	0.95%	-	-	-	-	-	-	-	5.61%	-	-	-	-	-	-	-	5.61%	-	-	-	-	-	-	0.00%
2002	32	1.46%	-	-	-	-	-	-	-	1.46%	-	-	-	-	-	-	-	0.37%	-	-	-	-	-	-	-	0.37%	-	-	-	-	-	-	0.00%
2001	33	0.13%	-	-	-	-	-	-	-	0.13%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
2000	34	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.35%	-	-	-	-	-	-	-	0.35%	-	-	-	-	-	-	0.00%
1999	35	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
1998	36	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	15.58%	-	-	-	-	-	-	15.58%
1997	37	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	7.70%	-	-	-	-	-	-	7.70%
1996	38	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
1995	39	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
1994	40	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
1993	41	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
1992	42	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
1991	43	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
1990	44	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
1989	45	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
Total		100.00%	0.00%	0.00%	0.00%	7.44%	20.43%	72.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.35%	16.60%	44.31%	38.74%	0.00%	100.00%	0.00%	23.29%	0.00%	0.00%	17.69%	54.27%	4.75%

**Warm Idling****Summary of Engine Type Distribution (Year 2033)**

Euro Standard	Estimated engine type distribution								
	PLB-Diesel	PV4-Diesel	PV5-Diesel	PLB-LPG	PV4-LPG	PV5-LPG	PLB-Petrol	PV4-Petrol	PV5-Petrol
pre-Euro	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro I	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	23.29%
Euro II	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.35%	0.00%
Euro III	0.00%	0.00%	0.00%	1.40%	0.00%	7.44%	0.00%	16.60%	0.00%
Euro IV	0.00%	0.00%	0.15%	1.29%	0.00%	20.43%	0.00%	44.31%	17.69%
Euro V	4.48%	0.03%	4.89%	97.32%	0.00%	72.13%	0.00%	38.74%	54.27%
Euro VI	95.52%	99.97%	94.95%	0.00%	0.00%	0.00%	0.00%	0.00%	4.75%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Basic Idling Emission Factors**

Euro Standard	Petrol		Diesel	
	NOx (g/h)	PM (g/h)	NOx (g/h)	PM (g/h)
pre-Euro	0.66	0.01	6.52	1.59
Euro I	1.69	0.01	5.88	0.63
Euro II	0.6	0.01	5.53	0.54
Euro III	0.34	0	4.12	0.1
Euro IV	0.17	0	3.62	0.16
Euro V	0.06	0	3.6	0.02
Euro VI	0.07	0	1.28	0.02

Source : Road tunnels: Vehicle emission and air demand for ventilation, PIARC, 2019

**Composite Idling Emission Factors**

Euro Standard	Composite Idling Emission Factors (g/h)																		
	PLB-Diesel		PV4-Diesel		PV5-Diesel		PLB-LPG		PV4-LPG		PV5-LPG		PLB-Petrol		PV4-Petrol		PV5-Petrol		
	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	
pre-Euro	0.000	0.000	0.000	0.000	0.000	0.000	-	0.000	-	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Euro I	0.000	0.000	0.000	0.000	0.000	0.000	-	0.000	-	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	0.394	0.002
Euro II	0.000	0.000	0.000	0.000	0.000	0.000	-	0.000	-	0.000	-	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000
Euro III	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.007	0.000	0.000	0.056	0.000	0.000	0.000	0.000
Euro IV	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.002	0.000	0.000	0.001	0.033	0.000	0.000	0.075	0.000	0.030	0.000	0.000
Euro V	0.161	0.001	0.001	0.000	0.176	0.001	0.004	0.019	0.000	0.000	0.003	0.014	0.000	0.000	0.023	0.000	0.033	0.000	0.000
Euro VI	1.223	0.019	1.280	0.020	1.215	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000
<i>Composite Emission Factors(g/h)</i>	<i>1.384</i>	<i>0.02</i>	<i>1.281</i>	<i>0.02</i>	<i>1.397</i>	<i>0.02</i>	<i>0.004</i>	<i>0.02</i>	<i>0.000</i>	<i>0.00</i>	<i>0.004</i>	<i>0.05</i>	<i>0.000</i>	<i>0.000</i>	<i>0.157</i>	<i>0.000</i>	<i>0.460</i>	<i>0.00</i>	<i>0.00</i>
<b>Composite Emission Factors (g/s)</b>	<b>3.84E-04</b>	<b>5.56E-06</b>	<b>3.56E-04</b>	<b>5.56E-06</b>	<b>3.88E-04</b>	<b>5.61E-06</b>	<b>1.10E-06</b>	<b>6.37E-06</b>	<b>0.00E+00</b>	<b>0.00E+00</b>	<b>1.19E-06</b>	<b>1.52E-05</b>	<b>0.00E+00</b>	<b>0.00E+00</b>	<b>4.36E-05</b>	<b>9.84E-09</b>	<b>1.28E-04</b>	<b>6.47E-07</b>	

NOx cold idling emission factors for are adopted as hot idling emission factors for LPG vehicles (Ref.: EIA for Revised Trunk Road T4 in Sha Tin (Register No.: AEIAR-231/2021))

PM idling emission factors for Diesel vehicles are adopted for LPG vehicles (Ref.: EIA for Revised Trunk Road T4 in Sha Tin (Register No.: AEIAR-231/2021))

**Cold Idling for diesel vehicles with SCR****Summary of Engine Type Distribution (Year 2033)**

Euro Standard	Estimated engine type distribution								
	PLB-Diesel	PV4-Diesel	PV5-Diesel	PLB-LPG	PV4-LPG	PV5-LPG	PLB-Petrol	PV4-Petrol	PV5-Petrol
pre-Euro	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro I	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	23.29%
Euro II	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.35%	0.00%
Euro III	0.00%	0.00%	0.00%	1.40%	0.00%	7.44%	0.00%	16.60%	0.00%
Euro IV	0.00%	0.00%	0.15%	1.29%	0.00%	20.43%	0.00%	44.31%	17.69%
Euro V	4.48%	0.03%	4.89%	97.32%	0.00%	72.13%	0.00%	38.74%	54.27%
Euro VI	95.52%	99.97%	94.95%	0.00%	0.00%	0.00%	0.00%	0.00%	4.75%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Basic Idling Emission Factors**

Euro Standard	PLB-Diesel		PV4-Diesel		PV5-Diesel		PLB-LPG		PV4-LPG		PV5-LPG		PLB-Petrol		PV4-Petrol		PV5-Petrol	
	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)
pre-Euro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro III	0.001	-	0.001	-	0.001	-	0.0092	-	0.0092	-	0.0092	-	-	-	-	-	-	-
Euro IV	0.001	-	0.001	-	0.001	-	0.0039	-	0.0039	-	0.0039	-	-	-	-	-	-	-
Euro V	0.001	-	0.001	-	0.001	-	0.0039	-	0.0039	-	0.0039	-	-	-	-	-	-	-
Euro VI	0.001	-	0.001	-	0.001	-	0.0039	-	0.0039	-	0.0039	-	-	-	-	-	-	-

Source : EPD Technical Note on "Calculation of Start Emissions in Air Quality Impact Assessment" ([https://www.epd.gov.hk/epd/sites/default/files/epd/Technical\\_Note\\_on\\_Calculation\\_of\\_Start\\_Emissions\\_in\\_Air\\_Quality\\_Impact\\_Assessment.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/Technical_Note_on_Calculation_of_Start_Emissions_in_Air_Quality_Impact_Assessment.pdf))

For Euro III, Euro IV and Euro V of PLB-Diesel, no emission factor has been provided, emission factor for warm idling is adopted. (Ref.: EIA for Revised Trunk Road T4 in Sha Tin (Register No.: AEIAR-231/2021))

For Euro III, Euro IV and Euro V of PV5-Diesel, no emission factor has been provided, emission factor for warm idling is adopted. (Ref.: EIA for Revised Trunk Road T4 in Sha Tin (Register No.: AEIAR-231/2021))

For PV4-Diesel, no emission factor has been provided, emission factor is assumed the same as PV5-Diesel for conservative assessments.

For PV4-LPG and PV5-LPG, no emission factor has been provided, emission factor is assumed the same as PLB-LPG for conservative assessments.

**Composite Idling Emission Factors**

Euro Standard	Composite Idling Emission Factors (g/s)																	
	PLB-Diesel		PV4-Diesel		PV5-Diesel		PLB-LPG		PV4-LPG		PV5-LPG		PLB-Petrol		PV4-Petrol		PV5-Petrol	
	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM
pre-Euro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro III	0.00E+00	-	0.00E+00	-	0.00E+00	-	1.28E-04	-	0.00E+00	-	6.85E-04	-	-	-	-	-	-	-
Euro IV	2.90E-08	-	0.00E+00	-	1.52E-06	-	5.02E-05	-	0.00E+00	-	7.97E-04	-	-	-	-	-	-	-
Euro V	4.48E-05	-	3.18E-07	-	4.89E-05	-	3.80E-03	-	0.00E+00	-	2.81E-03	-	-	-	-	-	-	-
Euro VI	9.55E-04	-	1.00E-03	-	9.50E-04	-	0.00E+00	-	0.00E+00	-	0.00E+00	-	-	-	-	-	-	-
<b>Composite Emission Factors(g/s)</b>	<b>1.00E-03</b>	<b>-</b>	<b>1.00E-03</b>	<b>-</b>	<b>1.00E-03</b>	<b>-</b>	<b>3.97E-03</b>	<b>-</b>	<b>0.00E+00</b>	<b>-</b>	<b>4.29E-03</b>	<b>-</b>	<b>0.00E+00</b>	<b>-</b>	<b>0.00E+00</b>	<b>-</b>	<b>0.00E+00</b>	<b>-</b>



**Population of diesel vehicle (Based on Emfac 4.3)**

Route 11 (Section between Yuen Long and North Lantau)- Investigation

Assessment Year : 2048

FirstRegYear	Age	Population of Diesel Vehicle																	
		01 - Private Cars (PC)	02 - Taxi	03 - Light Goods Vehicles<=2.5t	04 - Lt Goods Vehicles 2.5-3.5t	05 - Light Goods Vehicles>3.5t	06 - Medium & Heavy Goods Vehicles	07 - Medium & Heavy Goods Vehicles	08 - Public Light Buses	09 - Private Light Bus <=3.5t	10 - Private Light Bus >3.5t	11 - Non-franchised Bus<=6.4t	12 - Non-franchised Bus 6.4-15t	13 - Non-franchised Bus 15-24t	14 - Franchised Bus (SD)	15 - Franchised Bus (DD)	16 - Motorcycles (MC)	17 - Medium & Heavy Goods Vehicles	18 - Non-franchised Bus >24t
2048	1	859.78	0.00	46.19	5,065.23	1,910.05	1,192.80	2,191.11	368.85	45.97	352.70	222.03	150.42	300.22	54.00	221.01	0.00	556.78	0.21
2047	2	865.37	0.00	48.26	4,996.04	2,031.50	1,283.09	2,284.65	339.04	44.45	340.33	210.57	145.47	290.30	49.00	280.98	0.00	625.61	0.19
2046	3	872.12	0.00	46.35	5,094.74	2,061.59	1,256.93	2,357.60	333.57	44.19	333.70	199.60	140.16	290.13	36.00	176.98	0.00	695.66	0.16
2045	4	871.02	0.00	61.98	5,572.62	2,300.56	1,596.81	2,732.10	309.66	43.79	345.72	191.13	136.71	298.83	45.99	47.00	0.00	815.35	0.13
2044	5	859.16	0.00	68.65	5,739.15	2,085.85	1,481.26	2,764.59	286.00	42.67	343.32	187.21	136.45	314.70	10.00	45.00	0.00	746.12	0.10
2043	6	834.69	0.00	46.37	4,164.02	1,284.04	782.00	1,778.87	262.49	39.54	316.70	186.55	132.46	319.54	8.00	64.01	0.00	513.83	0.08
2042	7	797.25	0.00	47.52	4,069.90	1,179.24	739.89	1,690.64	252.71	37.29	309.36	191.17	132.25	327.75	9.00	109.99	0.00	501.30	0.09
2041	8	748.18	0.00	47.11	3,969.18	1,131.50	741.39	1,675.35	256.19	36.18	295.91	196.98	133.46	331.10	5.00	49.03	0.00	496.54	0.12
2040	9	690.48	0.00	45.44	3,849.60	1,097.00	744.53	1,643.09	274.94	33.50	275.36	199.63	132.17	323.18	0.00	176.00	0.00	479.54	0.15
2039	10	628.22	0.00	43.15	3,869.98	1,151.88	792.36	1,685.47	311.29	31.06	253.92	197.68	130.17	303.57	0.00	190.03	0.00	455.73	0.18
2038	11	565.79	0.00	37.88	3,915.18	1,345.37	918.80	1,883.70	311.77	29.40	232.47	186.41	125.76	270.12	0.00	322.00	0.00	436.09	0.19
2037	12	506.65	0.00	34.61	3,892.33	1,498.02	993.95	2,012.29	327.80	26.06	202.76	162.06	112.82	222.39	0.00	295.00	0.00	410.75	0.18
2036	13	452.34	0.00	26.91	2,977.55	1,226.93	771.47	1,553.14	301.44	21.71	159.00	114.40	81.99	153.22	0.00	648.00	0.00	313.00	0.13
2035	14	401.70	0.00	19.68	2,479.00	1,290.70	703.57	1,326.14	212.63	18.00	115.66	68.17	50.20	89.18	5.00	678.01	0.00	240.37	0.08
2034	15	351.95	0.00	16.81	2,013.78	1,083.66	591.06	1,104.29	173.44	13.95	87.58	33.41	26.44	44.65	0.00	835.00	0.00	206.05	0.04
2033	16	300.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	822.96	0.00	0.00	0.00
2032	17	246.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	442.00	0.00	0.00	0.00
2031	18	191.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00	439.98	0.00	0.00	0.00
2030	19	140.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00
2029	20	97.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2028	21	63.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2027	22	39.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	23	23.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2025	24	13.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2024	25	7.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2023	26	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	27	2.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2021	28	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020	29	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2019	30	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2018	31	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2017	32	4.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2016	33	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	34	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	35	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	36	0.08	0.00	0.26	18.67	1.38	2.21	3.71	0.00	0.02	6.64	0.00	0.04	0.08	0.00	0.00	0.00	1.25	0.00
2012	37	0.01	0.00	0.00	0.04	0.54	0.89	1.03	0.00	0.00	1.88	0.00	0.03	0.04	0.00	0.00	0.00	0.55	0.00
2011	38	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	39	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009	40	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008	41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2006	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	0.00	0.00
2005	44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note

1. Only diesel vehicles are presented.
2. Population, Age and Technology Group Fraction are default figures from Emfac 4.3.

Age Population Profile

FirstReg Year	Age	% by Age																
		14 - FBSD	15 - FBDD	11 - NFB6	12 - NFB7	13 - NFB8	18 - NFB9	06 - HGV7	07 - HGV8	17 - HGV9	18 - NFB9	01 - PC	03 - LGV3	04 - LGV4	05 - LGV6	08 - Public Light Buses	09 - Private Light Bus <=3.5t	10 - Private Light Bus >3.5t
2048	1	19.64%	3.78%	8.72%	8.51%	7.74%	10.41%	8.17%	7.64%	7.43%	10.41%	7.51%	7.25%	8.21%	8.42%	8.53%	9.05%	8.88%
2047	2	17.82%	4.81%	8.27%	8.23%	7.48%	9.36%	8.79%	7.96%	8.35%	9.36%	7.56%	7.57%	8.10%	8.96%	7.84%	8.75%	8.57%
2046	3	13.09%	3.03%	7.84%	7.93%	7.48%	7.99%	8.61%	8.22%	9.28%	7.99%	7.62%	7.27%	8.26%	9.09%	7.72%	8.70%	8.40%
2045	4	16.72%	0.80%	7.50%	7.74%	7.70%	6.48%	10.94%	9.52%	10.88%	6.48%	7.61%	9.73%	9.03%	10.14%	7.17%	8.62%	8.70%
2044	5	3.64%	0.77%	7.35%	7.72%	8.11%	5.00%	10.15%	9.64%	9.96%	5.00%	7.51%	10.77%	9.30%	9.20%	6.62%	8.40%	8.64%
2043	6	2.91%	1.10%	7.32%	7.50%	8.24%	3.79%	5.36%	6.20%	6.86%	3.79%	7.29%	7.28%	6.75%	5.66%	6.07%	7.79%	7.97%
2042	7	3.27%	1.88%	7.51%	7.48%	8.45%	4.37%	5.07%	5.89%	6.69%	4.37%	6.96%	7.46%	6.60%	5.20%	5.85%	7.34%	7.79%
2041	8	1.82%	0.84%	7.73%	7.55%	8.54%	6.11%	5.08%	5.84%	6.63%	6.11%	6.54%	7.39%	6.43%	4.99%	5.93%	7.13%	7.45%
2040	9	0.00%	3.01%	7.84%	7.48%	8.33%	7.50%	5.10%	5.73%	6.40%	7.50%	6.03%	7.13%	6.24%	4.84%	6.36%	6.60%	6.93%
2039	10	0.00%	3.25%	7.76%	7.37%	7.83%	8.78%	5.43%	5.88%	6.08%	8.78%	5.49%	6.77%	6.27%	5.08%	7.20%	6.12%	6.39%
2038	11	0.00%	5.51%	7.32%	7.12%	6.96%	9.36%	6.30%	6.57%	5.82%	9.36%	4.94%	5.94%	6.35%	5.93%	7.21%	5.79%	5.85%
2037	12	0.00%	5.05%	6.36%	6.38%	5.73%	8.81%	6.81%	7.01%	5.48%	8.81%	4.43%	5.43%	6.31%	6.61%	7.58%	5.13%	5.10%
2036	13	0.00%	11.09%	4.49%	4.64%	3.95%	6.45%	5.29%	5.41%	4.18%	6.45%	3.95%	4.22%	4.83%	5.41%	6.97%	4.28%	4.00%
2035	14	1.82%	11.60%	2.68%	2.84%	2.30%	3.76%	4.82%	4.62%	3.21%	3.76%	3.51%	3.09%	4.02%	5.69%	4.92%	3.54%	2.91%
2034	15	0.00%	14.29%	1.31%	1.50%	1.15%	1.84%	4.05%	3.85%	2.75%	1.84%	3.07%	2.64%	3.26%	4.78%	4.01%	2.75%	2.20%
2033	16	10.18%	14.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2032	17	0.00%	7.56%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2031	18	9.09%	7.53%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.68%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2030	19	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2029	20	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.85%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2028	21	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.56%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2027	22	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2026	23	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2025	24	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2024	25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2023	26	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2022	27	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2021	28	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2020	29	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2019	30	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2018	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%	0.00%
2017	32	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	33	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	34	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2014	35	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	36	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.01%	0.02%	0.00%	0.00%	0.04%	0.03%	0.01%	0.00%	0.00%	0.17%
2012	37	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%
2011	38	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2010	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%	0.00%
2009	40	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2008	41	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2007	42	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2006	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%	0.00%
2005	44	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2004	45	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Note

1. Only diesel vehicles are presented.
2. Population, Age and Technology Group Fraction are default figures from Emfac 4.3.

**Population of Light Buses (Based on Emfac 4.3)**

Route 11 (Section between Yuen Long and North Lantau)- Investigation

Assessment Year : 2048

FirstRegYear	Age	Population of Light Buses								
		08 - Public Light Buses (Petrol)	09 - Private Light Bus <=3.5t (Petrol)	10 - Private Light Bus >3.5t (Petrol)	08 - Public Light Buses (Diesel)	09 - Private Light Bus <=3.5t (Diesel)	10 - Private Light Bus >3.5t (Diesel)	08 - Public Light Buses (LPG)	09 - Private Light Bus <=3.5t (LPG)	10 - Private Light Bus >3.5t (LPG)
2048	1	0.00	0.00	0.00	368.85	45.97	352.70	0.00	0.00	0.00
2047	2	0.00	0.00	0.00	339.04	44.45	340.33	0.00	0.00	0.00
2046	3	0.00	0.00	0.00	333.57	44.19	333.70	0.00	0.00	0.00
2045	4	0.00	0.00	0.00	309.66	43.79	345.72	0.00	0.00	0.00
2044	5	0.00	0.00	0.00	286.00	42.67	343.32	0.00	0.00	0.00
2043	6	0.00	0.00	0.00	262.49	39.54	316.70	0.00	0.00	0.00
2042	7	0.00	0.00	0.00	252.71	37.29	309.36	0.00	0.00	0.00
2041	8	0.00	0.00	0.00	256.19	36.18	295.91	0.00	0.00	0.00
2040	9	0.00	0.00	0.00	274.94	33.50	275.36	0.00	0.00	0.00
2039	10	0.00	0.00	0.00	311.29	31.06	253.92	0.00	0.00	0.00
2038	11	0.00	0.00	0.00	311.77	29.40	232.47	0.00	0.00	0.00
2037	12	0.00	0.00	0.00	327.80	26.06	202.76	0.00	0.00	0.00
2036	13	0.00	0.00	0.00	301.44	21.71	159.00	0.00	0.00	0.00
2035	14	0.00	0.00	0.00	212.63	18.00	115.66	0.00	0.00	0.00
2034	15	0.00	0.00	0.00	173.44	13.95	87.58	0.00	0.00	0.00
2033	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2032	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2031	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2030	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2029	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2028	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2027	22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2025	24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2024	25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2023	26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2021	28	0.00	0.00	0.01	0.00	0.00	0.00	0.11	0.00	0.76
2020	29	0.00	0.00	0.04	0.00	0.00	0.00	0.44	0.00	2.87
2019	30	0.00	0.00	0.04	0.00	0.00	0.00	0.30	0.00	2.73
2018	31	0.00	0.00	0.07	0.00	0.00	0.00	0.21	0.00	4.30
2017	32	0.00	0.65	0.00	0.00	0.00	0.00	0.07	0.00	3.07
2016	33	0.00	0.67	0.00	0.00	0.00	0.00	0.03	0.00	3.20
2015	34	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	3.04
2014	35	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	2.15
2013	36	0.00	0.07	0.00	0.00	0.02	6.64	0.00	0.00	1.47
2012	37	0.00	1.61	0.00	0.00	0.00	1.88	0.00	0.00	1.00
2011	38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88
2010	39	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	1.01
2009	40	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.97
2008	41	0.00	0.50	0.01	0.00	0.00	0.00	0.00	0.00	1.49
2007	42	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	1.32
2006	43	0.00	0.06	0.03	0.00	0.00	0.00	0.00	0.00	0.63
2005	44	0.00	0.32	0.00	0.00	0.00	0.00	0.01	0.00	0.36
2004	45	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.53

Note

1. Population, Age and Technology Group Fraction are default figures from Emfac 4.3.

**Age Population Profile**

FirstReg Year	Age	% by Age								
		08 - Public Light Buses (Petrol)	09 - Private Light Bus <=3.5t (Petrol)	10 - Private Light Bus >3.5t (Petrol)	08 - Public Light Buses (Diesel)	09 - Private Light Bus <=3.5t (Diesel)	10 - Private Light Bus >3.5t (Diesel)	08 - Public Light Buses (LPG)	09 - Private Light Bus <=3.5t (LPG)	10 - Private Light Bus >3.5t (LPG)
2048	1	0.00%	0.00%	0.00%	8.53%	9.05%	8.88%	0.00%	0.00%	0.00%
2047	2	0.00%	0.00%	0.00%	7.84%	8.75%	8.57%	0.00%	0.00%	0.00%
2046	3	0.00%	0.00%	0.00%	7.72%	8.70%	8.40%	0.00%	0.00%	0.00%
2045	4	0.00%	0.00%	0.00%	7.17%	8.62%	8.70%	0.00%	0.00%	0.00%
2044	5	0.00%	0.00%	0.00%	6.62%	8.40%	8.64%	0.00%	0.00%	0.00%
2043	6	0.00%	0.00%	0.00%	6.07%	7.79%	7.97%	0.00%	0.00%	0.00%
2042	7	0.00%	0.00%	0.00%	5.85%	7.34%	7.79%	0.00%	0.00%	0.00%
2041	8	0.00%	0.00%	0.00%	5.93%	7.13%	7.45%	0.00%	0.00%	0.00%
2040	9	0.00%	0.00%	0.00%	6.36%	6.60%	6.93%	0.00%	0.00%	0.00%
2039	10	0.00%	0.00%	0.00%	7.20%	6.12%	6.39%	0.00%	0.00%	0.00%
2038	11	0.00%	0.00%	0.00%	7.21%	5.79%	5.85%	0.00%	0.00%	0.00%
2037	12	0.00%	0.00%	0.00%	7.58%	5.13%	5.10%	0.00%	0.00%	0.00%
2036	13	0.00%	0.00%	0.00%	6.97%	4.28%	4.00%	0.00%	0.00%	0.00%
2035	14	0.00%	0.00%	0.00%	4.92%	3.54%	2.91%	0.00%	0.00%	0.00%
2034	15	0.00%	0.00%	0.00%	4.01%	2.75%	2.20%	0.00%	0.00%	0.00%
2033	16	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2032	17	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2031	18	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2030	19	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2029	20	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2028	21	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2027	22	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2026	23	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2025	24	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2024	25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2023	26	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2022	27	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2021	28	0.00%	0.00%	5.74%	0.00%	0.00%	0.00%	9.14%	0.00%	2.40%
2020	29	0.00%	0.00%	21.51%	0.00%	0.00%	0.00%	37.24%	0.00%	9.02%
2019	30	0.00%	0.00%	20.51%	0.00%	0.00%	0.00%	25.10%	0.00%	8.60%
2018	31	0.00%	0.00%	32.23%	0.00%	0.00%	0.00%	17.47%	0.00%	13.52%
2017	32	0.00%	12.40%	0.00%	0.00%	0.00%	0.00%	5.56%	0.00%	9.65%
2016	33	0.00%	12.74%	0.00%	0.00%	0.00%	0.00%	2.15%	0.00%	10.08%
2015	34	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.22%	0.00%	9.58%
2014	35	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.46%	0.00%	6.75%
2013	36	0.00%	1.34%	0.00%	0.00%	0.00%	0.17%	0.17%	0.00%	4.63%
2012	37	0.00%	30.80%	0.00%	0.00%	0.00%	0.05%	0.13%	0.00%	3.13%
2011	38	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.13%	0.00%	2.78%
2010	39	0.00%	0.52%	0.00%	0.00%	0.00%	0.00%	0.24%	0.00%	3.17%
2009	40	0.00%	18.81%	0.00%	0.00%	0.00%	0.00%	0.10%	0.00%	3.06%
2008	41	0.00%	9.60%	6.12%	0.00%	0.00%	0.00%	0.11%	0.00%	4.70%
2007	42	0.00%	3.28%	0.00%	0.00%	0.00%	0.00%	0.04%	0.00%	4.15%
2006	43	0.00%	1.09%	13.89%	0.00%	0.00%	0.00%	0.04%	0.00%	1.97%
2005	44	0.00%	6.04%	0.00%	0.00%	0.00%	0.00%	0.52%	0.00%	1.14%
2004	45	0.00%	3.39%	0.00%	0.00%	0.00%	0.00%	0.18%	0.00%	1.67%













Calculations of Composite Idling Emission Factors--Diesel Vehicles

Estimated Engine Type Distribution

Assessment Year : 2048		Estimated engine type distribution										Estimated engine type distribution										Estimated engine type distribution										Estimated engine type distribution									
FirstRegYear	Age	NF89										HG77										HG88										HG99									
		Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI	Population profile	pre-Euro with DOC	Euro I	Euro II	Euro III	Euro IV	Euro V	Euro VI								
2048	1	10.41%	-	-	-	-	-	-	-	10.41%	8.17%	-	-	-	-	-	8.17%	7.64%	-	-	-	-	-	-	7.64%	7.43%	-	-	-	-	-	7.43%									
2047	2	9.36%	-	-	-	-	-	-	-	9.36%	8.79%	-	-	-	-	-	8.79%	7.96%	-	-	-	-	-	-	7.96%	8.35%	-	-	-	-	-	8.35%									
2046	3	7.99%	-	-	-	-	-	-	-	7.99%	8.61%	-	-	-	-	-	8.61%	8.22%	-	-	-	-	-	-	8.22%	9.28%	-	-	-	-	-	9.28%									
2045	4	6.48%	-	-	-	-	-	-	-	6.48%	10.94%	-	-	-	-	-	10.94%	9.52%	-	-	-	-	-	-	9.52%	10.88%	-	-	-	-	-	10.88%									
2044	5	5.00%	-	-	-	-	-	-	-	5.00%	10.15%	-	-	-	-	-	10.15%	9.64%	-	-	-	-	-	-	9.64%	9.96%	-	-	-	-	-	9.96%									
2043	6	3.79%	-	-	-	-	-	-	-	3.79%	5.36%	-	-	-	-	-	5.36%	6.20%	-	-	-	-	-	-	6.20%	6.86%	-	-	-	-	-	6.86%									
2042	7	4.37%	-	-	-	-	-	-	-	4.37%	5.07%	-	-	-	-	-	5.07%	5.89%	-	-	-	-	-	-	5.89%	6.69%	-	-	-	-	-	6.69%									
2041	8	6.11%	-	-	-	-	-	-	-	6.11%	5.08%	-	-	-	-	-	5.08%	5.84%	-	-	-	-	-	-	5.84%	6.63%	-	-	-	-	-	6.63%									
2040	9	7.50%	-	-	-	-	-	-	-	7.50%	5.10%	-	-	-	-	-	5.10%	5.73%	-	-	-	-	-	-	5.73%	6.40%	-	-	-	-	-	6.40%									
2039	10	8.78%	-	-	-	-	-	-	-	8.78%	5.43%	-	-	-	-	-	5.43%	5.88%	-	-	-	-	-	-	5.88%	6.08%	-	-	-	-	-	6.08%									
2038	11	9.36%	-	-	-	-	-	-	-	9.36%	6.30%	-	-	-	-	-	6.30%	6.57%	-	-	-	-	-	-	6.57%	5.82%	-	-	-	-	-	5.82%									
2037	12	8.81%	-	-	-	-	-	-	-	8.81%	6.81%	-	-	-	-	-	6.81%	7.01%	-	-	-	-	-	-	7.01%	5.48%	-	-	-	-	-	5.48%									
2036	13	6.45%	-	-	-	-	-	-	-	6.45%	5.29%	-	-	-	-	-	5.29%	5.41%	-	-	-	-	-	-	5.41%	4.18%	-	-	-	-	-	4.18%									
2035	14	3.76%	-	-	-	-	-	-	-	3.76%	4.82%	-	-	-	-	-	4.82%	4.62%	-	-	-	-	-	-	4.62%	3.21%	-	-	-	-	-	3.21%									
2034	15	1.84%	-	-	-	-	-	-	-	1.84%	4.05%	-	-	-	-	-	4.05%	3.85%	-	-	-	-	-	-	3.85%	2.75%	-	-	-	-	-	2.75%									
2033	16	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2032	17	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2031	18	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2030	19	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2029	20	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2028	21	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2027	22	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2026	23	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2025	24	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2024	25	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2023	26	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2022	27	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2021	28	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2020	29	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2019	30	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2018	31	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2017	32	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2016	33	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2015	34	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2014	35	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2013	36	0.00%	-	-	-	-	-	-	-	0.00%	0.02%	-	-	-	-	-	0.02%	0.01%	-	-	-	-	-	-	0.01%	0.02%	-	-	-	-	-	0.02%									
2012	37	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2011	38	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2010	39	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2009	40	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2008	41	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2007	42	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2006	43	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2005	44	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
2004	45	0.00%	-	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	-	0.00%	0.00%	-	-	-	-	-	0.00%									
	Total	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.02%	99.98%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	99.99%	100.00%	0.00%	0.00%	0.00%	0.02%	99.98%										

**Warm Idling**

**Summary of Engine Type Distribution (Year 2048)**

Euro Standard	Estimated engine type distribution								
	FBSD	FBDD	NFB6	NFB7	NFB8	NFB9	HGV7	HGV8	HGV9
pre-Euro	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro I	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro II	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro III	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro IV	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro V	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.01%	0.02%
Euro VI	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.98%	99.98%	99.98%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Basic Idling Emission Factors**

Euro Standard	Truck/bus		Light Duty	
	NOx (g/h)	PM (g/h)	NOx (g/h)	PM (g/h)
pre-Euro	40.56	6.62	6.52	1.59
Euro I	32.6	5.53	5.88	0.63
Euro II	40.58	1.43	5.53	0.54
Euro III	42.08	1.29	4.12	0.1
Euro IV	7.51	0.2	3.62	0.16
Euro V	11.71	0.1	3.6	0.02
Euro VI	1.75	0.01	1.28	0.02

Source : Road tunnels: Vehicle emission and air demand for ventilation, PIARC, 2019

**Mass Factors**

Pollutant	Mass Factor		
	15t	23t	32t
NOx	0.9	1	1.2
PM	0.9	1	1.2

Source : Road tunnels: Vehicle emission and air demand for ventilation, PIARC, 2019

**Composite Idling Emission Factors**

Euro Standard	Composite Idling Emission Factors (g/h)																		
	FBSD		FBDD		NFB6		NFB7		NFB8		NFB9		HGV7		HGV8		HGV9		
	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	
pre-Euro	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Euro I	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Euro II	0.00E+00	0.00E+00	8.16E-11	2.88E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Euro III	2.60E-10	7.97E-12	2.15E-10	6.59E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Euro IV	1.88E-10	5.02E-12	1.81E-11	4.83E-13	2.02E-07	5.38E-09	3.05E-05	8.13E-07	2.70E-05	7.18E-07	0.00E+00	0.00E+00	1.83E-04	4.88E-06	1.14E-04	3.03E-06	2.31E-04	6.14E-06	
Euro V	7.84E-10	6.69E-12	8.77E-10	7.49E-12	1.58E-06	1.35E-08	3.82E-04	3.26E-06	3.00E-04	2.57E-06	0.00E+00	0.00E+00	2.20E-03	1.87E-05	1.76E-03	1.50E-05	2.44E-03	2.08E-05	
Euro VI	1.75E+00	1.00E-02	1.75E+00	1.00E-02	1.75E+00	1.00E-02	1.75E+00	1.00E-02	1.75E+00	1.00E-02	1.75E+00	1.00E-02	1.75E+00	1.00E-02	1.75E+00	1.00E-02	1.75E+00	1.00E-02	
<b>Composite Emission Factors(g/h)</b>	<b>1.75E+00</b>	<b>1.00E-02</b>	<b>2.10E+00</b>	<b>1.20E-02</b>	<b>1.58E+00</b>	<b>9.00E-03</b>	<b>1.58E+00</b>	<b>9.00E-03</b>	<b>1.75E+00</b>	<b>1.00E-02</b>	<b>2.10E+00</b>	<b>1.20E-02</b>	<b>1.58E+00</b>	<b>9.02E-03</b>	<b>1.75E+00</b>	<b>1.00E-02</b>	<b>2.10E+00</b>	<b>1.20E-02</b>	
<b>Composite Emission Factors (g/s)</b>	<b>4.86E-04</b>	<b>2.78E-06</b>	<b>5.83E-04</b>	<b>3.33E-06</b>	<b>4.38E-04</b>	<b>2.50E-06</b>	<b>4.38E-04</b>	<b>2.50E-06</b>	<b>4.86E-04</b>	<b>2.78E-06</b>	<b>5.83E-04</b>	<b>3.33E-06</b>	<b>4.38E-04</b>	<b>2.51E-06</b>	<b>4.87E-04</b>	<b>2.78E-06</b>	<b>5.84E-04</b>	<b>3.34E-06</b>	

Mass influence factor for 32t is assumed for NFB (9) and HGV(9) for conservative assessment.

Mass influence factor for 23t is assumed for NFB (8) and HGV(8) for conservative assessment.

Mass influence factor for 15t is assumed for HGV(7), NFB(6) and NFB(7) for conservative assessment.

For conservative assessment, mass factor of 1 and 1.2 are used for FBSD (assuming >15 ton) and FBDD (assuming >23 ton) respectively.

**Cold Idling for diesel vehicles with SCR**

**Summary of Engine Type Distribution (Year 2048)**

Euro Standard	Estimated engine type distribution								
	FBSD	FBDD	NFB6	NFB7	NFB8	NFB9	HGV7	HGV8	HGV9
pre-Euro	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro I	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro II	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro III	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro IV	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro V	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.01%	0.02%
Euro VI	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.98%	99.98%	99.98%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Basic Idling Emission Factors**

Euro Standard	FBSD		FBDD		NFB6		NFB7		NFB8		NFB9		HGV7		HGV8		HGV9	
	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)
pre-Euro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro III	0.0737	-	0.0737	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro IV	0.0573	-	0.1535	-	0.0573	-	0.0573	-	0.0573	-	0.0573	-	0.0144	-	0.0144	-	0.0144	-
Euro V	0.0474	-	0.1535	-	0.0474	-	0.0474	-	0.0474	-	0.0474	-	0.0059	-	0.023	-	0.023	-
Euro VI	0.0077	-	0.0225	-	0.0010	-	0.0077	-	0.0077	-	0.0077	-	0.0059	-	0.0037	-	0.0037	-

Source : EPD Technical Note on "Calculation of Start Emissions in Air Quality Impact Assessment" ([https://www.epd.gov.hk/epd/sites/default/files/epd/Technical\\_Note\\_on\\_Calculation\\_of\\_Start\\_Emissions\\_in\\_Air\\_Quality\\_Impact\\_Assessment.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/Technical_Note_on_Calculation_of_Start_Emissions_in_Air_Quality_Impact_Assessment.pdf)).

For Euro III of FBSD, no emission factor has been provided, emission factor is assumed the same as FBDD for conservative assessments.

For Euro IV and V of NFB6, no emission factor has been provided, emission factor is assumed the same as NFB8/9 for conservative assessments.

For Euro V of NFB7, no emission factor has been provided, emission factor is assumed the same as NFB8/9 for conservative assessments.

For Euro IV of HGV7, no emission factor has been provided, emission factor is assumed the same as HGV8/9 for conservative assessments.

**Composite Idling Emission Factors**

Euro Standard	Composite Idling Emission Factors (g/s)																	
	FBSD		FBDD		NFB6		NFB7		NFB8		NFB9		HGV7		HGV8		HGV9	
	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM
pre-Euro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro III	4.56E-13	-	3.77E-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro IV	1.44E-12	-	3.70E-13	-	1.54E-09	-	2.33E-07	-	2.06E-07	-	0.00E+00	-	3.51E-07	-	2.18E-07	-	4.42E-07	-
Euro V	3.17E-12	-	1.15E-11	-	6.42E-09	-	1.55E-06	-	1.22E-06	-	0.00E+00	-	1.11E-06	-	3.45E-06	-	4.79E-06	-
Euro VI	7.70E-03	-	2.25E-02	-	1.00E-03	-	7.70E-03	-	7.70E-03	-	7.70E-03	-	5.90E-03	-	3.70E-03	-	3.70E-03	-
<b>Composite Emission Factors(g/s)</b>	<b>7.70E-03</b>	<b>-</b>	<b>2.25E-02</b>	<b>-</b>	<b>1.00E-03</b>	<b>-</b>	<b>7.70E-03</b>	<b>-</b>	<b>7.70E-03</b>	<b>-</b>	<b>7.70E-03</b>	<b>-</b>	<b>5.90E-03</b>	<b>-</b>	<b>3.70E-03</b>	<b>-</b>	<b>3.70E-03</b>	<b>-</b>





**Warm Idling**

**Summary of Engine Type Distribution (Year 2048)**

Euro Standard	Estimated engine type distribution								
	PLB-Diesel	PV4-Diesel	PV5-Diesel	PLB-LPG	PV4-LPG	PV5-LPG	PLB-Petrol	PV4-Petrol	PV5-Petrol
pre-Euro	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro I	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro II	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro III	0.00%	0.00%	0.00%	0.72%	0.00%	4.43%	0.00%	10.52%	0.00%
Euro IV	0.00%	0.00%	0.02%	0.67%	0.00%	19.06%	0.00%	45.79%	20.01%
Euro V	0.00%	0.00%	0.20%	98.61%	0.00%	76.51%	0.00%	43.69%	74.26%
Euro VI	100.00%	100.00%	99.79%	0.00%	0.00%	0.00%	0.00%	0.00%	5.72%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Basic Idling Emission Factors**

Euro Standard	Petrol		Diesel	
	NOx (g/h)	PM (g/h)	NOx (g/h)	PM (g/h)
pre-Euro	0.66	0.01	6.52	1.59
Euro I	1.69	0.01	5.88	0.63
Euro II	0.6	0.01	5.53	0.54
Euro III	0.34	0	4.12	0.1
Euro IV	0.17	0	3.62	0.16
Euro V	0.06	0	3.6	0.02
Euro VI	0.07	0	1.28	0.02

Source : Road tunnels: Vehicle emission and air demand for ventilation, PIARC, 2019

**Composite Idling Emission Factors**

Euro Standard	Composite Idling Emission Factors (g/h)																		
	PLB-Diesel		PV4-Diesel		PV5-Diesel		PLB-LPG		PV4-LPG		PV5-LPG		PLB-Petrol		PV4-Petrol		PV5-Petrol		
	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	
pre-Euro	0.000	0.000	0.000	0.000	0.000	0.000	-	0.000	-	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Euro I	0.000	0.000	0.000	0.000	0.000	0.000	-	0.000	-	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Euro II	0.000	0.000	0.000	0.000	0.000	0.000	-	0.000	-	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Euro III	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.036	0.000	0.000	0.000
Euro IV	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.001	0.030	0.000	0.000	0.078	0.000	0.034	0.000	0.000
Euro V	0.000	0.000	0.000	0.000	0.007	0.000	0.004	0.020	0.000	0.000	0.003	0.015	0.000	0.000	0.026	0.000	0.045	0.000	0.000
Euro VI	1.280	0.020	1.280	0.020	1.277	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000
<i>Composite Emission Factors(g/h)</i>	<i>1.280</i>	<i>0.02</i>	<i>1.280</i>	<i>0.02</i>	<i>1.285</i>	<i>0.02</i>	<i>0.004</i>	<i>0.02</i>	<i>0.000</i>	<i>0.00</i>	<i>0.004</i>	<i>0.05</i>	<i>0.000</i>	<i>0.000</i>	<i>0.140</i>	<i>0.000</i>	<i>0.083</i>	<i>0.00</i>	<i>0.00</i>
<b>Composite Emission Factors (g/s)</b>	<b>3.56E-04</b>	<b>5.56E-06</b>	<b>3.56E-04</b>	<b>5.56E-06</b>	<b>3.57E-04</b>	<b>5.56E-06</b>	<b>1.09E-06</b>	<b>5.98E-06</b>	<b>0.00E+00</b>	<b>0.00E+00</b>	<b>1.15E-06</b>	<b>1.40E-05</b>	<b>0.00E+00</b>	<b>0.00E+00</b>	<b>3.88E-05</b>	<b>0.00E+00</b>	<b>2.29E-05</b>	<b>0.00E+00</b>	<b>0.00E+00</b>

NOx cold idling emission factors for are adopted as hot idling emission factors for LPG vehicles (Ref.: EIA for Revised Trunk Road T4 in Sha Tin (Register No.: AEIAR-231/2021))

PM idling emission factors for Diesel vehicles are adopted for LPG vehicles (Ref.: EIA for Revised Trunk Road T4 in Sha Tin (Register No.: AEIAR-231/2021))

**Cold Idling for diesel vehicles with SCR**

**Summary of Engine Type Distribution (Year 2048)**

Euro Standard	Estimated engine type distribution								
	PLB-Diesel	PV4-Diesel	PV5-Diesel	PLB-LPG	PV4-LPG	PV5-LPG	PLB-Petrol	PV4-Petrol	PV5-Petrol
pre-Euro	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro I	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro II	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro III	0.00%	0.00%	0.00%	0.72%	0.00%	4.43%	0.00%	10.52%	0.00%
Euro IV	0.00%	0.00%	0.02%	0.67%	0.00%	19.06%	0.00%	45.79%	20.01%
Euro V	0.00%	0.00%	0.20%	98.61%	0.00%	76.51%	0.00%	43.69%	74.26%
Euro VI	100.00%	100.00%	99.79%	0.00%	0.00%	0.00%	0.00%	0.00%	5.72%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Basic Idling Emission Factors**

Euro Standard	PLB-Diesel		PV4-Diesel		PV5-Diesel		PLB-LPG		PV4-LPG		PV5-LPG		PLB-Petrol		PV4-Petrol		PV5-Petrol	
	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)	NOx (g/s)	PM (g/s)
pre-Euro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro III	0.001	-	0.001	-	0.001	-	0.0092	-	0.0092	-	0.0092	-	-	-	-	-	-	-
Euro IV	0.001	-	0.001	-	0.001	-	0.0039	-	0.0039	-	0.0039	-	-	-	-	-	-	-
Euro V	0.001	-	0.001	-	0.001	-	0.0039	-	0.0039	-	0.0039	-	-	-	-	-	-	-
Euro VI	0.001	-	0.001	-	0.001	-	0.0039	-	0.0039	-	0.0039	-	-	-	-	-	-	-

Source : EPD Technical Note on "Calculation of Start Emissions in Air Quality Impact Assessment" ([https://www.epd.gov.hk/epd/sites/default/files/epd/Technical\\_Note\\_on\\_Calculation\\_of\\_Start\\_Emissions\\_in\\_Air\\_Quality\\_Impact\\_Assessment.pdf](https://www.epd.gov.hk/epd/sites/default/files/epd/Technical_Note_on_Calculation_of_Start_Emissions_in_Air_Quality_Impact_Assessment.pdf).)

For Euro III, Euro IV and Euro V of PLB-Diesel, no emission factor has been provided, emission factor for warm idling is adopted. (Ref.: EIA for Revised Trunk Road T4 in Sha Tin (Register No.: AEIAR-231/2021))

For Euro III, Euro IV and Euro V of PV5-Diesel, no emission factor has been provided, , emission factor for warm idling is adopted. (Ref.: EIA for Revised Trunk Road T4 in Sha Tin (Register No.: AEIAR-231/2021))

For PV4-Diesel, no emission factor has been provided, emission factor is assumed the same as PV5-Diesel for conservative assessments.

For PV4-LPG and PV5-LPG, no emission factor has been provided, emission factor is assumed the same as PLB-LPG for conservative assessments.

**Composite Idling Emission Factors**

Euro Standard	Composite Idling Emission Factors (g/s)																	
	PLB-Diesel		PV4-Diesel		PV5-Diesel		PLB-LPG		PV4-LPG		PV5-LPG		PLB-Petrol		PV4-Petrol		PV5-Petrol	
	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM	NOx	PM
pre-Euro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Euro III	0.00E+00	-	0.00E+00	-	0.00E+00	-	6.63E-05	-	0.00E+00	-	4.08E-04	-	-	-	-	-	-	-
Euro IV	2.74E-11	-	0.00E+00	-	1.66E-07	-	2.63E-05	-	0.00E+00	-	7.43E-04	-	-	-	-	-	-	-
Euro V	3.05E-10	-	3.45E-08	-	1.98E-06	-	3.85E-03	-	0.00E+00	-	2.98E-03	-	-	-	-	-	-	-
Euro VI	1.00E-03	-	1.00E-03	-	9.98E-04	-	0.00E+00	-	0.00E+00	-	0.00E+00	-	-	-	-	-	-	-
<b>Composite Emission Factors(g/s)</b>	<b>1.00E-03</b>	-	<b>1.00E-03</b>	-	<b>1.00E-03</b>	-	<b>3.94E-03</b>	-	<b>0.00E+00</b>	-	<b>4.13E-03</b>	-	<b>0.00E+00</b>	-	<b>0.00E+00</b>	-	<b>0.00E+00</b>	-

**Annex - 2**

Source Locations for PTIs and HGV/  
Coach Parking  
(Lam Tei Area)



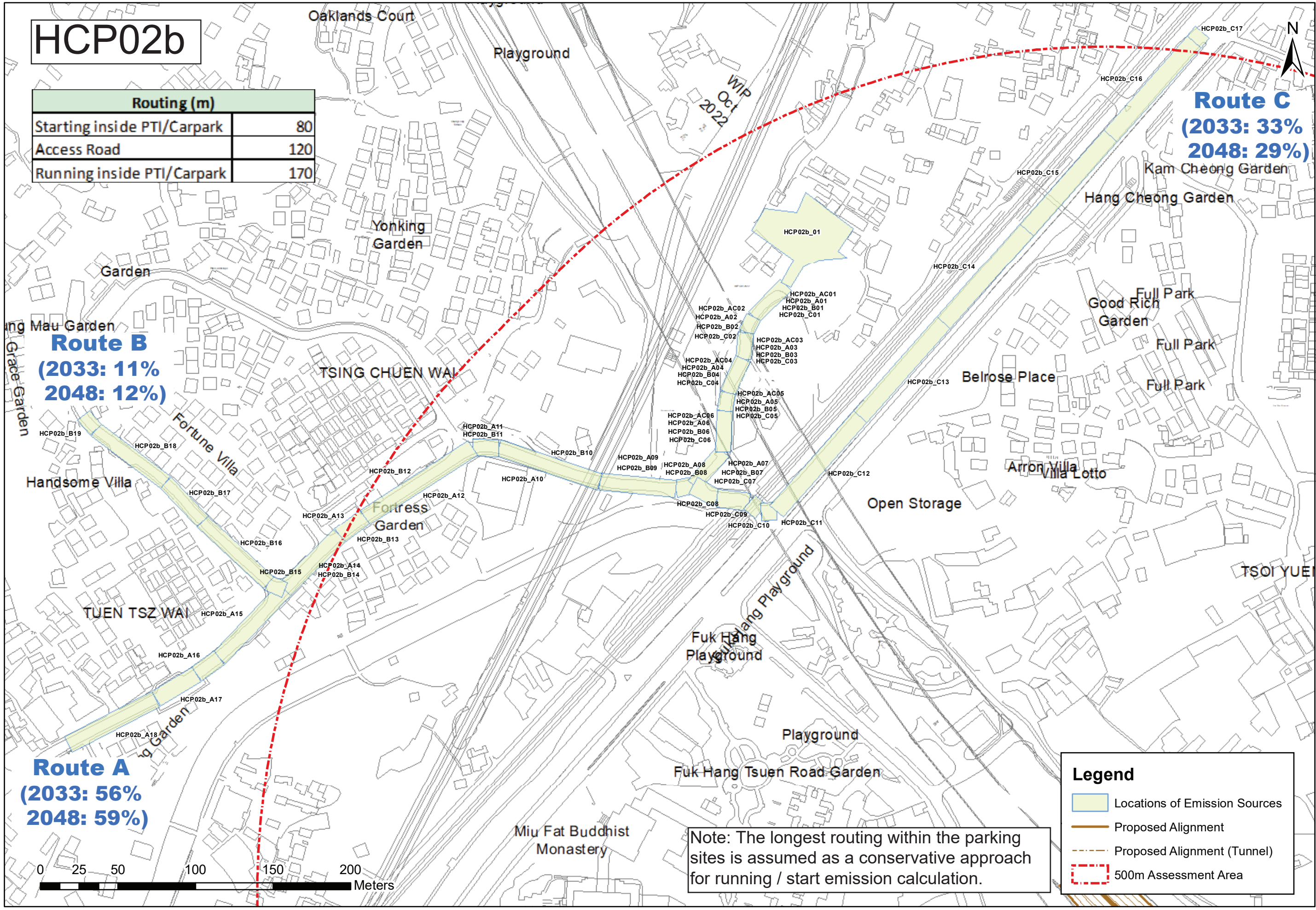
# HCP02b

Routing (m)	
Starting inside PTI/Carpark	80
Access Road	120
Running inside PTI/Carpark	170

**Route C**  
(2033: 33%  
2048: 29%)

**Route B**  
(2033: 11%  
2048: 12%)

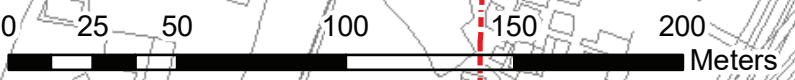
**Route A**  
(2033: 56%  
2048: 59%)



**Legend**

- Locations of Emission Sources
- Proposed Alignment
- Proposed Alignment (Tunnel)
- 500m Assessment Area

Note: The longest routing within the parking sites is assumed as a conservative approach for running / start emission calculation.





# HCP04

Routing (m)	
Starting inside PTI/Carpark	150
Access Road	40
Running inside PTI/Carpark	265

## Route C (2033, 2048: 50%)

## Route A (2033, 2048: 33%)

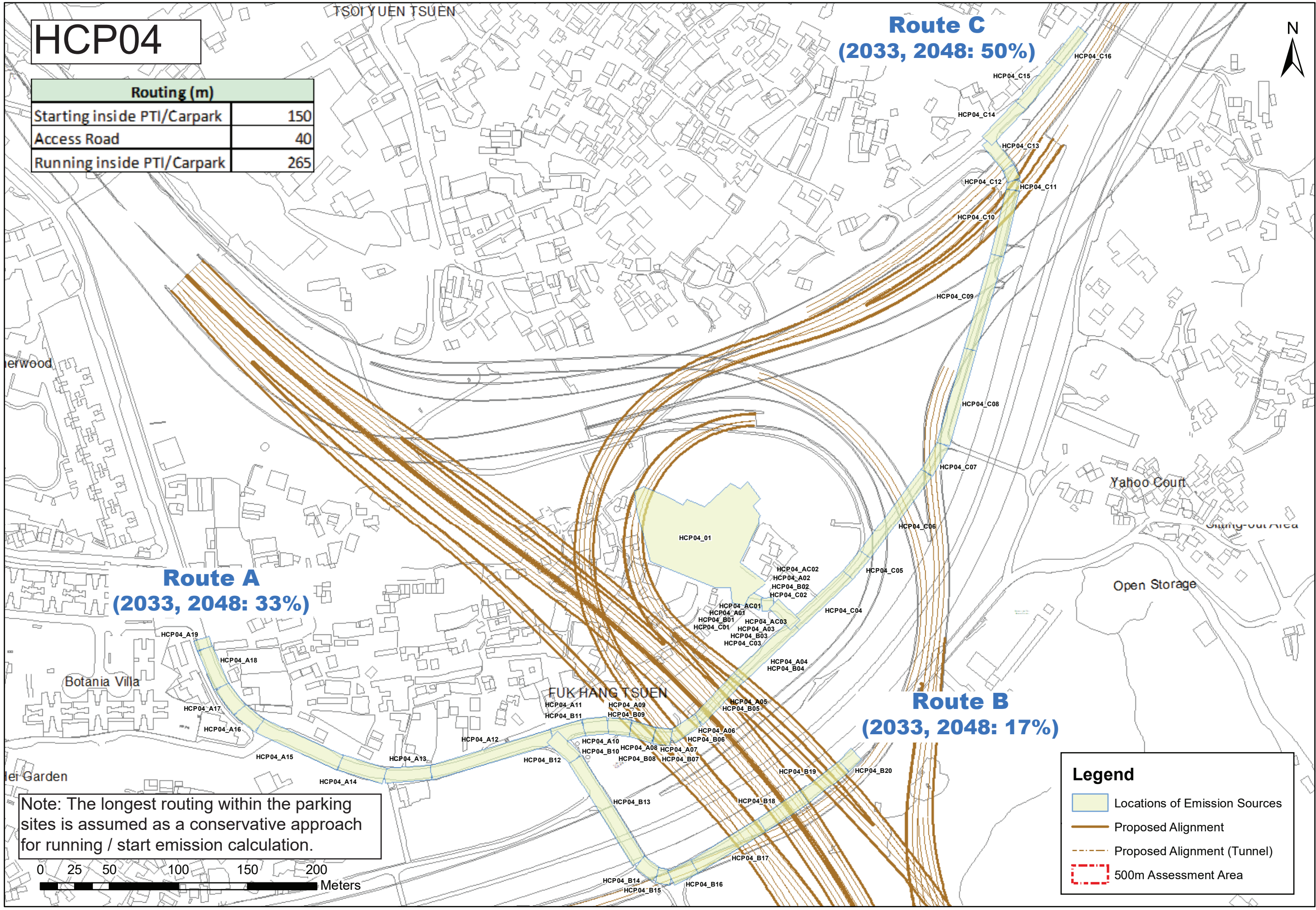
## Route B (2033, 2048: 17%)

Note: The longest routing within the parking sites is assumed as a conservative approach for running / start emission calculation.



**Legend**

- Locations of Emission Sources
- Proposed Alignment
- Proposed Alignment (Tunnel)
- 500m Assessment Area





# HCP09

Routing (m)	
Starting inside PTI/Carpark	100
Running inside PTI/Carpark	215



**Route A**  
(2033, 2048: 56%)

**Route B**  
(2033, 2048: 22%)

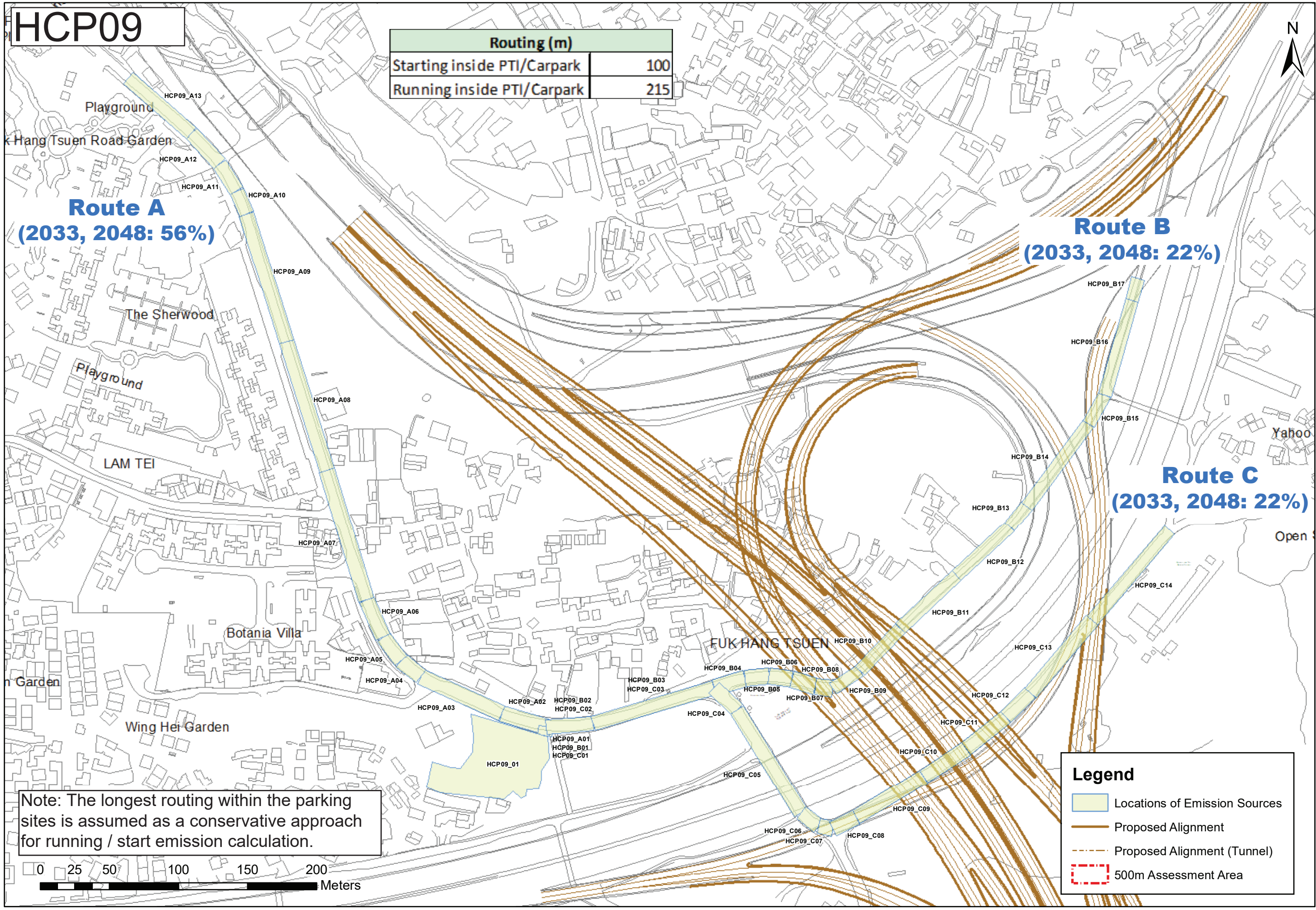
**Route C**  
(2033, 2048: 22%)

Note: The longest routing within the parking sites is assumed as a conservative approach for running / start emission calculation.



**Legend**

- Locations of Emission Sources
- Proposed Alignment
- Proposed Alignment (Tunnel)
- 500m Assessment Area





# HCP11

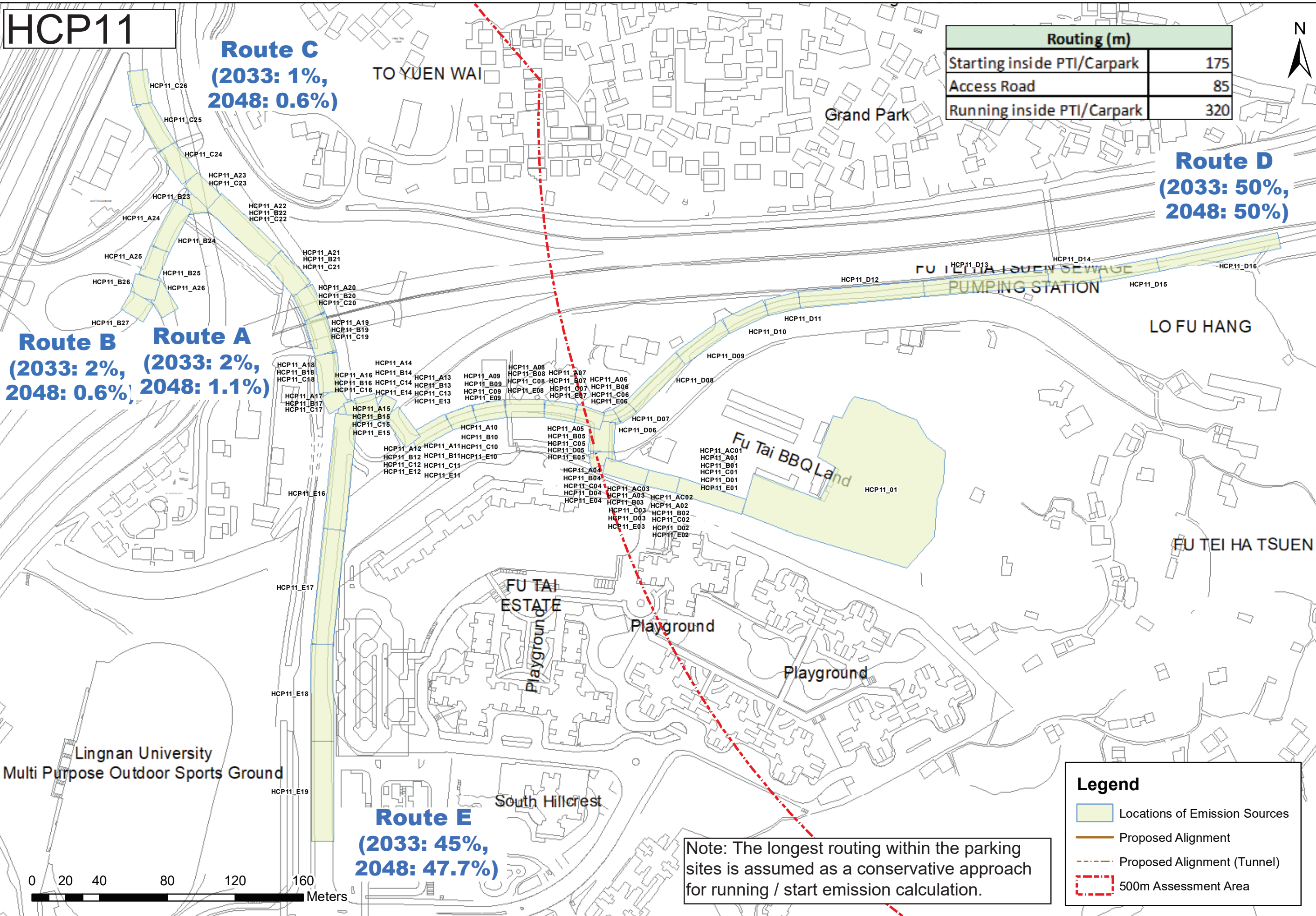
**Route C**  
(2033: 1%,  
2048: 0.6%)

**Route B** (2033: 2%,  
2048: 0.6%)  
**Route A** (2033: 2%,  
2048: 1.1%)

**Route E**  
(2033: 45%,  
2048: 47.7%)

**Route D**  
(2033: 50%,  
2048: 50%)

Routing (m)	
Starting inside PTI/Carpark	175
Access Road	85
Running inside PTI/Carpark	320



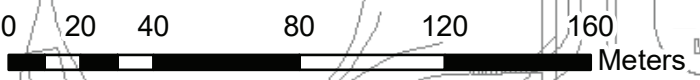
Lingnan University  
Multi Purpose Outdoor Sports Ground

South Hillcrest

Note: The longest routing within the parking sites is assumed as a conservative approach for running / start emission calculation.

**Legend**

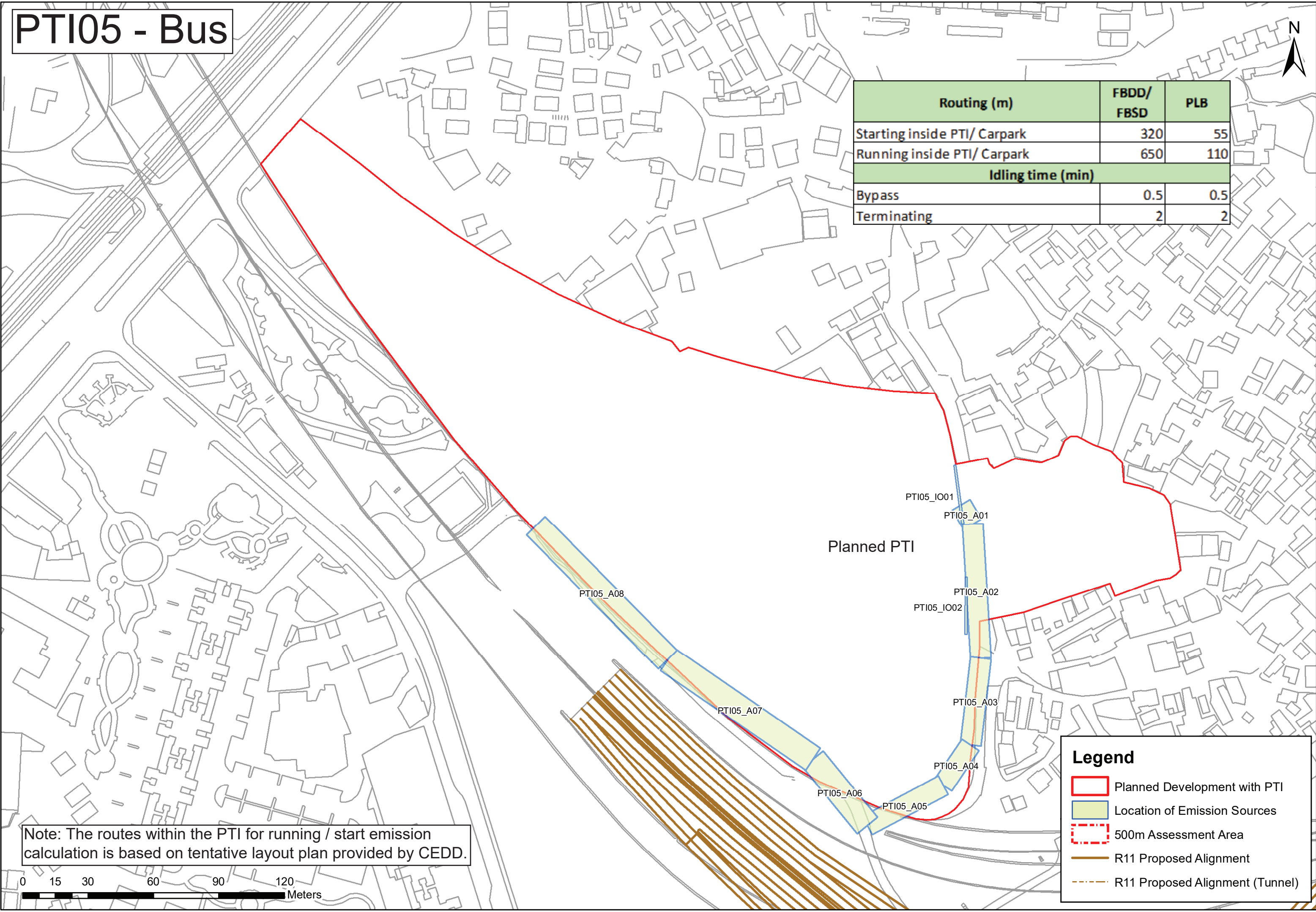
- Locations of Emission Sources
- Proposed Alignment
- Proposed Alignment (Tunnel)
- 500m Assessment Area



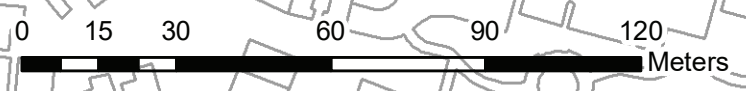
# PTI05 - Bus



Routing (m)	FBDD/ FBSD	PLB
Starting inside PTI/ Carpark	320	55
Running inside PTI/ Carpark	650	110
Idling time (min)		
Bypass	0.5	0.5
Terminating	2	2



Note: The routes within the PTI for running / start emission calculation is based on tentative layout plan provided by CEDD.



**Legend**

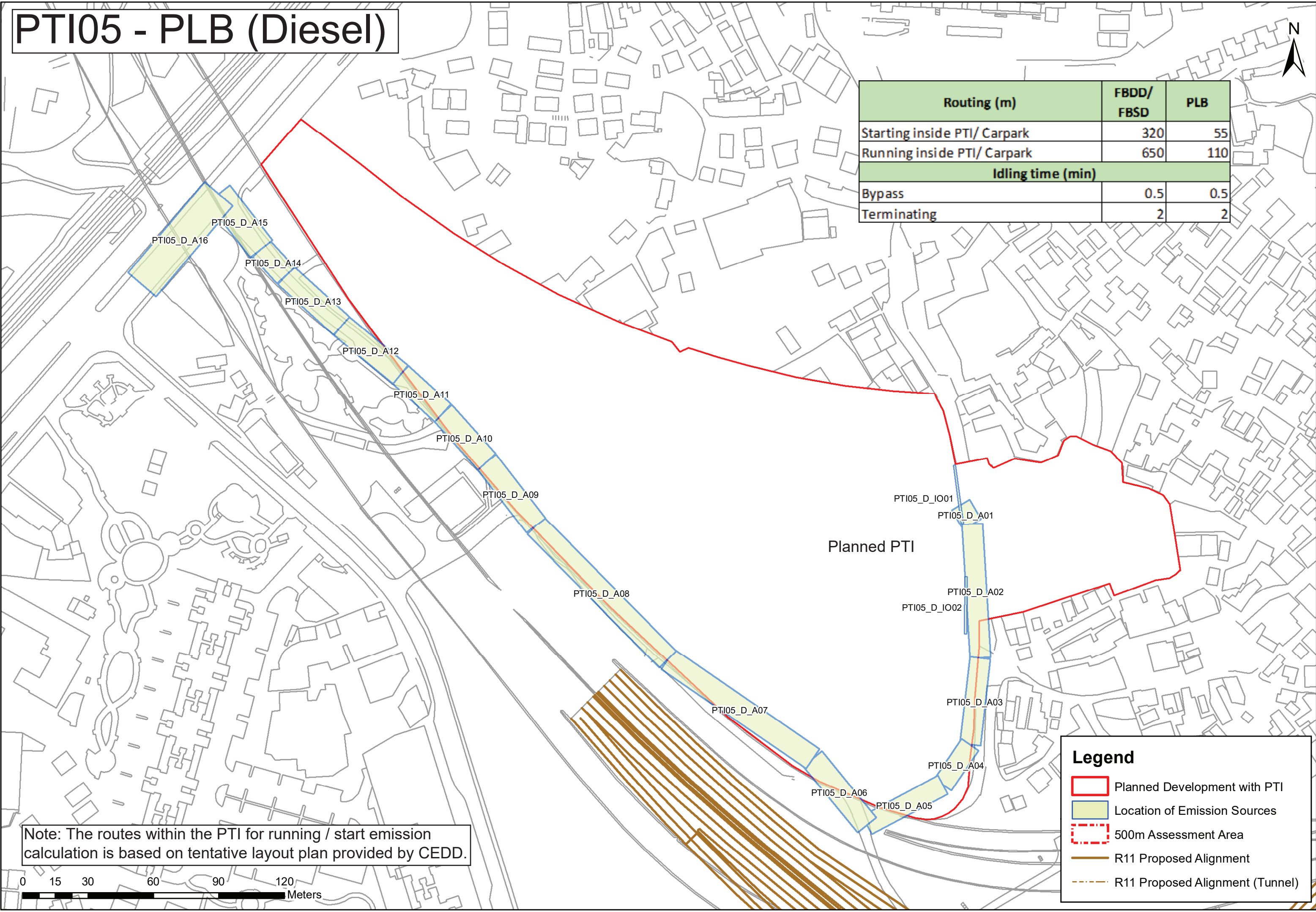
- Planned Development with PTI
- Location of Emission Sources
- 500m Assessment Area
- R11 Proposed Alignment
- R11 Proposed Alignment (Tunnel)



# PTI05 - PLB (Diesel)



Routing (m)	FBDD/ FBSD	PLB
Starting inside PTI/ Carpark	320	55
Running inside PTI/ Carpark	650	110
Idling time (min)		
Bypass	0.5	0.5
Terminating	2	2



Note: The routes within the PTI for running / start emission calculation is based on tentative layout plan provided by CEDD.

**Legend**

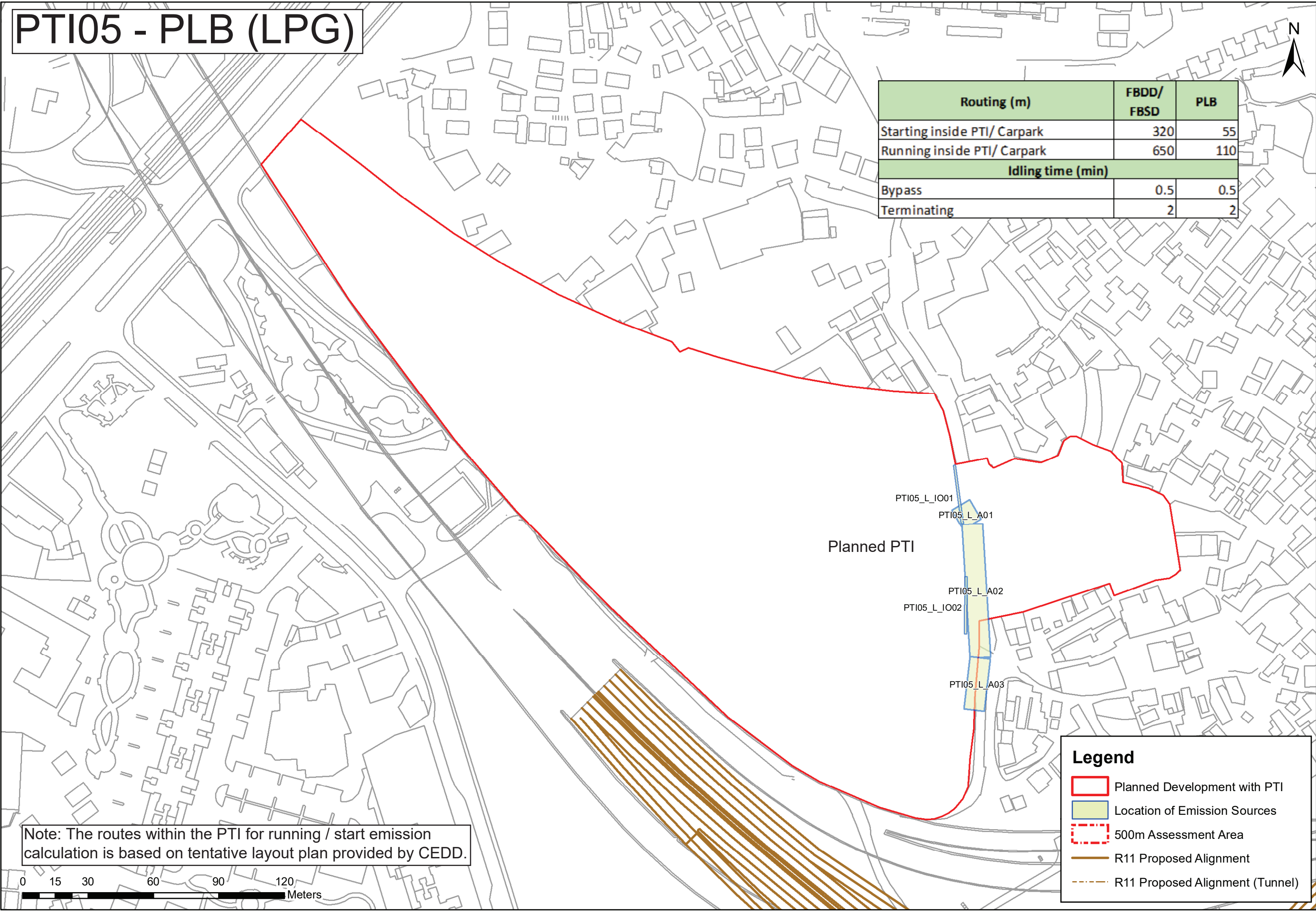
- Planned Development with PTI
- Location of Emission Sources
- 500m Assessment Area
- R11 Proposed Alignment
- R11 Proposed Alignment (Tunnel)



# PTI05 - PLB (LPG)



Routing (m)	FBDD/ FBSD	PLB
Starting inside PTI/ Carpark	320	55
Running inside PTI/ Carpark	650	110
Idling time (min)		
Bypass	0.5	0.5
Terminating	2	2



Note: The routes within the PTI for running / start emission calculation is based on tentative layout plan provided by CEDD.



**Legend**

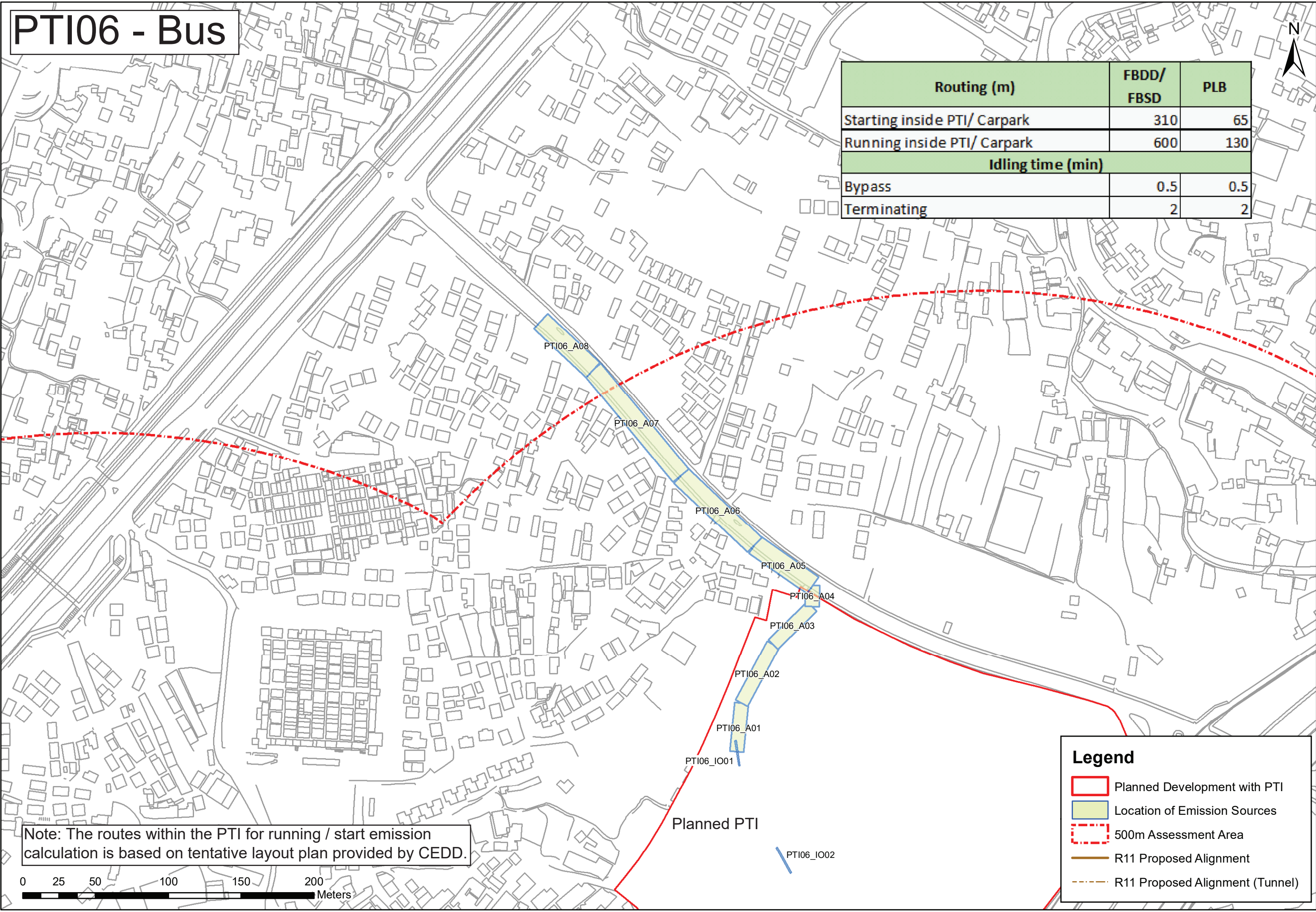
- Planned Development with PTI
- Location of Emission Sources
- 500m Assessment Area
- R11 Proposed Alignment
- R11 Proposed Alignment (Tunnel)



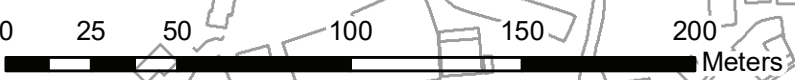
# PTI06 - Bus



Routing (m)	FBDD/ FBSD	PLB
Starting inside PTI/ Carpark	310	65
Running inside PTI/ Carpark	600	130
Idling time (min)		
Bypass	0.5	0.5
Terminating	2	2



Note: The routes within the PTI for running / start emission calculation is based on tentative layout plan provided by CEDD.



**Legend**

- Planned Development with PTI
- Location of Emission Sources
- 500m Assessment Area
- R11 Proposed Alignment
- R11 Proposed Alignment (Tunnel)

Planned PTI

PTI06\_IO02

PTI06\_A08

PTI06\_A07

PTI06\_A06

PTI06\_A05

PTI06\_A04

PTI06\_A03

PTI06\_A02

PTI06\_A01

PTI06\_IO01

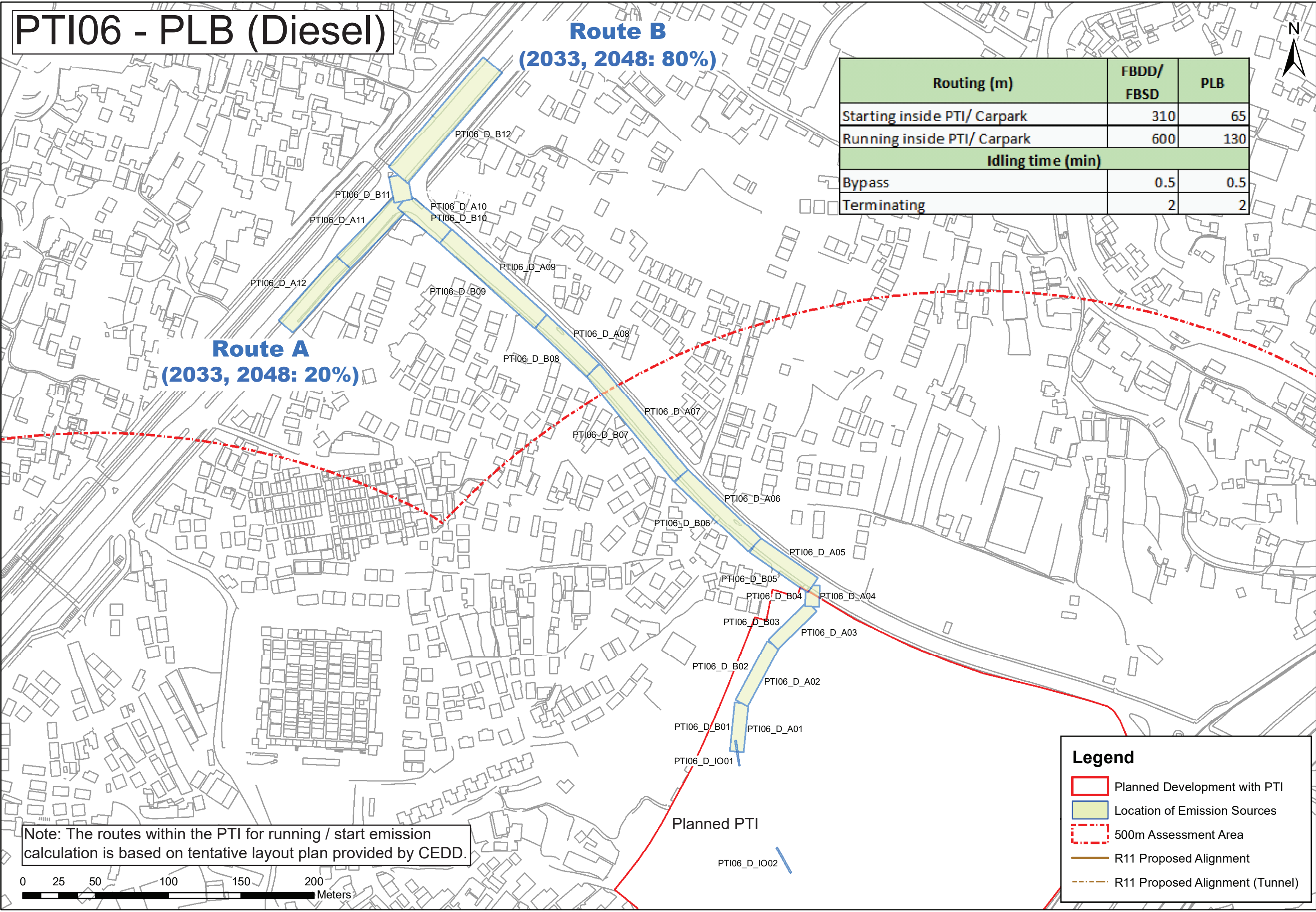


# PTI06 - PLB (Diesel)

**Route B**  
(2033, 2048: 80%)

**Route A**  
(2033, 2048: 20%)

Routing (m)	FBDD/ FBSD	PLB
Starting inside PTI/ Carpark	310	65
Running inside PTI/ Carpark	600	130
Idling time (min)		
Bypass	0.5	0.5
Terminating	2	2

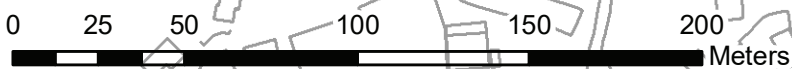


Note: The routes within the PTI for running / start emission calculation is based on tentative layout plan provided by CEDD.

Planned PTI

**Legend**

- Planned Development with PTI
- Location of Emission Sources
- 500m Assessment Area
- R11 Proposed Alignment
- R11 Proposed Alignment (Tunnel)

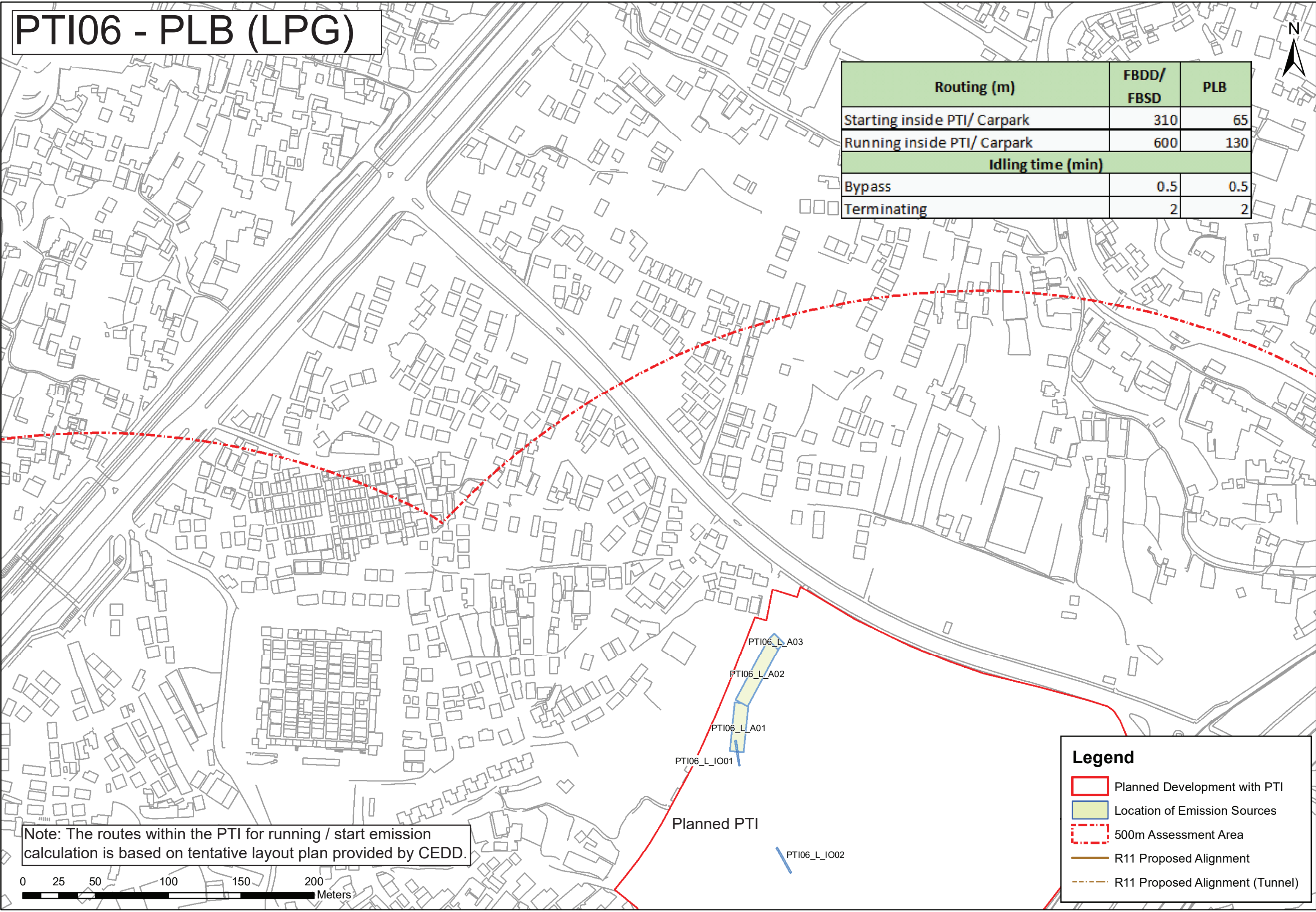




# PTI06 - PLB (LPG)



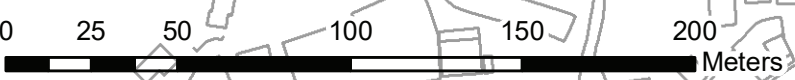
Routing (m)	FBDD/ FBSD	PLB
Starting inside PTI/ Carpark	310	65
Running inside PTI/ Carpark	600	130
Idling time (min)		
Bypass	0.5	0.5
Terminating	2	2



Note: The routes within the PTI for running / start emission calculation is based on tentative layout plan provided by CEDD.

**Legend**

- Planned Development with PTI
- Location of Emission Sources
- 500m Assessment Area
- R11 Proposed Alignment
- R11 Proposed Alignment (Tunnel)



**Annex – 3**

Emission Inventory for PTIs and  
HGV/ Coach Parking  
(Lam Tei Area, Year 2033)















HCP04

INDEX

Vehicle Type: NFB6 11

Hour	No. of Trip <sup>[1]</sup>																						
	Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720		
0	1																						
1	2																						
2	3																						
3	4																						
4	5																						
5	6																						
6	7																						
7	8																					2	
8	9																						
9	10																					1	
10	11																						
11	12																					1	
12	13																						
13	14																						
14	15																						
15	16																						
16	17																					1	
17	18																						
18	19																						
19	20																						
20	21																						
21	22																						
22	23																						
23	0																						

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

INDEX

Vehicle Type: NFB7 12

Hour	No. of Trip <sup>[1]</sup>																						
	Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720		
0	1																						
1	2																						
2	3																						
3	4																						
4	5																						
5	6																						
6	7																						
7	8																					1	
8	9																						
9	10																					1	
10	11																						
11	12																					1	
12	13																						
13	14																						
14	15																						
15	16																						
16	17																					1	
17	18																						
18	19																						
19	20																						
20	21																						
21	22																						
22	23																						
23	0																						

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	150	21%	Bypass route
Starting on Public Road	510	73%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	40	6%	
Access Road - Departure	40		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity	RSP						FSP														
			Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road									
0 to 8760	°C	%																					
1	8	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	6	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	7	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	7	26	0.00E+00	0.00E+00	0.00E+00	1.02E-05	0.00E+00	3.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.42E-06	0.00E+00	2.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	7	23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	8	22	0.00E+00	0.00E+00	0.00E+00	5.12E-06	0.00E+00	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-06	0.00E+00	1.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	8	22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	8	16	0.00E+00	0.00E+00	0.00E+00	5.12E-06	0.00E+00	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-06	0.00E+00	1.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	9	19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	8	18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	8	19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	8	20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	8	22	0.00E+00	0.00E+00	0.00E+00	5.12E-06	0.00E+00	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-06	0.00E+00	1.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	8	22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	8	25	0.00E+00	0.00																			





Emission Inventory for PTI, Bus Depot & Coach Parking (RSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>(1)</sup>	Area Polygon Source											Hourly Emission Rate (g/s or g/s/sq. m)																				
				X	Y	Base Elevation	Release Height <sup>(2)</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>(3)</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
				(m)	(m)	(m)	(m)	(m2)		(m)																									
HCP04	Carpark near Tat Fuk Road	HCP04_01	AREAPOLY	817041.1	831045.1	18.5	3.5	5137.6	817041.1 831045.1 817047.2 831048.9 817065.6 831041.3 817075.9 831035.3 817079.1 831039.5 817091.8 831034.2 817110.4 831051.2 817117.5 831047.2 817123.1 831052.2 817132.1 831039.9 817127.1 831035.0 817132.1 831027.7 817130.9 831026.1 817130.8 831021.3 817117.3 830993.0 817136.7 830978.7 817123.9 830968.9 817120.4 830962.1 817111.6 830964.1 817110.8 830974.9 817099.6 830975.0 817052.5 830993.6 817043.0 831030.6 817041.1 831045.1	24	3.26	1.40E-09	1.40E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-08	0.00E+00	5.85E-09	2.81E-09	7.88E-09	2.81E-09	2.81E-09	0.00E+00	2.81E-09	8.66E-09	5.62E-09	8.42E-09	7.02E-09	7.02E-09	1.40E-09	1.40E-09	1.40E-09

- Note:
1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
  3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.



Emission Inventory for PTI, Bus Depot & Coach Parking (FSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>(1)</sup>	Area Polygon Source											Hourly Emission Rate (g/s or g/s/sq. m)																				
				X	Y	Base Elevation	Release Height <sup>(2)</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>(3)</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
				(m)	(m)	(m)	(m)	(m2)		(m)																									
HCP04	Carpark near Tat Fuk Road	HCP04_01	AREAPOLY	817041.1	831045.1	18.5	3.5	5137.6	817041.1 831045.1 817047.2 831048.9 817065.6 831041.3 817075.9 831035.3 817079.1 831039.5 817091.8 831034.2 817110.4 831051.2 817117.5 831047.2 817123.1 831052.2 817132.1 831039.9 817127.1 831035.0 817132.1 831027.7 817130.9 831026.1 817130.8 831021.3 817117.3 830993.0 817136.7 830978.7 817123.9 830968.9 817120.4 830962.1 817111.6 830964.1 817110.8 830974.9 817099.6 830975.0 817052.5 830993.6 817043.0 831030.6 817041.1 831045.1	24	3.26	1.29E-09	1.29E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-08	0.00E+00	5.38E-09	2.58E-09	7.25E-09	2.58E-09	2.58E-09	0.00E+00	2.58E-09	7.96E-09	5.16E-09	7.75E-09	6.45E-09	6.45E-09	1.29E-09	1.29E-09	1.29E-09

- Note:
1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
  3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.



INDEX

Vehicle Type: HGV9      17

Hour	No. of Trip <sup>[1]</sup>																						
	Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720		
0	1																						
1	2																						
2	3																						
3	4																						
4	5																						
5	6																						
6	7																						
7	8																					5	
8	9																					7	
9	10		1		1	2	2	2	1														
10	11		1		1	2	2	2	1														
11	12		1		1	2	2	2	1														
12	13		1		1	2	2	2	1														
13	14		1		1	2	2	2	1														
14	15		1		1	2	2	2	1														
15	16		1		1	2	2	2	1														
16	17		1		1	2	2	2	1														
17	18		2						1														
18	19		2						1														
19	20																						
20	21																						
21	22																						
22	23																						
23	0																						

Day: 1

Hour	Temperature °C	Relative Humidity %	RSP						FSP														
			Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road									
0 to 8760																							
1	8	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	6	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	7	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	7	26	0.00E+00	0.00E+00	2.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	7	23	0.00E+00	0.00E+00	2.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	8	22	0.00E+00	0.00E+00	3.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	8	22	0.00E+00	0.00E+00	3.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	8	16	0.00E+00	0.00E+00	3.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	9	19	0.00E+00	0.00E+00	3.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	8	18	0.00E+00	0.00E+00	3.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	8	19	0.00E+00	0.00E+00	3.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	8	20	0.00E+00	0.00E+00	3.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	8	22	0.00E+00	0.00E+00	3.64E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	8	22	0.00E+00	0.00E+00	1.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	8	25	0.00E+00	0.00E+00	1.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	8	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	8	27	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	8	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	8	30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	8	29	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.





Emission Inventory for PTI, Bus Depot & Coach Parking (RSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source											Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m <sup>2</sup> )																												(m)		
HCP09	Carpark near To Lai Road	HCP09_01	AREAPOLY	816806.1	830848.6	16.1	3.4	3346.8	816806.1 830848.6 816861.9 830832.3 816862.7 830816.6 816856.9 830807.7 816857.0 830801.1 816855.4 830794.4 816846.7 830793.5 816846.1 830788.7 816842.4 830787.5 816836.3 830792.4 816830.4 830786.7 816783.8 830791.5 816773.8 830795.1 816778.0 830814.3 816791.8 830810.0 816798.4 830809.6 816807.1 830821.3 816807.9 830832.9 816806.1 830848.6	19	3.18	3.50E-09	3.50E-09	3.50E-09	3.50E-09	3.50E-09	3.50E-09	3.50E-09	1.08E-08	1.45E-08	1.99E-08	1.99E-08	1.99E-08	1.99E-08	1.99E-08	1.99E-08	1.99E-08	1.99E-08	5.37E-09	5.37E-09	3.50E-09	3.50E-09	3.50E-09	3.50E-09	3.50E-09	3.50E-09		

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.



Emission Inventory for PTI, Bus Depot & Coach Parking (FSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source											Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m <sup>2</sup> )																												(m)		
HCP09	Carpark near To Lai Road	HCP09_01	AREAPOLY	816806.1	830848.6	16.1	3.4	3346.8	816806.1 830848.6 816861.9 830832.3 816862.7 830816.6 816856.9 830807.7 816857.0 830801.1 816855.4 830794.4 816846.7 830793.5 816846.1 830788.7 816842.4 830787.5 816836.3 830792.4 816830.4 830786.7 816783.8 830791.5 816773.8 830795.1 816778.0 830814.3 816791.8 830810.0 816798.4 830809.6 816807.1 830821.3 816807.9 830832.9 816806.1 830848.6	19	3.18	3.22E-09	3.22E-09	3.22E-09	3.22E-09	3.22E-09	3.22E-09	3.22E-09	9.93E-09	1.33E-08	1.83E-08	1.83E-08	1.83E-08	1.83E-08	1.83E-08	1.83E-08	1.83E-08	1.83E-08	1.83E-08	4.94E-09	4.94E-09	3.22E-09	3.22E-09	3.22E-09	3.22E-09	3.22E-09		

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.

HCP11

INDEX

Vehicle Type: NFB6 11

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				1
8	9																				1
9	10																				
10	11																				
11	12									1											1
12	13																				
13	14																				
14	15																				
15	16																				
16	17																				
17	18		1																		
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

INDEX

Vehicle Type: NFB7 12

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				1
8	9																				1
9	10																				
10	11																				
11	12									1											1
12	13																				
13	14																				
14	15																				
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity	RSP						FSP												
			Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road							
0 to 8760	°C	%																			
1	8	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	6	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	7	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	7	26	0.00E+00	0.00E+00	0.00E+00	6.18E-06	0.00E+00	3.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-06	0.00E+00	3.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	7	23	0.00E+00	0.00E+00	0.00E+00	6.18E-06	0.00E+00	3.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-06	0.00E+00	3.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	8	22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	8	22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	8	16	0.00E+00	0.00E+00	0.00E+00	1.24E-05	0.00E+00	6.56E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-05	0.00E+00	6.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	9	19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	8	18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	8	19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	8	20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	8	22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	8	22	0.00E+00	0.00E+00	0.00E+00	6.18E-06	0.00E+00	3.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-06	0.00E+00	3.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	8	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	8	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	8	27	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	8	26	0.00E+00	0.00E+00																	



INDEX

Vehicle Type: HGV8 7

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																1				1
3	4																1				1
4	5																1				1
5	6																1				1
6	7																1				1
7	8																				3
8	9																2				2
9	10																				5
10	11																				
11	12																				
12	13																				
13	14																				
14	15																				2
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

Day: 1

Hour	Temperature	Relative Humidity	RSP						FSP													
			Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road								
0 to 8760	°C	%																				
1	8	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	7	24	0.00E+00	0.00E+00	1.26E-05	0.00E+00	6.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	6	25	0.00E+00	0.00E+00	1.26E-05	0.00E+00	6.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	6	26	0.00E+00	0.00E+00	1.26E-05	0.00E+00	6.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	7	26	0.00E+00	0.00E+00	1.26E-05	0.00E+00	6.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	6	26	0.00E+00	0.00E+00	1.26E-05	0.00E+00	6.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	7	26	0.00E+00	0.00E+00	1.89E-05	0.00E+00	1.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	7	23	0.00E+00	0.00E+00	2.52E-05	0.00E+00	1.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	8	22	0.00E+00	0.00E+00	3.15E-05	0.00E+00	1.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	8	22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	8	16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	9	19	0.00E+00	0.00E+00	1.26E-05	0.00E+00	6.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	8	18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	8	19	0.00E+00	0.00E+00	1.26E-05	0.00E+00	6.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	8	20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	8	22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	8	22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	8	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	8	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	8	27	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	8	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	8	30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	8	29	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

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Vehicle Type: HGV9 17

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				1
3	4																				1
4	5																				1
5	6																				1
6	7																				1
7	8																				7
8	9																				2
9	10																				
10	11																				
11	12																				
12	13																				
13	14																				
14	15																				4
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				







Emission Inventory for PTI, Bus Depot & Coach Parking (RSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>(1)</sup>	Area Polygon Source					Source Points String	Number of Points	Vertical Dim. (Sz) <sup>(3)</sup>	Hourly Emission Rate (g/s or g/s/sq. m)																								
				X (m)	Y (m)	Base Elevation (m)	Release Height <sup>(2)</sup> (m)	Source Area (m2)				Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
HCP11	Carpark near Fu Hang Road	HCP11_01	AREAPOLY	816550.1	830599.7	10.0	3.1	6682.6	816550.1 830599.7 816553.1 830603.0 816565.8 830600.0 816574.2 830595.4 816589.6 830589.6 816595.9 830578.8 816606.4 830571.4 816605.5 830552.6 816601.5 830542.8 816600.0 830521.1 816583.8 830502.5 816517.7 830522.4 816486.7 830534.6 816493.7 830558.0 816532.5 830542.8 816541.6 830561.6 816531.2 830567.8 816540.5 830592.0 816545.5 830590.3 816550.1 830599.7	20	2.84	1.30E-09	1.30E-09	4.09E-09	4.09E-09	4.09E-09	4.09E-09	4.09E-09	4.09E-09	1.51E-08	1.10E-08	8.38E-09	1.30E-09	1.09E-08	1.88E-09	1.30E-09	1.38E-08	2.61E-09	2.61E-09	6.14E-09	1.80E-09	0.00E+00	1.30E-09	1.30E-09	1.30E-09	1.30E-09

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.





Emission Inventory for PTI, Bus Depot & Coach Parking (FSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>(1)</sup>	Area Polygon Source					Source Points String	Number of Points	Vertical Dim. (Sz) <sup>(3)</sup>	Hourly Emission Rate (g/s or g/s/sq. m)																								
				X (m)	Y (m)	Base Elevation (m)	Release Height <sup>(2)</sup> (m)	Source Area (m2)				Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
HCP11	Carpark near Fu Hang Road	HCP11_01	AREAPOLY	816550.1	830599.7	10.0	3.1	6682.6	816550.1 830599.7 816553.1 830603.0 816565.8 830600.0 816574.2 830595.4 816589.6 830589.6 816595.9 830578.8 816606.4 830571.4 816605.5 830552.6 816601.5 830542.8 816600.0 830521.1 816583.8 830502.5 816517.7 830522.4 816486.7 830534.6 816493.7 830558.0 816532.5 830542.8 816541.6 830561.6 816531.2 830567.8 816540.5 830592.0 816545.5 830590.3 816550.1 830599.7	20	2.84	1.20E-09	1.20E-09	3.76E-09	3.76E-09	3.76E-09	3.76E-09	3.76E-09	3.76E-09	1.39E-08	1.01E-08	7.71E-09	1.20E-09	9.99E-09	1.73E-09	1.20E-09	1.27E-08	2.40E-09	2.40E-09	5.65E-09	1.65E-09	0.00E+00	1.20E-09	1.20E-09	1.20E-09	1.20E-09

- Note:
1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
  3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.



**PTI05 - Bus**

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Vehicle Type: FBDD 15

Hour	No. of Trip <sup>[1][2]</sup>																					
	Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1						8															
1	2																					
2	3																					
3	4																					
4	5																					
5	6						12											2				
6	7						20											2				
7	8						24											3				
8	9						24															
9	10						24															
10	11						20															
11	12						12															
12	13						12															
13	14						12															
14	15						12															
15	16						12															
16	17						20															
17	18						24															
18	19						24															
19	20						24															
20	21						20															
21	22						12															
22	23						12															
23	0						12															

Note:

- No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.
- Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	320	46%	Bypass route
Starting on Public Road	380	54%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
Total Distance	700		

Note: 1. The routes within the PTI is based on tentative layout plan provided by CEDD.

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Day: 1

Hour	Temperature	Relative Humidity	RSP						FSP													
			Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road								
0 to 8760	°C	%																				
1	8	25	0.00E+00	3.71E-06	3.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.71E-06	3.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
2	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
4	6	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
5	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
6	7	26	0.00E+00	6.50E-06	5.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.50E-06	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
7	6	26	0.00E+00	1.02E-05	9.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-05	8.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
8	7	26	0.00E+00	1.25E-05	1.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-05	1.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
9	7	23	0.00E+00	1.11E-05	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-05	9.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
10	8	22	0.00E+00	1.11E-05	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-05	9.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
11	8	22	0.00E+00	9.28E-06	8.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.28E-06	7.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
12	8	16	0.00E+00	5.57E-06	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-06	4.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
13	9	19	0.00E+00	5.57E-06	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-06	4.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
14	8	18	0.00E+00	5.57E-06	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-06	4.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
15	8	19	0.00E+00	5.57E-06	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-06	4.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
16	8	20	0.00E+00	5.57E-06	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-06	4.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
17	8	22	0.00E+00	9.28E-06	8.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.28E-06	7.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
18	8	22	0.00E+00	1.11E-05	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-05	9.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
19	8	25	0.00E+00	1.11E-05	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-05	9.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
20	8	26	0.00E+00	1.11E-05	1.01E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-05	9.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
21	8	27	0.00E+00	9.28E-06	8.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.28E-06	7.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
22	8	26	0.00E+00	5.57E-06	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-06	4.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
23	8	30	0.00E+00	5.57E-06	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-06	4.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
24	8	29	0.00E+00	5.57E-06	5.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.57E-06	4.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	







Emission Inventory for PTI, Bus Depot & Coach Parking (FSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source						Area Polygon Source				Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Source Area	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m <sup>2</sup> )	(m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
PTI05_Bus	Planned PTI at Proposed Public Housing at Nai Wai	PTI05_IO01	AREA	816881.6	831305.9	12.6	3.0	26.9	1.0	82.3	26.9	2.80	5.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-05	1.62E-05	1.98E-05	1.76E-05	1.76E-05	1.47E-05	8.82E-06	8.82E-06	8.82E-06	8.82E-06	8.82E-06	1.47E-05	1.76E-05	1.76E-05	1.76E-05	1.47E-05	8.82E-06	8.82E-06	8.82E-06	
		PTI05_IO02	AREA	816886.7	831228.7	12.7	3.0	1.0	26.2	0.3	26.2	2.80	5.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-05	1.62E-05	1.98E-05	1.76E-05	1.76E-05	1.47E-05	8.82E-06	8.82E-06	8.82E-06	8.82E-06	8.82E-06	1.47E-05	1.76E-05	1.76E-05	1.76E-05	1.47E-05	8.82E-06	8.82E-06	8.82E-06	

Note:

- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
- According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
- According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.



**PTI05 - PLB - Diesel**

INDEX

Vehicle Type: PLB-D 22

Hour		No. of Trip <sup>[1][2]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	6	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
6	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
7	8	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
8	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	10	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	11	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	12	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	13	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	14	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	15	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	16	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	17	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	18	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	19	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	20	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	21	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	22	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	23	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note:

- No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.
- Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	55	8%	Bypass route
Starting on Public Road	645	92%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
Total Distance	700		

Note: 1. The routes within the PTI is based on tentative layout plan provided by CEDD.

Day: 1

Hour	Temperature °C	Relative Humidity %	RSP						FSP													
			Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road								
0 to 8760																						
1	8	25	0.00E+00	5.56E-07	5.61E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-07	5.16E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	6	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	7	26	0.00E+00	9.26E-07	9.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E-07	8.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	6	26	0.00E+00	1.48E-06	1.50E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-06	1.38E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	7	26	0.00E+00	1.85E-06	1.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-06	1.72E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	7	23	0.00E+00	1.67E-06	1.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-06	1.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	8	22	0.00E+00	1.67E-06	1.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-06	1.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	8	22	0.00E+00	1.30E-06	1.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-06	1.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	8	16	0.00E+00	7.41E-07	7.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	6.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	9	19	0.00E+00	7.41E-07	7.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	6.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	8	18	0.00E+00	7.41E-07	7.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	6.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	8	19	0.00E+00	7.41E-07	7.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	6.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	8	20	0.00E+00	7.41E-07	7.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	6.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	8	22	0.00E+00	1.30E-06	1.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-06	1.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	8	22	0.00E+00	1.67E-06	1.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-06	1.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	8	25	0.00E+00	1.67E-06	1.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-06	1.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	8	26	0.00E+00	1.67E-06	1.68E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-06	1.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	8	27	0.00E+00	1.30E-06	1.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-06	1.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	8	26	0.00E+00	7.41E-07	7.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	6.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	8	30	0.00E+00	7.41E-07	7.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	6.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	8	29	0.00E+00	7.41E-07	7.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	6.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.



Emission Inventory for PTI, Bus Depot & Coach Parking (RSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source				Area Polygon Source					Hourly Emission Rate (g/s or g/s/sq. m)																							
				X (m)	Y (m)	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	x dim. (m)	y dim. (m)	Rotation angle (o)	Source Area (m2)	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
PTI05_PLBD	Planned PTI at Proposed Public Housing at Nai Wai	PTI05_D_IO01	AREA	816881.6	831305.9	12.6	3.0	26.9	1.0	82.3	26.9	2.80	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-07	3.10E-07	3.87E-07	3.48E-07	3.48E-07	2.71E-07	1.55E-07	1.55E-07	1.55E-07	1.55E-07	1.55E-07	2.71E-07	3.48E-07	3.48E-07	3.48E-07	2.71E-07	1.55E-07	1.55E-07	1.55E-07
		PTI05_D_IO02	AREA	816886.7	831228.7	12.7	3.0	1.0	26.2	0.3	26.2	2.80	1.16E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-07	3.10E-07	3.87E-07	3.48E-07	3.48E-07	2.71E-07	1.55E-07	1.55E-07	1.55E-07	1.55E-07	1.55E-07	2.71E-07	3.48E-07	3.48E-07	3.48E-07	2.71E-07	1.55E-07	1.55E-07	1.55E-07

- Note:
- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
  - According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
  - According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.



Emission Inventory for PTI, Bus Depot & Coach Parking (FSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source							Area Polygon Source		Hourly Emission Rate (g/s or g/s/sq. m)																							
				X (m)	Y (m)	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	x dim. (m)	y dim. (m)	Rotation angle (o)	Source Area (m2)	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
PTI05_PLBD	Planned PTI at Proposed Public Housing at Nai Wai	PTI05_D_IO01	AREA	816881.6	831305.9	12.6	3.0	26.9	1.0	82.3	26.9	2.80	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-07	2.87E-07	3.59E-07	3.23E-07	3.23E-07	2.51E-07	1.44E-07	1.44E-07	1.44E-07	1.44E-07	1.44E-07	2.51E-07	3.23E-07	3.23E-07	3.23E-07	2.51E-07	1.44E-07	1.44E-07	1.44E-07
		PTI05_D_IO02	AREA	816886.7	831228.7	12.7	3.0	1.0	26.2	0.3	26.2	2.80	1.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-07	2.87E-07	3.59E-07	3.23E-07	3.23E-07	2.51E-07	1.44E-07	1.44E-07	1.44E-07	1.44E-07	1.44E-07	2.51E-07	3.23E-07	3.23E-07	3.23E-07	2.51E-07	1.44E-07	1.44E-07	1.44E-07

Note:

- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
- According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
- According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.













**PTI06 - Bus**

INDEX

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	310	44%	Bypass route
Starting on Public Road	390	56%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
Total Distance		700	

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Note: 1. The routes within the PTI is based on tentative layout plan provided by CEDD.

Vehicle Type: FBDD 15

Hour		No. of Trip <sup>[1][2]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1					6															
1	2																	1			
2	3																	1			
3	4																	2			
4	5																				
5	6					9															
6	7					15															
7	8					18															
8	9					18															
9	10					18															
10	11					15															
11	12					9															
12	13					9															
13	14					9															
14	15					9															
15	16					9															
16	17					15															
17	18					18															
18	19					18															
19	20					18															
20	21					15															
21	22					9															
22	23					9															
23	0					9															

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Hour	RSP						FSP					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	2.78E-06	2.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-06	2.14E-04	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	4.64E-06	3.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-06	3.56E-04	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	7.42E-06	6.19E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.42E-06	5.69E-04	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	9.28E-06	7.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.28E-06	7.12E-04	0.00E+00	0.00E+00	0.00E+00
9	0.00E+00	8.35E-06	6.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.35E-06	6.41E-04	0.00E+00	0.00E+00	0.00E+00
10	0.00E+00	8.35E-06	6.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.35E-06	6.41E-04	0.00E+00	0.00E+00	0.00E+00
11	0.00E+00	6.96E-06	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-06	5.34E-04	0.00E+00	0.00E+00	0.00E+00
12	0.00E+00	4.18E-06	3.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-06	3.20E-04	0.00E+00	0.00E+00	0.00E+00
13	0.00E+00	4.18E-06	3.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-06	3.20E-04	0.00E+00	0.00E+00	0.00E+00
14	0.00E+00	4.18E-06	3.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-06	3.20E-04	0.00E+00	0.00E+00	0.00E+00
15	0.00E+00	4.18E-06	3.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-06	3.20E-04	0.00E+00	0.00E+00	0.00E+00
16	0.00E+00	4.18E-06	3.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-06	3.20E-04	0.00E+00	0.00E+00	0.00E+00
17	0.00E+00	6.96E-06	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-06	5.34E-04	0.00E+00	0.00E+00	0.00E+00
18	0.00E+00	8.35E-06	6.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.35E-06	6.41E-04	0.00E+00	0.00E+00	0.00E+00
19	0.00E+00	8.35E-06	6.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.35E-06	6.41E-04	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	8.35E-06	6.96E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.35E-06	6.41E-04	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	6.96E-06	5.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.96E-06	5.34E-04	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	4.18E-06	3.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-06	3.20E-04	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	4.18E-06	3.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-06	3.20E-04	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	4.18E-06	3.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-06	3.20E-04	0.00E+00	0.00E+00	0.00E+00

Note:

- No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.
- Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.





Emission Inventory for PTI, Bus Depot & Coach Parking (RSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source											Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m)																											
PTI06_Bus	Planned PTI at Proposed Public Housing at Lam Tei North	PTI06_IO01	AREA	817174.8	831519.1	14.5	3.0	17.3	1.0	80.9	2.80	6.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-05	1.67E-05	2.09E-05	1.88E-05	1.88E-05	1.57E-05	9.42E-06	9.42E-06	9.42E-06	9.42E-06	9.42E-06	1.57E-05	1.88E-05	1.88E-05	1.88E-05	1.57E-05	9.42E-06	9.42E-06	9.42E-06			
		PTI06_IO02	AREA	817203.2	831445.7	15.5	3.0	20.1	1.0	61.3	2.80	6.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-05	1.67E-05	2.09E-05	1.88E-05	1.88E-05	1.57E-05	9.42E-06	9.42E-06	9.42E-06	9.42E-06	9.42E-06	1.57E-05	1.88E-05	1.88E-05	1.88E-05	1.57E-05	9.42E-06	9.42E-06	9.42E-06			

Note:

- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
- According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
- According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.



Emission Inventory for PTI, Bus Depot & Coach Parking (FSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source											Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m)																											
PTI06_Bus	Planned PTI at Proposed Public Housing at Lam Tei North	PTI06_IO01	AREA	817174.8	831519.1	14.5	3.0	17.3	1.0	80.9	2.80	5.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.64E-06	1.54E-05	1.93E-05	1.73E-05	1.73E-05	1.45E-05	8.67E-06	8.67E-06	8.67E-06	8.67E-06	8.67E-06	1.45E-05	1.73E-05	1.73E-05	1.73E-05	1.45E-05	8.67E-06	8.67E-06	8.67E-06			
		PTI06_IO02	AREA	817203.2	831445.7	15.5	3.0	20.1	1.0	61.3	2.80	5.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.64E-06	1.54E-05	1.93E-05	1.73E-05	1.73E-05	1.45E-05	8.67E-06	8.67E-06	8.67E-06	8.67E-06	8.67E-06	1.45E-05	1.73E-05	1.73E-05	1.73E-05	1.45E-05	8.67E-06	8.67E-06	8.67E-06			

Note:

- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
- According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
- According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.

**PTI06 - PLB - Diesel**

INDEX

Vehicle Type: PLB-D 22

Hour	No. of Trip <sup>[1][2]</sup>																					
	Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	6	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
6	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
7	8	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
8	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	10	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	11	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	12	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	13	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	14	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	15	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	16	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	17	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	18	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	19	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	20	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	21	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	22	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	23	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note:

- No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.
- Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	65	9%	Bypass route
Starting on Public Road	635	91%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
Total Distance	700		

Note: 1. The routes within the PTI is based on tentative layout plan provided by CEDD.

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Day: 1

Hour	Temperature °C	Relative Humidity %	RSP						FSP													
			Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road								
0 to 8760																						
1	8	25	0.00E+00	5.56E-07	6.63E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-07	6.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
2	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
3	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
4	6	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
5	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
6	7	26	0.00E+00	9.26E-07	1.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.26E-07	1.02E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
7	6	26	0.00E+00	1.48E-06	1.77E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-06	1.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
8	7	26	0.00E+00	2.04E-06	2.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-06	2.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
9	7	23	0.00E+00	1.67E-06	1.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-06	1.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
10	8	22	0.00E+00	1.67E-06	1.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-06	1.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
11	8	22	0.00E+00	1.30E-06	1.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-06	1.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
12	8	16	0.00E+00	7.41E-07	8.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	8.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
13	9	19	0.00E+00	7.41E-07	8.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	8.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
14	8	18	0.00E+00	7.41E-07	8.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	8.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
15	8	19	0.00E+00	7.41E-07	8.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	8.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
16	8	20	0.00E+00	7.41E-07	8.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	8.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
17	8	22	0.00E+00	1.30E-06	1.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-06	1.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
18	8	22	0.00E+00	1.67E-06	1.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-06	1.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
19	8	25	0.00E+00	1.67E-06	1.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-06	1.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
20	8	26	0.00E+00	1.67E-06	1.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-06	1.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
21	8	27	0.00E+00	1.30E-06	1.55E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-06	1.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
22	8	26	0.00E+00	7.41E-07	8.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	8.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
23	8	30	0.00E+00	7.41E-07	8.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	8.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
24	8	29	0.00E+00	7.41E-07	8.84E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.41E-07	8.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	





Emission Inventory for PTI, Bus Depot & Coach Parking (RSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source											Hourly Emission Rate (g/s or g/s/sq. m)																				
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m)																								
PTI06_PLBD	Planned PTI at Proposed Public Housing at Lam Tei North	PTI06_D_IO01	AREA	817174.8	831519.1	14.5	3.0	17.3	1.0	80.9	2.80	1.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-07	5.12E-07	7.04E-07	5.76E-07	5.76E-07	4.48E-07	2.56E-07	2.56E-07	2.56E-07	2.56E-07	2.56E-07	4.48E-07	5.76E-07	5.76E-07	5.76E-07	4.48E-07	2.56E-07	2.56E-07	2.56E-07
		PTI06_D_IO02	AREA	817203.2	831445.7	15.5	3.0	20.1	1.0	61.3	2.80	1.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-07	5.12E-07	7.04E-07	5.76E-07	5.76E-07	4.48E-07	2.56E-07	2.56E-07	2.56E-07	2.56E-07	2.56E-07	4.48E-07	5.76E-07	5.76E-07	5.76E-07	4.48E-07	2.56E-07	2.56E-07	2.56E-07

- Note:
- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
  - According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
  - According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.



Emission Inventory for PTI, Bus Depot & Coach Parking (FSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source								Hourly Emission Rate (g/s or g/s/sq. m)																							
				X (m)	Y (m)	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	x dim. (m)	y dim. (m)	Rotation angle (o)	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
PTI06_PLBD	Planned PTI at Proposed Public Housing at Lam Tei North	PTI06_D_IO01	AREA	817174.8	831519.1	14.5	3.0	17.3	1.0	80.9	2.80	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-07	4.74E-07	6.52E-07	5.34E-07	5.34E-07	4.15E-07	2.37E-07	2.37E-07	2.37E-07	2.37E-07	2.37E-07	4.15E-07	5.34E-07	5.34E-07	5.34E-07	4.15E-07	2.37E-07	2.37E-07	2.37E-07
		PTI06_D_IO02	AREA	817203.2	831445.7	15.5	3.0	20.1	1.0	61.3	2.80	1.78E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-07	4.74E-07	6.52E-07	5.34E-07	5.34E-07	4.15E-07	2.37E-07	2.37E-07	2.37E-07	2.37E-07	2.37E-07	4.15E-07	5.34E-07	5.34E-07	5.34E-07	4.15E-07	2.37E-07	2.37E-07	2.37E-07

- Note:
- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
  - According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
  - According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.

**PTI06 - PLB - LPG**

INDEX

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	65	43%	Bypass route 0
Starting on Public Road	85	57%	Running inside PTI/ Carpark <sup>[1]</sup> 130
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
<b>Total Distance</b>	<b>150</b>		

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Note: 1. The routes within the PTI is based on tentative layout plan provided by CEDD.

Vehicle Type: PLB-L 25

Day: 1

Hour	No. of Trip <sup>[1][2]</sup>																					
	Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	6	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	7	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	9	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	10	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	11	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	12	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	13	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	14	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	16	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	17	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	18	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	19	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	20	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	21	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	22	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	23	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Hour	Temperature °C	Relative Humidity %	RSP						FSP													
			Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road								
0 to 8760																						
1	8	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	6	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	7	26	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	6	26	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	7	26	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	7	23	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	8	22	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	8	22	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	8	16	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	9	19	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	8	18	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	8	19	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	8	20	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	8	22	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	8	22	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	8	25	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	8	26	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	8	27	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	8	26	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	8	30	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	8	29	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

- Note:
- No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.
  - Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.











**Annex - 4a**

Emission Inventory for PTIs and HGV/  
Coach Parking  
(Lam Tei Area, Year 2048, Long Term)

HCP02b

INDEX

Vehicle Type: NFB8 13

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1							1	1												
1	2							1	1												
2	3							1	1												
3	4							1	1												
4	5							1	1												
5	6							1	1												
6	7							1	1												
7	8																				2
8	9																				3
9	10							1	1												1
10	11							1	1												1
11	12							1	1												1
12	13							1	1												1
13	14							1	1												1
14	15							1	1												1
15	16							1	1												1
16	17							1	1												1
17	18																				
18	19							1													
19	20							1	1												1
20	21							1	1												
21	22							1	1												
22	23							1	1												
23	0							1	1												

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	80	11%	Bypass route
Starting on Public Road	500	71%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	120	17%	
Access Road - Departure	120		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	2.56E-04	3.65E-05	4.16E-04	2.28E-04	0.00E+00	0.00E+00	1.26E-04	1.80E-05	2.05E-04	1.12E-04
2	0.00E+00	0.00E+00	2.57E-04	3.65E-05	4.18E-04	2.28E-04	0.00E+00	0.00E+00	1.27E-04	1.80E-05	2.06E-04	1.12E-04
3	0.00E+00	0.00E+00	2.57E-04	3.65E-05	4.18E-04	2.28E-04	0.00E+00	0.00E+00	1.27E-04	1.80E-05	2.06E-04	1.12E-04
4	0.00E+00	0.00E+00	2.57E-04	3.65E-05	4.18E-04	2.28E-04	0.00E+00	0.00E+00	1.27E-04	1.80E-05	2.06E-04	1.12E-04
5	0.00E+00	0.00E+00	2.57E-04	3.65E-05	4.18E-04	2.28E-04	0.00E+00	0.00E+00	1.27E-04	1.80E-05	2.06E-04	1.12E-04
6	0.00E+00	0.00E+00	2.58E-04	3.65E-05	4.19E-04	2.28E-04	0.00E+00	0.00E+00	1.27E-04	1.80E-05	2.06E-04	1.12E-04
7	0.00E+00	0.00E+00	2.59E-04	3.65E-05	4.21E-04	2.28E-04	0.00E+00	0.00E+00	1.28E-04	1.80E-05	2.07E-04	1.12E-04
8	0.00E+00	0.00E+00	2.59E-04	1.69E-04	6.19E-04	1.06E-03	0.00E+00	0.00E+00	1.27E-04	8.34E-05	3.05E-04	5.21E-04
9	0.00E+00	0.00E+00	3.89E-04	2.54E-04	9.30E-04	1.59E-03	0.00E+00	0.00E+00	1.92E-04	1.25E-04	4.58E-04	7.82E-04
10	0.00E+00	0.00E+00	3.90E-04	1.17E-04	7.26E-04	7.34E-04	0.00E+00	0.00E+00	1.92E-04	5.79E-05	3.58E-04	3.62E-04
11	0.00E+00	0.00E+00	3.89E-04	1.17E-04	7.25E-04	7.34E-04	0.00E+00	0.00E+00	1.91E-04	5.79E-05	3.57E-04	3.62E-04
12	0.00E+00	0.00E+00	3.88E-04	1.17E-04	7.24E-04	7.34E-04	0.00E+00	0.00E+00	1.91E-04	5.79E-05	3.57E-04	3.62E-04
13	0.00E+00	0.00E+00	3.88E-04	1.17E-04	7.24E-04	7.34E-04	0.00E+00	0.00E+00	1.91E-04	5.79E-05	3.57E-04	3.62E-04
14	0.00E+00	0.00E+00	3.86E-04	1.17E-04	7.22E-04	7.34E-04	0.00E+00	0.00E+00	1.90E-04	5.79E-05	3.55E-04	3.62E-04
15	0.00E+00	0.00E+00	3.84E-04	1.17E-04	7.18E-04	7.34E-04	0.00E+00	0.00E+00	1.89E-04	5.79E-05	3.54E-04	3.62E-04
16	0.00E+00	0.00E+00	3.86E-04	1.17E-04	7.21E-04	7.34E-04	0.00E+00	0.00E+00	1.90E-04	5.79E-05	3.55E-04	3.62E-04
17	0.00E+00	0.00E+00	3.86E-04	1.17E-04	7.21E-04	7.34E-04	0.00E+00	0.00E+00	1.90E-04	5.79E-05	3.55E-04	3.62E-04
18	0.00E+00	0.00E+00	1.28E-04	1.48E-05	2.03E-04	9.26E-05	0.00E+00	0.00E+00	6.30E-05	7.30E-06	9.99E-05	4.56E-05
19	0.00E+00	0.00E+00	1.28E-04	1.48E-05	2.03E-04	9.26E-05	0.00E+00	0.00E+00	6.29E-05	7.30E-06	9.98E-05	4.56E-05
20	0.00E+00	0.00E+00	3.83E-04	1.21E-04	7.22E-04	7.57E-04	0.00E+00	0.00E+00	1.89E-04	5.97E-05	3.56E-04	3.73E-04
21	0.00E+00	0.00E+00	2.55E-04	3.65E-05	4.14E-04	2.28E-04	0.00E+00	0.00E+00	1.25E-04	1.80E-05	2.04E-04	1.12E-04
22	0.00E+00	0.00E+00	2.54E-04	3.65E-05	4.14E-04	2.28E-04	0.00E+00	0.00E+00	1.25E-04	1.80E-05	2.04E-04	1.12E-04
23	0.00E+00	0.00E+00	2.56E-04	3.65E-05	4.16E-04	2.28E-04	0.00E+00	0.00E+00	1.26E-04	1.80E-05	2.05E-04	1.12E-04
24	0.00E+00	0.00E+00	2.56E-04	3.65E-05	4.16E-04	2.28E-04	0.00E+00	0.00E+00	1.26E-04	1.80E-05	2.05E-04	1.12E-04



Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source					Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[1]</sup>	Hourly Emission Rate (g/s or g/s/sq. m)																								
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area				(m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
				(m)	(m)	(m)	(m)	(m2)																												
HCPO2b	Carpark near Tung Lei Path	HCPO2b_01	AREAPOLY	816541.6	831588.5	9.2	3.9	1881.4	816541.6 831588.5 816533.2 831574.6 816527.0 831577.9 816535.1 831593.1 816508.2 831612.2 816516.1 831626.5 816537.0 831623.9 816543.0 831637.1 816573.8 831613.6 816563.9 831598.8 816569.5 831594.5 816551.7 831593.1 816541.6 831588.5	13	3.64	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.56E-07	1.57E-07	2.27E-07	3.42E-07	2.70E-07	2.69E-07	2.69E-07	2.68E-07	2.66E-07	2.67E-07	2.67E-07	7.58E-08	7.58E-08	2.68E-07	1.55E-07	1.55E-07	1.56E-07	1.55E-07		

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.





Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	X	Y	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	Source Area (m <sup>2</sup> )	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hourly Emission Rate (g/s or g/s/sq. m)																							
				(m)	(m)							Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
HCP02b	Carpark near Tung Lei Path	HCP02b_01	AREAPOLY	816541.6	831588.5	9.2	3.9	1881.4	816541.6 831588.5 816533.2 831574.6 816527.0 831577.9 816535.1 831593.1 816508.2 831612.2 816516.1 831626.5 816537.0 831623.9 816543.0 831637.1 816573.8 831613.6 816563.9 831598.8 816569.5 831594.5 816551.7 831593.1 816541.6 831588.5	13	3.64	7.66E-08	7.68E-08	7.68E-08	7.68E-08	7.69E-08	7.70E-08	7.74E-08	1.12E-07	1.68E-07	1.33E-07	1.32E-07	1.32E-07	1.32E-07	1.31E-07	1.32E-07	1.32E-07	3.74E-08	3.73E-08	1.32E-07	7.62E-08	7.61E-08	7.66E-08	7.65E-08	

- Note:
1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark
  3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark

HCP04

INDEX

Vehicle Type: NFB6 11

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				2
8	9																				
9	10																				1
10	11																				
11	12																				1
12	13																				
13	14																				
14	15																				
15	16																				
16	17																				1
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

INDEX

Vehicle Type: NFB7 12

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				1
8	9																				
9	10																				1
10	11																				
11	12																				1
12	13																				
13	14																				
14	15																				
15	16																				
16	17																				1
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	150	21%	Bypass route
Starting on Public Road	510	73%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	40	6%	
Access Road - Departure	40		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	1.17E-04	1.88E-04	8.55E-05	6.39E-04	0.00E+00	0.00E+00	4.56E-05	7.31E-05	3.33E-05	2.48E-04
9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	0.00E+00	0.00E+00	5.89E-05	9.39E-05	4.28E-05	3.19E-04	0.00E+00	0.00E+00	2.29E-05	3.65E-05	1.67E-05	1.24E-04
11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	0.00E+00	0.00E+00	5.87E-05	9.39E-05	4.28E-05	3.19E-04	0.00E+00	0.00E+00	2.28E-05	3.65E-05	1.66E-05	1.24E-04
13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	0.00E+00	0.00E+00	5.83E-05	9.39E-05	4.27E-05	3.19E-04	0.00E+00	0.00E+00	2.27E-05	3.65E-05	1.66E-05	1.24E-04
18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	150	21%	Bypass route
Starting on Public Road	510	73%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	40	6%	
Access Road - Departure	40		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	

INDEX

Vehicle Type: NFB8 13

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				1
1	2																				1
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																	2			6
8	9																				
9	10																				3
10	11								2												
11	12																				3
12	13																				2
13	14																				2
14	15																				
15	16		2																		
16	17		2																		3
17	18			1						1											2
18	19								1						1	1			1		2
19	20		2						1	1								1			3
20	21							1												1	3
21	22																				1
22	23																				1
23	0																				1

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

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Vehicle Type: HGV8 7

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				
8	9																				
9	10																				
10	11																				
11	12		2																		
12	13																				
13	14																				
14	15																				
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	150	21%	Bypass route
Starting on Public Road	510	73%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	40	6%	
Access Road - Departure	40		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	2.00E-04	1.59E-04	1.03E-04	5.40E-04	0.00E+00	0.00E+00	9.83E-05	7.82E-05	5.05E-05	2.66E-04
2	0.00E+00	0.00E+00	2.00E-04	1.59E-04	1.03E-04	5.40E-04	0.00E+00	0.00E+00	9.86E-05	7.82E-05	5.06E-05	2.66E-04
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	1.61E-03	1.27E-03	8.24E-04	4.30E-03	0.00E+00	0.00E+00	7.94E-04	6.23E-04	4.06E-04	2.12E-03
9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	0.00E+00	0.00E+00	6.07E-04	4.76E-04	3.10E-04	1.62E-03	0.00E+00	0.00E+00	2.99E-04	2.35E-04	1.53E-04	7.97E-04
11	0.00E+00	0.00E+00	4.04E-04	8.14E-05	1.44E-04	2.77E-04	0.00E+00	0.00E+00	1.99E-04	4.01E-05	7.07E-05	1.36E-04
12	0.00E+00	0.00E+00	6.05E-04	4.76E-04	3.10E-04	1.62E-03	0.00E+00	0.00E+00	2.98E-04	2.35E-04	1.52E-04	7.97E-04
13	0.00E+00	0.00E+00	4.03E-04	3.17E-04	2.06E-04	1.08E-03	0.00E+00	0.00E+00	1.99E-04	1.56E-04	1.02E-04	5.32E-04
14	0.00E+00	0.00E+00	4.02E-04	3.17E-04	2.06E-04	1.08E-03	0.00E+00	0.00E+00	1.98E-04	1.56E-04	1.01E-04	5.32E-04
15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	0.00E+00	0.00E+00	4.01E-04	9.93E-06	1.24E-04	3.38E-05	0.00E+00	0.00E+00	1.97E-04	4.88E-06	6.09E-05	1.66E-05
17	0.00E+00	0.00E+00	1.00E-03	4.86E-04	4.32E-04	1.65E-03	0.00E+00	0.00E+00	4.93E-04	2.39E-04	2.13E-04	8.14E-04
18	0.00E+00	0.00E+00	7.97E-04	3.77E-04	3.41E-04	1.28E-03	0.00E+00	0.00E+00	3.93E-04	1.86E-04	1.68E-04	6.31E-04
19	0.00E+00	0.00E+00	1.20E-03	8.16E-04	5.78E-04	2.77E-03	0.00E+00	0.00E+00	5.89E-04	4.02E-04	2.85E-04	1.37E-03
20	0.00E+00	0.00E+00	9.94E-04	2.54E-04	3.68E-04	8.64E-04	0.00E+00	0.00E+00	4.90E-04	1.25E-04	1.81E-04	4.25E-04
21	0.00E+00	0.00E+00	9.93E-04	6.63E-04	4.76E-04	2.25E-03	0.00E+00	0.00E+00	4.89E-04	3.26E-04	2.35E-04	1.11E-03
22	0.00E+00	0.00E+00	1.98E-04	1.59E-04	1.02E-04	5.40E-04	0.00E+00	0.00E+00	9.76E-05	7.82E-05	5.03E-05	2.66E-04
23	0.00E+00	0.00E+00	2.00E-04	1.59E-04	1.03E-04	5.40E-04	0.00E+00	0.00E+00	9.83E-05	7.82E-05	5.05E-05	2.66E-04
24	0.00E+00	0.00E+00	1.99E-04	1.59E-04	1.02E-04	5.40E-04	0.00E+00	0.00E+00	9.81E-05	7.82E-05	5.05E-05	2.66E-04

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	150	21%	Bypass route
Starting on Public Road	510	73%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	40	6%	
Access Road - Departure	40		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1



Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source					Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[1]</sup>	Hourly Emission Rate (g/s or g/s/sq. m)																								
				X (m)	Y (m)	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	Source Area (m2)				Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
HCP04	Carpark near Tat Fuk Road	HCP04_01	AREAPOLY	817041.1	831045.1	18.5	3.5	5137.6	817041.1 831045.1 817047.2 831048.9 817065.6 831041.3 817075.9 831035.3 817079.1 831039.5 817091.8 831034.2 817110.4 831051.2 817117.5 831047.2 817123.1 831052.2 817132.1 831039.9 817127.1 831035.0 817132.1 831027.7 817130.9 831026.1 817130.8 831021.3 817117.3 830993.0 817136.7 830978.7 817123.9 830968.9 817120.4 830962.1 817111.6 830964.1 817110.8 830974.9 817099.6 830975.0 817052.5 830993.6 817043.0 831030.6 817041.1 831045.1	24	3.26	6.97E-08	6.99E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-07	0.00E+00	2.89E-07	9.45E-08	3.59E-07	1.40E-07	1.40E-07	0.00E+00	7.99E-08	3.68E-07	2.29E-07	3.91E-07	2.43E-07	3.22E-07	6.95E-08	6.97E-08	6.97E-08

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.





Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	X	Y	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	Source Area (m <sup>2</sup> )	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hourly Emission Rate (g/s or g/s/sq. m)																							
				(m)	(m)							Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
HCP04	Carpark near Tat Fuk Road	HCP04_01	AREAPOLY	817041.1	831045.1	18.5	3.5	5137.6	817041.1 831045.1 817047.2 831048.9 817065.6 831041.3 817075.9 831035.3 817079.1 831039.5 817091.8 831034.2 817110.4 831051.2 817117.5 831047.2 817123.1 831052.2 817132.1 831039.9 817127.1 831035.0 817132.1 831027.7 817130.9 831026.1 817130.8 831021.3 817117.3 830993.0 817136.7 830978.7 817123.9 830968.9 817120.4 830962.1 817111.6 830964.1 817110.8 830974.9 817099.6 830975.0 817052.5 830993.6 817043.0 831030.6 817041.1 831045.1	24	3.26	3.43E-08	3.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-07	0.00E+00	1.39E-07	4.65E-08	1.74E-07	6.91E-08	6.89E-08	0.00E+00	3.94E-08	1.78E-07	1.13E-07	1.93E-07	1.20E-07	1.59E-07	3.42E-08	3.43E-08	3.43E-08

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.

HCP09

INDEX

Vehicle Type: NFB8 13

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1							1	1												
1	2							1	1												
2	3							1	1												
3	4							1	1												
4	5							1	1												
5	6							1	1												
6	7							1	1												
7	8																				2
8	9																				2
9	10							1	1												1
10	11							1	1												1
11	12							1	1												1
12	13							1	1												1
13	14							1	1												1
14	15							1	1												1
15	16							1	1												1
16	17							1	1												1
17	18								1												
18	19								1												
19	20								1	1											
20	21								1	1											
21	22								1	1											
22	23								1	1											
23	0								1	1											

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

INDEX

Vehicle Type: HGV8 7

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				1
8	9																				2
9	10				1	1															1
10	11				1	1															1
11	12				1	1															1
12	13				1	1															1
13	14				1	1															1
14	15				1	1															1
15	16				1	1															1
16	17				1	1															1
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	100	14%	Bypass route
Starting on Public Road	600	86%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	3.24E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.59E-04	2.25E-05	0.00E+00	1.35E-04
2	0.00E+00	0.00E+00	3.25E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.60E-04	2.25E-05	0.00E+00	1.35E-04
3	0.00E+00	0.00E+00	3.25E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.60E-04	2.25E-05	0.00E+00	1.35E-04
4	0.00E+00	0.00E+00	3.25E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.60E-04	2.25E-05	0.00E+00	1.35E-04
5	0.00E+00	0.00E+00	3.25E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.60E-04	2.25E-05	0.00E+00	1.35E-04
6	0.00E+00	0.00E+00	3.26E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.61E-04	2.25E-05	0.00E+00	1.35E-04
7	0.00E+00	0.00E+00	3.28E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.62E-04	2.25E-05	0.00E+00	1.35E-04
8	0.00E+00	0.00E+00	3.27E-04	2.12E-04	0.00E+00	1.27E-03	0.00E+00	0.00E+00	1.61E-04	1.04E-04	0.00E+00	6.25E-04
9	0.00E+00	0.00E+00	3.28E-04	2.12E-04	0.00E+00	1.27E-03	0.00E+00	0.00E+00	1.62E-04	1.04E-04	0.00E+00	6.25E-04
10	0.00E+00	0.00E+00	4.93E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.43E-04	7.23E-05	0.00E+00	4.34E-04
11	0.00E+00	0.00E+00	4.92E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.42E-04	7.23E-05	0.00E+00	4.34E-04
12	0.00E+00	0.00E+00	4.91E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.42E-04	7.23E-05	0.00E+00	4.34E-04
13	0.00E+00	0.00E+00	4.91E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.42E-04	7.23E-05	0.00E+00	4.34E-04
14	0.00E+00	0.00E+00	4.89E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.41E-04	7.23E-05	0.00E+00	4.34E-04
15	0.00E+00	0.00E+00	4.86E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.39E-04	7.23E-05	0.00E+00	4.34E-04
16	0.00E+00	0.00E+00	4.88E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.40E-04	7.23E-05	0.00E+00	4.34E-04
17	0.00E+00	0.00E+00	4.88E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.40E-04	7.23E-05	0.00E+00	4.34E-04
18	0.00E+00	0.00E+00	1.62E-04	1.85E-05	0.00E+00	1.11E-04	0.00E+00	0.00E+00	7.97E-05	9.12E-06	0.00E+00	5.47E-05
19	0.00E+00	0.00E+00	1.62E-04	1.85E-05	0.00E+00	1.11E-04	0.00E+00	0.00E+00	7.96E-05	9.12E-06	0.00E+00	5.47E-05
20	0.00E+00	0.00E+00	3.23E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.59E-04	2.25E-05	0.00E+00	1.35E-04
21	0.00E+00	0.00E+00	3.22E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.59E-04	2.25E-05	0.00E+00	1.35E-04
22	0.00E+00	0.00E+00	3.22E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.58E-04	2.25E-05	0.00E+00	1.35E-04
23	0.00E+00	0.00E+00	3.24E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.59E-04	2.25E-05	0.00E+00	1.35E-04
24	0.00E+00	0.00E+00	3.23E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.59E-04	2.25E-05	0.00E+00	1.35E-04

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	100	14%	Bypass route
Starting on Public Road	600	86%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13		

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Vehicle Type: HGV9 17

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				5
8	9																				7
9	10		1		1	2	2	2	1												
10	11		1		1	2	2	2	1												
11	12		1		1	2	2	2	1												
12	13		1		1	2	2	2	1												
13	14		1		1	2	2	2	1												
14	15		1		1	2	2	2	1												
15	16		1		1	2	2	2	1												
16	17		1		1	2	2	2	1												
17	18		2						1												
18	19		2						1												
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	100	14%	Bypass route
Starting on Public Road	600	86%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	7.09E-04	5.29E-04	0.00E+00	3.18E-03	0.00E+00	0.00E+00	3.49E-04	2.61E-04	0.00E+00	1.56E-03
9	0.00E+00	0.00E+00	9.96E-04	7.41E-04	0.00E+00	4.45E-03	0.00E+00	0.00E+00	4.90E-04	3.65E-04	0.00E+00	2.19E-03
10	0.00E+00	0.00E+00	1.28E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.31E-04	6.19E-05	0.00E+00	3.71E-04
11	0.00E+00	0.00E+00	1.28E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.30E-04	6.19E-05	0.00E+00	3.71E-04
12	0.00E+00	0.00E+00	1.28E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.29E-04	6.19E-05	0.00E+00	3.71E-04
13	0.00E+00	0.00E+00	1.28E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.29E-04	6.19E-05	0.00E+00	3.71E-04
14	0.00E+00	0.00E+00	1.27E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.26E-04	6.19E-05	0.00E+00	3.71E-04
15	0.00E+00	0.00E+00	1.26E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.22E-04	6.19E-05	0.00E+00	3.71E-04
16	0.00E+00	0.00E+00	1.27E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.25E-04	6.19E-05	0.00E+00	3.71E-04
17	0.00E+00	0.00E+00	1.27E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.25E-04	6.19E-05	0.00E+00	3.71E-04
18	0.00E+00	0.00E+00	4.21E-04	3.38E-05	0.00E+00	2.03E-04	0.00E+00	0.00E+00	2.07E-04	1.66E-05	0.00E+00	9.96E-05
19	0.00E+00	0.00E+00	4.21E-04	3.38E-05	0.00E+00	2.03E-04	0.00E+00	0.00E+00	2.07E-04	1.66E-05	0.00E+00	9.96E-05
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source											Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m2)																												(m)		
HCP09	Carpark near To Lai Road	HCP09_01	AREAPOLY	816806.1	830848.6	16.1	3.4	3346.8	816806.1 830848.6 816861.9 830832.3 816862.7 830816.6 816856.9 830807.7 816857.0 830801.1 816855.4 830794.4 816846.7 830793.5 816846.1 830788.7 816842.4 830787.5 816836.3 830792.4 816830.4 830786.7 816783.8 830791.5 816773.8 830795.1 816778.0 830814.3 816791.8 830810.0 816798.4 830809.6 816807.1 830821.3 816807.9 830832.9 816806.1 830848.6	19	3.18	1.10E-07	1.11E-07	1.11E-07	1.11E-07	1.11E-07	1.11E-07	1.12E-07	6.05E-07	8.29E-07	7.77E-07	7.76E-07	7.74E-07	7.74E-07	7.72E-07	7.67E-07	7.70E-07	7.70E-07	1.90E-07	1.90E-07	1.10E-07	1.10E-07	1.10E-07	1.10E-07	1.10E-07	1.10E-07		

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.



Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	X	Y	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	Source Area (m2)	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hourly Emission Rate (g/s or g/s/sq. m)																							
				(m)	(m)							Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
HCP09	Carpark near To Lai Road	HCP09_01	AREAPOLY	816806.1	830848.6	16.1	3.4	3346.8	816806.1 830848.6 816861.9 830832.3 816862.7 830816.6 816856.9 830807.7 816857.0 830801.1 816855.4 830794.4 816846.7 830793.5 816846.1 830788.7 816842.4 830787.5 816836.3 830792.4 816830.4 830786.7 816783.8 830791.5 816773.8 830795.1 816778.0 830814.3 816791.8 830810.0 816798.4 830809.6 816807.1 830821.3 816807.9 830832.9 816806.1 830848.6	19	3.18	5.44E-08	5.45E-08	5.45E-08	5.45E-08	5.46E-08	5.47E-08	5.50E-08	2.98E-07	4.08E-07	3.83E-07	3.82E-07	3.81E-07	3.81E-07	3.80E-07	3.78E-07	3.79E-07	3.79E-07	9.34E-08	9.33E-08	5.42E-08	5.41E-08	5.40E-08	5.44E-08	5.43E-08

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.



HCP11

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Vehicle Type: NFB6 11

Hour	No. of Trip <sup>[1]</sup>																					
	Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																					
1	2																					
2	3																					
3	4																					
4	5																					
5	6																					
6	7																					
7	8																				1	
8	9																				1	
9	10																					
10	11																					
11	12										1											1
12	13																					
13	14																					
14	15																					
15	16																					
16	17																					
17	18		1																			
18	19																					
19	20																					
20	21																					
21	22																					
22	23																					
23	0																					

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

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Vehicle Type: NFB7 12

Hour	No. of Trip <sup>[1]</sup>																					
	Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																					
1	2																					
2	3																					
3	4																					
4	5																					
5	6																					
6	7																					
7	8																				1	
8	9																				1	
9	10																					
10	11																					
11	12										1											1
12	13																					
13	14																					
14	15																					
15	16																					
16	17																					
17	18																					
18	19																					
19	20																					
20	21																					
21	22																					
22	23																					
23	0																					

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	7.08E-05	1.10E-04	9.08E-05	2.76E-04	0.00E+00	0.00E+00	2.75E-05	4.26E-05	3.53E-05	1.07E-04
9	0.00E+00	0.00E+00	7.10E-05	1.10E-04	9.10E-05	2.76E-04	0.00E+00	0.00E+00	2.76E-05	4.26E-05	3.54E-05	1.07E-04
10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	0.00E+00	0.00E+00	1.42E-04	1.45E-04	1.45E-04	3.63E-04	0.00E+00	0.00E+00	5.51E-05	5.62E-05	5.66E-05	1.41E-04
13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	0.00E+00	0.00E+00	7.00E-05	3.42E-06	3.89E-05	8.61E-06	0.00E+00	0.00E+00	2.72E-05	1.33E-06	1.51E-05	3.35E-06
19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44

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Vehicle Type: NFB8 13

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1		1																		
1	2		1																		
2	3																				1
3	4																				1
4	5																				1
5	6																				1
6	7																				1
7	8																				3
8	9																				3
9	10			1			1														
10	11										1										
11	12										3										3
12	13																				
13	14		1															1	1		
14	15		3																		
15	16								1							1					
16	17			1						1											
17	18		3						1												
18	19																				
19	20																				
20	21		1																		
21	22		1																		
22	23		1																		
23	0		1																		

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	2.41E-04	5.79E-06	1.31E-04	1.46E-05	0.00E+00	0.00E+00	1.19E-04	2.85E-06	6.44E-05	7.16E-06
2	0.00E+00	0.00E+00	2.42E-04	5.79E-06	1.31E-04	1.46E-05	0.00E+00	0.00E+00	1.19E-04	2.85E-06	6.47E-05	7.16E-06
3	0.00E+00	0.00E+00	2.42E-04	1.85E-04	2.18E-04	4.66E-04	0.00E+00	0.00E+00	1.19E-04	9.12E-05	1.08E-04	2.29E-04
4	0.00E+00	0.00E+00	2.42E-04	1.85E-04	2.18E-04	4.66E-04	0.00E+00	0.00E+00	1.19E-04	9.12E-05	1.08E-04	2.29E-04
5	0.00E+00	0.00E+00	2.42E-04	1.85E-04	2.19E-04	4.66E-04	0.00E+00	0.00E+00	1.19E-04	9.12E-05	1.08E-04	2.29E-04
6	0.00E+00	0.00E+00	2.43E-04	1.85E-04	2.19E-04	4.66E-04	0.00E+00	0.00E+00	1.19E-04	9.12E-05	1.08E-04	2.29E-04
7	0.00E+00	0.00E+00	2.44E-04	1.85E-04	2.20E-04	4.66E-04	0.00E+00	0.00E+00	1.20E-04	9.12E-05	1.08E-04	2.29E-04
8	0.00E+00	0.00E+00	7.30E-04	5.56E-04	6.58E-04	1.40E-03	0.00E+00	0.00E+00	3.59E-04	2.74E-04	3.24E-04	6.88E-04
9	0.00E+00	0.00E+00	7.33E-04	5.56E-04	6.59E-04	1.40E-03	0.00E+00	0.00E+00	3.61E-04	2.74E-04	3.25E-04	6.88E-04
10	0.00E+00	0.00E+00	4.89E-04	3.47E-05	2.77E-04	8.73E-05	0.00E+00	0.00E+00	2.41E-04	1.71E-05	1.36E-04	4.30E-05
11	0.00E+00	0.00E+00	2.44E-04	5.90E-05	1.58E-04	1.48E-04	0.00E+00	0.00E+00	1.20E-04	2.91E-05	7.79E-05	7.31E-05
12	0.00E+00	0.00E+00	1.46E-03	7.33E-04	1.13E-03	1.84E-03	0.00E+00	0.00E+00	7.19E-04	3.61E-04	5.57E-04	9.07E-04
13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	0.00E+00	0.00E+00	2.42E-04	5.79E-06	1.32E-04	1.46E-05	0.00E+00	0.00E+00	1.19E-04	2.85E-06	6.48E-05	7.16E-06
15	0.00E+00	0.00E+00	1.20E-03	2.95E-04	7.83E-04	7.42E-04	0.00E+00	0.00E+00	5.93E-04	1.45E-04	3.86E-04	3.65E-04
16	0.00E+00	0.00E+00	4.84E-04	2.21E-04	3.64E-04	5.56E-04	0.00E+00	0.00E+00	2.38E-04	1.09E-04	1.79E-04	2.74E-04
17	0.00E+00	0.00E+00	4.84E-04	5.79E-05	2.85E-04	1.46E-04	0.00E+00	0.00E+00	2.38E-04	2.85E-05	1.40E-04	7.17E-05
18	0.00E+00	0.00E+00	9.63E-04	4.98E-05	5.36E-04	1.25E-04	0.00E+00	0.00E+00	4.74E-04	2.45E-05	2.64E-04	6.16E-05
19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	2.40E-04	5.79E-06	1.30E-04	1.46E-05	0.00E+00	0.00E+00	1.18E-04	2.85E-06	6.41E-05	7.16E-06
22	0.00E+00	0.00E+00	2.39E-04	5.79E-06	1.30E-04	1.46E-05	0.00E+00	0.00E+00	1.18E-04	2.85E-06	6.40E-05	7.16E-06
23	0.00E+00	0.00E+00	2.41E-04	5.79E-06	1.31E-04	1.46E-05	0.00E+00	0.00E+00	1.19E-04	2.85E-06	6.44E-05	7.16E-06
24	0.00E+00	0.00E+00	2.41E-04	5.79E-06	1.31E-04	1.46E-05	0.00E+00	0.00E+00	1.18E-04	2.85E-06	6.43E-05	7.16E-06

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

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Vehicle Type: HGV7 6

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				1
8	9																				
9	10																				2
10	11																				
11	12																				
12	13																				
13	14																				
14	15																				
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
1		

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Vehicle Type: HGV8 7

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3															1				1	
3	4															1				1	
4	5															1				1	
5	6															1				1	
6	7															1				1	
7	8																			3	
8	9															2				2	
9	10																			5	
10	11																				
11	12																				
12	13															2					
13	14																				
14	15																				2
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	4.20E-04	3.59E-04	3.98E-04	9.02E-04	0.00E+00	0.00E+00	2.07E-04	1.77E-04	1.96E-04	4.44E-04
4	0.00E+00	0.00E+00	4.20E-04	3.59E-04	3.98E-04	9.02E-04	0.00E+00	0.00E+00	2.07E-04	1.77E-04	1.96E-04	4.44E-04
5	0.00E+00	0.00E+00	4.21E-04	3.59E-04	3.98E-04	9.02E-04	0.00E+00	0.00E+00	2.07E-04	1.77E-04	1.96E-04	4.44E-04
6	0.00E+00	0.00E+00	4.22E-04	3.59E-04	3.98E-04	9.02E-04	0.00E+00	0.00E+00	2.08E-04	1.77E-04	1.96E-04	4.44E-04
7	0.00E+00	0.00E+00	4.24E-04	3.59E-04	4.00E-04	9.02E-04	0.00E+00	0.00E+00	2.09E-04	1.77E-04	1.97E-04	4.44E-04
8	0.00E+00	0.00E+00	6.35E-04	5.56E-04	6.07E-04	1.40E-03	0.00E+00	0.00E+00	3.12E-04	2.74E-04	2.99E-04	6.88E-04
9	0.00E+00	0.00E+00	8.49E-04	7.18E-04	8.00E-04	1.80E-03	0.00E+00	0.00E+00	4.18E-04	3.53E-04	3.94E-04	8.88E-04
10	0.00E+00	0.00E+00	1.06E-03	9.26E-04	1.01E-03	2.33E-03	0.00E+00	0.00E+00	5.23E-04	4.56E-04	4.99E-04	1.15E-03
11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	0.00E+00	0.00E+00	4.23E-04	3.94E-05	2.44E-04	9.90E-05	0.00E+00	0.00E+00	2.08E-04	1.94E-05	1.20E-04	4.87E-05
14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	0.00E+00	0.00E+00	4.19E-04	3.71E-04	4.02E-04	9.32E-04	0.00E+00	0.00E+00	2.06E-04	1.82E-04	1.98E-04	4.59E-04
16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

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Vehicle Type: HGV9 17

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				1
3	4																				1
4	5																				1
5	6																				1
6	7																				1
7	8																				7
8	9																				2
9	10																				
10	11																				
11	12																				
12	13																				
13	14																				
14	15																				4
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54</

Emission Inventory for PTI, Bus Depot & Coach Parking (Residual NOx - Road)

PTI ID	Route	Source ID	Type	Line Source				Area/Polyarea/Line		Hourly Emission Rate (g/s or g/s/q, m)																																							
				X	Y	X2	Y2	Width	Base Elevation	Release Height [1]	Initial Vertical Dim [2]	Percentage of %	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23													
				(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(%)																																					
HCP11	Route A	HCP11_A01	LINE	816487.8	830538.4	816448.8	830551.1	9.5	7.9	1.7	1.58	1.1%	3.34E-11	3.34E-11	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09												
		HCP11_A02	LINE	816448.8	830551.1	816430.3	830555.7	9.5	7.7	1.7	1.58	1.1%	3.34E-11	3.34E-11	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09											
		HCP11	Route B	HCP11_B01	LINE	816487.8	830538.4	816448.8	830551.1	9.5	7.9	1.7	1.58	0.6%	1.82E-11	1.82E-11	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09	2.30E-09									
				HCP11	Route C	HCP11_C01	LINE	816487.8	830538.4	816448.8	830551.1	9.5	7.9	1.7	1.58	0.6%	1.68E-11	1.68E-11	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09	2.12E-09							
						HCP11	Route D	HCP11_D01	LINE	816487.8	830538.4	816448.8	830551.1	9.5	7.9	1.7	1.58	50.0%	1.43E-09	1.43E-09	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07					
								HCP11	Route E	HCP11_E01	LINE	816487.8	830538.4	816448.8	830551.1	9.5	7.9	1.7	1.58	47.7%	1.38E-09	1.38E-09	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07	1.74E-07		
										HCP11	Access road	HCP11_AC01	LINE	816487.8	830538.4	816448.8	830551.1	9.5	7.9	1.7	1.58	100%	1.60E-07	1.61E-07	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	
												HCP11_AC02	LINE	816448.8	830551.1	816430.3	830555.7	9.5	7.7	1.7	1.58	100%	1.60E-07	1.61E-07	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06
												HCP11_AC03	LINE	816430.3	830555.7	816405.4	830562.9	9.5	7.6	1.7	1.58	100%	1.60E-07	1.61E-07	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06

Note:  
1. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicles travel on the roads which consist of a combination of light-duty and heavy-duty traffic. A generalized weighted vehicle height of 2.0m for modeling the start emission spreading on public roads outside PTI/carpark has been adopted.  
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height / 2.15.

Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source					Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[1]</sup>	Hourly Emission Rate (g/s or g/s/sq. m)																							
				X (m)	Y (m)	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	Source Area (m2)				Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
HCP11	Carpark near Fu Hang Road	HCP11_01	AREAPOLY	816550.1	830599.7	10.0	3.1	6682.6	816550.1 830599.7 816553.1 830603.0 816565.8 830600.0 816574.2 830595.4 816589.6 830589.6 816595.9 830578.8 816606.4 830571.4 816605.5 830552.6 816601.5 830542.8 816600.0 830521.1 816583.8 830502.5 816517.7 830522.4 816486.7 830534.6 816493.7 830558.0 816532.5 830542.8 816541.6 830561.6 816531.2 830567.8 816540.5 830592.0 816545.5 830590.3 816550.1 830599.7	20	2.84	3.69E-08	3.71E-08	2.40E-07	2.40E-07	2.40E-07	2.40E-07	2.41E-07	8.98E-07	6.17E-07	4.60E-07	4.53E-08	4.39E-07	6.92E-08	3.71E-08	6.43E-07	1.05E-07	8.11E-08	1.63E-07	6.42E-08	0.00E+00	3.67E-08	3.67E-08	3.69E-08	3.69E-08

- Note:
1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
  3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.





Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

Area Polygon Source

PTI ID	Description	Source ID	Type <sup>[1]</sup>	X	Y	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	Source Area (m2)	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hourly Emission Rate (g/s or g/s/sq. m)																								
				(m)	(m)							Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
HCP11	Carpark near Fu Hang Road	HCP11_01	AREAPOLY	816550.1	830599.7	10.0	3.1	6682.6	816550.1 830599.7 816553.1 830603.0 816565.8 830600.0 816574.2 830595.4 816589.6 830589.6 816595.9 830578.8 816606.4 830571.4 816605.5 830552.6 816601.5 830542.8 816600.0 830521.1 816583.8 830502.5 816517.7 830522.4 816486.7 830534.6 816493.7 830558.0 816532.5 830542.8 816541.6 830561.6 816531.2 830567.8 816540.5 830592.0 816545.5 830590.3 816550.1 830599.7	20	2.84	1.82E-08	1.82E-08	1.18E-07	1.18E-07	1.18E-07	1.18E-07	1.18E-07	1.19E-07	4.39E-07	3.01E-07	2.26E-07	2.23E-08	2.12E-07	3.41E-08	1.83E-08	3.16E-07	5.19E-08	3.99E-08	7.89E-08	3.16E-08	0.00E+00	1.81E-08	1.81E-08	1.82E-08	1.82E-08

Note:

1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.



**PTI05 - Bus**

INDEX

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	320	46%	Bypass route
Starting on Public Road	380	54%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
Total Distance	700		

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Note: 1. The routes within the PTI is based on tentative layout plan provided by CEDD.

Vehicle Type: FBDD 15

Hour		No. of Trip <sup>[1][2]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1					8															
1	2																				
2	3																				
3	4																				
4	5																				
5	6					12												2			
6	7					20												2			
7	8					24												3			
8	9					24															
9	10					24															
10	11					20															
11	12					12															
12	13					12															
13	14					12															
14	15					12															
15	16					12															
16	17					20															
17	18					24															
18	19					24															
19	20					24															
20	21					20															
21	22					12															
22	23					12															
23	0					12															

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	1.10E-04	4.50E-03	7.95E-04	0.00E+00	9.45E-04	0.00E+00	4.51E-05	1.84E-03	3.25E-04	0.00E+00	3.86E-04
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	1.23E-03	7.92E-03	2.81E-03	0.00E+00	3.34E-03	0.00E+00	5.03E-04	3.23E-03	1.15E-03	0.00E+00	1.36E-03
7	0.00E+00	1.34E-03	1.25E-02	3.60E-03	0.00E+00	4.28E-03	0.00E+00	5.48E-04	5.11E-03	1.47E-03	0.00E+00	1.75E-03
8	0.00E+00	1.93E-03	1.53E-02	4.81E-03	0.00E+00	5.71E-03	0.00E+00	7.88E-04	6.26E-03	1.96E-03	0.00E+00	2.33E-03
9	0.00E+00	3.31E-04	1.37E-02	2.39E-03	0.00E+00	2.83E-03	0.00E+00	1.35E-04	5.58E-03	9.75E-04	0.00E+00	1.16E-03
10	0.00E+00	3.31E-04	1.37E-02	2.39E-03	0.00E+00	2.83E-03	0.00E+00	1.35E-04	5.59E-03	9.75E-04	0.00E+00	1.16E-03
11	0.00E+00	2.76E-04	1.14E-02	1.99E-03	0.00E+00	2.36E-03	0.00E+00	1.13E-04	4.64E-03	8.12E-04	0.00E+00	9.65E-04
12	0.00E+00	1.66E-04	6.81E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.78E-03	4.87E-04	0.00E+00	5.79E-04
13	0.00E+00	1.66E-04	6.81E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.78E-03	4.87E-04	0.00E+00	5.79E-04
14	0.00E+00	1.66E-04	6.78E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.77E-03	4.87E-04	0.00E+00	5.79E-04
15	0.00E+00	1.66E-04	6.74E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.75E-03	4.87E-04	0.00E+00	5.79E-04
16	0.00E+00	1.66E-04	6.77E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.76E-03	4.87E-04	0.00E+00	5.79E-04
17	0.00E+00	2.76E-04	1.13E-02	1.99E-03	0.00E+00	2.36E-03	0.00E+00	1.13E-04	4.61E-03	8.12E-04	0.00E+00	9.65E-04
18	0.00E+00	3.31E-04	1.35E-02	2.39E-03	0.00E+00	2.83E-03	0.00E+00	1.35E-04	5.50E-03	9.75E-04	0.00E+00	1.16E-03
19	0.00E+00	3.31E-04	1.35E-02	2.39E-03	0.00E+00	2.83E-03	0.00E+00	1.35E-04	5.50E-03	9.75E-04	0.00E+00	1.16E-03
20	0.00E+00	3.31E-04	1.34E-02	2.39E-03	0.00E+00	2.83E-03	0.00E+00	1.35E-04	5.49E-03	9.75E-04	0.00E+00	1.16E-03
21	0.00E+00	2.76E-04	1.12E-02	1.99E-03	0.00E+00	2.36E-03	0.00E+00	1.13E-04	4.57E-03	8.12E-04	0.00E+00	9.65E-04
22	0.00E+00	1.66E-04	6.70E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.73E-03	4.87E-04	0.00E+00	5.79E-04
23	0.00E+00	1.66E-04	6.74E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.75E-03	4.87E-04	0.00E+00	5.79E-04
24	0.00E+00	1.66E-04	6.73E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.75E-03	4.87E-04	0.00E+00	5.79E-04

Note:  
1. No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.  
2. Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.



Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source							Area Polygon Source		Hourly Emission Rate (g/s or g/s/sq. m)																								
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Source Area	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m2)	(m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
PTI05_Bus	Planned PTI at Proposed Public Housing at Nai Wai	PTI05_I001	AREA	816881.6	831305.9	12.6	3.0	26.9	1.0	82.3	26.9	2.80	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-04	3.29E-04	4.15E-04	3.08E-04	3.09E-04	2.57E-04	1.54E-04	1.54E-04	1.53E-04	1.53E-04	1.53E-04	2.55E-04	3.05E-04	3.05E-04	3.04E-04	2.53E-04	1.52E-04	1.53E-04	1.52E-04
		PTI05_I002	AREA	816886.7	831228.7	12.7	3.0	1.0	26.2	0.3	26.2	2.80	1.02E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-04	3.29E-04	4.15E-04	3.08E-04	3.09E-04	2.57E-04	1.54E-04	1.54E-04	1.53E-04	1.53E-04	1.53E-04	2.55E-04	3.05E-04	3.05E-04	3.04E-04	2.53E-04	1.52E-04	1.53E-04	1.52E-04	

Note:

1. The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
3. According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.



Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source							Area Polygon Source		Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Source Area	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m2)	(m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
PTI05_Bus	Planned PTI at Proposed Public Housing at Nai Wai	PTI05_IO01	AREA	816881.6	831305.9	12.6	3.0	26.9	1.0	82.3	26.9	2.80	4.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.20E-05	1.34E-04	1.70E-04	1.26E-04	1.26E-04	1.05E-04	6.28E-05	6.28E-05	6.26E-05	6.23E-05	6.25E-05	1.04E-04	1.25E-04	1.24E-04	1.24E-04	1.03E-04	6.20E-05	6.23E-05	6.22E-05
		PTI05_IO02	AREA	816886.7	831228.7	12.7	3.0	1.0	26.2	0.3	26.2	2.80	4.15E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.20E-05	1.34E-04	1.70E-04	1.26E-04	1.26E-04	1.05E-04	6.28E-05	6.28E-05	6.26E-05	6.23E-05	6.25E-05	1.04E-04	1.25E-04	1.24E-04	1.24E-04	1.03E-04	6.20E-05	6.23E-05	6.22E-05

Note:

1. The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
3. According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.

**PTI05 - PLB - Diesel**

INDEX

Vehicle Type: PLB-D 22

Hour		No. of Trip <sup>[1][2]</sup>																		
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	6	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
6	7	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
7	8	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
8	9	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	11	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	12	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	13	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	14	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	15	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	16	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	17	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	18	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	19	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	20	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	21	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	22	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	23	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note:  
1. No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.  
2. Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	55	8%	Bypass route
Starting on Public Road	645	92%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
Total Distance	700		

Note: 1. The routes within the PTI is based on tentative layout plan provided by CEDD.

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	2.56E-05	4.59E-05	6.75E-06	0.00E+00	7.91E-05	0.00E+00	9.95E-06	1.79E-05	2.62E-06	0.00E+00	3.07E-05
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	6.67E-05	9.24E-05	4.35E-05	0.00E+00	5.10E-04	0.00E+00	2.59E-05	3.60E-05	1.69E-05	0.00E+00	1.98E-04
7	0.00E+00	9.23E-05	1.40E-04	5.02E-05	0.00E+00	5.89E-04	0.00E+00	3.59E-05	5.43E-05	1.95E-05	0.00E+00	2.29E-04
8	0.00E+00	1.09E-04	1.70E-04	5.47E-05	0.00E+00	6.41E-04	0.00E+00	4.25E-05	6.61E-05	2.13E-05	0.00E+00	2.49E-04
9	0.00E+00	8.53E-05	1.55E-04	2.25E-05	0.00E+00	2.64E-04	0.00E+00	3.32E-05	6.03E-05	8.74E-06	0.00E+00	1.02E-04
10	0.00E+00	8.53E-05	1.55E-04	2.25E-05	0.00E+00	2.64E-04	0.00E+00	3.32E-05	6.04E-05	8.74E-06	0.00E+00	1.02E-04
11	0.00E+00	6.83E-05	1.24E-04	1.80E-05	0.00E+00	2.11E-04	0.00E+00	2.65E-05	4.82E-05	6.99E-06	0.00E+00	8.20E-05
12	0.00E+00	4.27E-05	7.73E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	3.01E-05	4.37E-06	0.00E+00	5.12E-05
13	0.00E+00	4.27E-05	7.73E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	3.01E-05	4.37E-06	0.00E+00	5.12E-05
14	0.00E+00	4.27E-05	7.70E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	2.99E-05	4.37E-06	0.00E+00	5.12E-05
15	0.00E+00	4.27E-05	7.65E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	2.97E-05	4.37E-06	0.00E+00	5.12E-05
16	0.00E+00	4.27E-05	7.68E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	2.99E-05	4.37E-06	0.00E+00	5.12E-05
17	0.00E+00	6.83E-05	1.23E-04	1.80E-05	0.00E+00	2.11E-04	0.00E+00	2.66E-05	4.78E-05	6.99E-06	0.00E+00	8.20E-05
18	0.00E+00	8.53E-05	1.53E-04	2.25E-05	0.00E+00	2.64E-04	0.00E+00	3.32E-05	5.95E-05	8.74E-06	0.00E+00	1.02E-04
19	0.00E+00	8.53E-05	1.53E-04	2.25E-05	0.00E+00	2.64E-04	0.00E+00	3.32E-05	5.94E-05	8.74E-06	0.00E+00	1.02E-04
20	0.00E+00	8.53E-05	1.53E-04	2.25E-05	0.00E+00	2.64E-04	0.00E+00	3.32E-05	5.93E-05	8.74E-06	0.00E+00	1.02E-04
21	0.00E+00	6.83E-05	1.22E-04	1.80E-05	0.00E+00	2.11E-04	0.00E+00	2.65E-05	4.74E-05	6.99E-06	0.00E+00	8.20E-05
22	0.00E+00	4.27E-05	7.60E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	2.96E-05	4.37E-06	0.00E+00	5.12E-05
23	0.00E+00	4.27E-05	7.65E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	2.98E-05	4.37E-06	0.00E+00	5.12E-05
24	0.00E+00	4.27E-05	7.64E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	2.97E-05	4.37E-06	0.00E+00	5.12E-05

Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Road)

PTI ID	Route	Source ID	Type	Line Source				Area/Polyarea/Line					Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	X2	Y2	Width	Base Elevation	Release Height <sup>[1]</sup>	Initial Vertical Dim <sup>[2]</sup>	Percentage of Routing	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
				(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(%)																								
PTI05_PLBD	Route A	PTI05_D_A01	LINE	816885.0	831287.9	816890.2	831279.0	9.5	12.8	1.7	1.58	100%	1.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-08	9.60E-08	1.05E-07	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	3.44E-08	4.30E-08	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08
		PTI05_D_A02	LINE	816890.2	831279.0	816893.9	831217.6	9.5	12.8	1.7	1.58	100%	1.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-08	9.60E-08	1.05E-07	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	3.44E-08	4.30E-08	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08
		PTI05_D_A03	LINE	816893.9	831217.6	816889.3	831177.9	9.5	12.4	1.7	1.58	100%	1.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-08	9.60E-08	1.05E-07	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	3.44E-08	4.30E-08	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08
		PTI05_D_A04	LINE	816889.3	831177.9	816876.7	831159.5	9.5	12.3	1.7	1.58	100%	1.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-08	9.60E-08	1.05E-07	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	3.44E-08	4.30E-08	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08
		PTI05_D_A05	LINE	816876.7	831159.5	816842.0	831141.0	9.5	13.5	1.7	1.58	100%	1.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-08	9.60E-08	1.05E-07	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	3.44E-08	4.30E-08	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08
		PTI05_D_A06	LINE	816842.0	831141.0	816817.1	831171.4	11	12.9	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08
		PTI05_D_A07	LINE	816817.1	831171.4	816750.7	831216.9	11	12	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08
		PTI05_D_A08	LINE	816750.7	831216.9	816690.2	831278.3	11	11.2	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08
		PTI05_D_A09	LINE	816690.2	831278.3	816667.6	831307.6	11	12	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08
		PTI05_D_A10	LINE	816667.6	831307.6	816647.5	831329.9	11	11.2	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08
		PTI05_D_A11	LINE	816647.5	831329.9	816628.1	831347.7	11	10	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08
		PTI05_D_A12	LINE	816628.1	831347.7	816601.0	831369.9	11	10	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08
		PTI05_D_A13	LINE	816601.0	831369.9	816575.6	831393.0	11	10	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08
		PTI05_D_A14	LINE	816575.6	831393.0	816564.3	831405.2	11	10	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08
		PTI05_D_A15	LINE	816564.3	831405.2	816544.8	831430.4	13	10	1.7	1.58	100%	9.42E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-08	7.01E-08	7.64E-08	3.14E-08	3.14E-08	2.51E-08	1.57E-08	1.57E-08	1.57E-08	1.57E-08	1.57E-08	2.51E-08	3.14E-08	3.14E-08	3.14E-08	2.51E-08	1.57E-08	1.57E-08	1.57E-08
		PTI05_D_A16	LINE	816544.8	831430.4	816509.1	831388.2	17	9.5	1.7	1.58	100%	7.21E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-08	5.36E-08	5.84E-08	2.40E-08	2.40E-08	1.92E-08	1.20E-08	1.20E-08	1.20E-08	1.20E-08	1.20E-08	1.92E-08	2.40E-08	2.40E-08	2.40E-08	1.92E-08	1.20E-08	1.20E-08	1.20E-08

Note:

1. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicles travel on the roads which consist of a combination of light-duty and heavy-duty traffic. A generalized weighted vehicle height of 2.0m for modeling the start emission spreading on public roads outside PTI/carpark has been adopted.
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15.



Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source							Area Polygon Source		Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Source Area	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m2)	(m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
PTI05_PLBD	Planned PTI at Proposed Public Housing at Nai Wai	PTI05_D_I001	AREA	816881.6	831305.9	12.6	3.0	26.9	1.0	82.3	26.9	2.80	1.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-06	5.31E-06	6.29E-06	4.95E-06	4.95E-06	3.96E-06	2.47E-06	2.47E-06	2.47E-06	2.46E-06	2.46E-06	3.94E-06	4.91E-06	4.91E-06	4.90E-06	3.92E-06	2.45E-06	2.46E-06	2.45E-06
		PTI05_D_I002	AREA	816886.7	831228.7	12.7	3.0	1.0	26.2	0.3	26.2	2.80	1.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-06	5.31E-06	6.29E-06	4.95E-06	4.95E-06	3.96E-06	2.47E-06	2.47E-06	2.47E-06	2.46E-06	2.46E-06	3.94E-06	4.91E-06	4.91E-06	4.90E-06	3.92E-06	2.45E-06	2.46E-06	2.45E-06

Note:

- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
- According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
- According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.





PTI06 - Bus

INDEX

Vehicle Type: FBDD 15

Hour		No. of Trip <sup>[1][2]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1					6															
1	2																				
2	3																				
3	4																				
4	5																				
5	6					9											1				
6	7					15											1				
7	8					18											2				
8	9					18															
9	10					18															
10	11					15															
11	12					9															
12	13					9															
13	14					9															
14	15					9															
15	16					9															
16	17					15															
17	18					18															
18	19					18															
19	20					18															
20	21					15															
21	22					9															
22	23					9															
23	0					9															

Note:

- No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.
- Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	310	44%	Bypass route
Starting on Public Road	390	56%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
Total Distance	700		

Note: 1. The routes within the PTI is based on tentative layout plan provided by CEDD.

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	8.28E-05	3.11E-03	5.78E-04	0.00E+00	7.27E-04	0.00E+00	3.38E-05	1.27E-03	2.36E-04	0.00E+00	2.97E-04
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	6.57E-04	5.22E-03	1.65E-03	0.00E+00	2.08E-03	0.00E+00	2.68E-04	2.13E-03	6.74E-04	0.00E+00	8.48E-04
7	0.00E+00	7.40E-04	8.40E-03	2.23E-03	0.00E+00	2.80E-03	0.00E+00	3.02E-04	3.43E-03	9.10E-04	0.00E+00	1.14E-03
8	0.00E+00	1.31E-03	1.05E-02	3.30E-03	0.00E+00	4.15E-03	0.00E+00	5.36E-04	4.28E-03	1.35E-03	0.00E+00	1.70E-03
9	0.00E+00	2.48E-04	9.46E-03	1.73E-03	0.00E+00	2.18E-03	0.00E+00	1.02E-04	3.86E-03	7.08E-04	0.00E+00	8.91E-04
10	0.00E+00	2.48E-04	9.47E-03	1.73E-03	0.00E+00	2.18E-03	0.00E+00	1.02E-04	3.87E-03	7.08E-04	0.00E+00	8.91E-04
11	0.00E+00	2.07E-04	7.87E-03	1.44E-03	0.00E+00	1.82E-03	0.00E+00	8.46E-05	3.22E-03	5.90E-04	0.00E+00	7.43E-04
12	0.00E+00	1.24E-04	4.72E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.07E-05	1.93E-03	3.54E-04	0.00E+00	4.46E-04
13	0.00E+00	1.24E-04	4.72E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.07E-05	1.93E-03	3.54E-04	0.00E+00	4.46E-04
14	0.00E+00	1.24E-04	4.70E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.07E-05	1.92E-03	3.54E-04	0.00E+00	4.46E-04
15	0.00E+00	1.24E-04	4.67E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.07E-05	1.91E-03	3.54E-04	0.00E+00	4.46E-04
16	0.00E+00	1.24E-04	4.69E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.08E-05	1.91E-03	3.54E-04	0.00E+00	4.46E-04
17	0.00E+00	2.07E-04	7.81E-03	1.44E-03	0.00E+00	1.82E-03	0.00E+00	8.46E-05	3.19E-03	5.90E-04	0.00E+00	7.43E-04
18	0.00E+00	2.48E-04	9.32E-03	1.73E-03	0.00E+00	2.18E-03	0.00E+00	1.02E-04	3.81E-03	7.08E-04	0.00E+00	8.91E-04
19	0.00E+00	2.48E-04	9.32E-03	1.73E-03	0.00E+00	2.18E-03	0.00E+00	1.02E-04	3.81E-03	7.08E-04	0.00E+00	8.91E-04
20	0.00E+00	2.49E-04	9.30E-03	1.73E-03	0.00E+00	2.18E-03	0.00E+00	1.01E-04	3.80E-03	7.08E-04	0.00E+00	8.91E-04
21	0.00E+00	2.07E-04	7.74E-03	1.44E-03	0.00E+00	1.82E-03	0.00E+00	8.46E-05	3.16E-03	5.90E-04	0.00E+00	7.43E-04
22	0.00E+00	1.24E-04	4.64E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.07E-05	1.89E-03	3.54E-04	0.00E+00	4.46E-04
23	0.00E+00	1.24E-04	4.67E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.08E-05	1.91E-03	3.54E-04	0.00E+00	4.46E-04
24	0.00E+00	1.24E-04	4.66E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.07E-05	1.90E-03	3.54E-04	0.00E+00	4.46E-04



Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source								Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
PTI06_Bus	Planned PTI at Proposed Public Housing at Lam Tei North	PTI06_IO01	AREA	817174.8	831519.1	14.5	3.0	17.3	1.0	80.9	2.80	1.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-04	3.04E-04	4.03E-04	3.06E-04	3.06E-04	2.55E-04	1.53E-04	1.53E-04	1.52E-04	1.51E-04	1.52E-04	2.53E-04	3.02E-04	3.02E-04	3.02E-04	2.51E-04	1.50E-04	1.51E-04	1.51E-04
		PTI06_IO02	AREA	817203.2	831445.7	15.5	3.0	20.1	1.0	61.3	2.80	1.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-04	3.04E-04	4.03E-04	3.06E-04	3.06E-04	2.55E-04	1.53E-04	1.53E-04	1.52E-04	1.51E-04	1.52E-04	2.53E-04	3.02E-04	3.02E-04	3.02E-04	2.51E-04	1.50E-04	1.51E-04	1.51E-04

- Note:
- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
  - According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
  - According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.





Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	X	Y	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	x dim. (m)	y dim. (m)	Rotation angle (o)	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hourly Emission Rate (g/s or g/s/sq. m)																							
				(m)	(m)							Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
				PTI06_Bus	Planned PTI at Proposed Public Housing at Lam Tei North							PTI06_IO01	AREA	817174.8	831519.1	14.5	3.0	17.3	1.0	80.9	2.80	4.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.22E-05	1.24E-04	1.65E-04	1.25E-04	1.25E-04	1.04E-04	6.23E-05	6.23E-05	6.21E-05
		PTI06_IO02	AREA	817203.2	831445.7	15.5	3.0	20.1	1.0	61.3	2.80	4.12E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.22E-05	1.24E-04	1.65E-04	1.25E-04	1.25E-04	1.04E-04	6.23E-05	6.23E-05	6.21E-05	6.18E-05	6.20E-05	1.03E-04	1.23E-04	1.23E-04	1.23E-04	1.03E-04	6.14E-05	6.18E-05	6.17E-05

- Note:
1. The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
  3. According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.

**PTI06 - PLB - Diesel**

INDEX

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	65	9%	Bypass route
Starting on Public Road	635	91%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
Total Distance	700		

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Note: 1. The routes within the PTI is based on tentative layout plan provided by CEDD.

Vehicle Type: PLB-D 22

Hour		No. of Trip <sup>[1][2]</sup>																		
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	6	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
6	7	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
7	8	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
8	9	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	11	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	12	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	13	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	14	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	15	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	16	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	17	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	18	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	19	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	20	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	21	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	22	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	23	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	2.56E-05	5.43E-05	7.97E-06	0.00E+00	7.79E-05	0.00E+00	9.95E-06	2.11E-05	3.10E-06	0.00E+00	3.03E-05
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	6.67E-05	1.09E-04	5.14E-05	0.00E+00	5.02E-04	0.00E+00	2.59E-05	4.25E-05	2.00E-05	0.00E+00	1.95E-04
7	0.00E+00	9.23E-05	1.65E-04	5.93E-05	0.00E+00	5.80E-04	0.00E+00	3.59E-05	6.41E-05	2.31E-05	0.00E+00	2.25E-04
8	0.00E+00	1.33E-04	2.19E-04	1.03E-04	0.00E+00	1.00E-03	0.00E+00	5.19E-05	8.52E-05	3.99E-05	0.00E+00	3.90E-04
9	0.00E+00	8.53E-05	1.83E-04	2.66E-05	0.00E+00	2.60E-04	0.00E+00	3.32E-05	7.13E-05	1.03E-05	0.00E+00	1.01E-04
10	0.00E+00	8.53E-05	1.83E-04	2.66E-05	0.00E+00	2.60E-04	0.00E+00	3.32E-05	7.14E-05	1.03E-05	0.00E+00	1.01E-04
11	0.00E+00	6.83E-05	1.46E-04	2.13E-05	0.00E+00	2.08E-04	0.00E+00	2.65E-05	5.69E-05	8.26E-06	0.00E+00	8.07E-05
12	0.00E+00	4.27E-05	9.14E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.55E-05	5.16E-06	0.00E+00	5.04E-05
13	0.00E+00	4.27E-05	9.14E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.55E-05	5.16E-06	0.00E+00	5.04E-05
14	0.00E+00	4.27E-05	9.10E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.54E-05	5.16E-06	0.00E+00	5.04E-05
15	0.00E+00	4.27E-05	9.04E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.52E-05	5.16E-06	0.00E+00	5.04E-05
16	0.00E+00	4.27E-05	9.08E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.53E-05	5.16E-06	0.00E+00	5.04E-05
17	0.00E+00	6.83E-05	1.45E-04	2.13E-05	0.00E+00	2.08E-04	0.00E+00	2.66E-05	5.65E-05	8.26E-06	0.00E+00	8.07E-05
18	0.00E+00	8.53E-05	1.81E-04	2.66E-05	0.00E+00	2.60E-04	0.00E+00	3.32E-05	7.03E-05	1.03E-05	0.00E+00	1.01E-04
19	0.00E+00	8.53E-05	1.81E-04	2.66E-05	0.00E+00	2.60E-04	0.00E+00	3.32E-05	7.02E-05	1.03E-05	0.00E+00	1.01E-04
20	0.00E+00	8.53E-05	1.80E-04	2.66E-05	0.00E+00	2.60E-04	0.00E+00	3.32E-05	7.01E-05	1.03E-05	0.00E+00	1.01E-04
21	0.00E+00	6.83E-05	1.44E-04	2.13E-05	0.00E+00	2.08E-04	0.00E+00	2.65E-05	5.60E-05	8.26E-06	0.00E+00	8.07E-05
22	0.00E+00	4.27E-05	8.98E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.49E-05	5.16E-06	0.00E+00	5.04E-05
23	0.00E+00	4.27E-05	9.05E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.52E-05	5.16E-06	0.00E+00	5.04E-05
24	0.00E+00	4.27E-05	9.03E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.51E-05	5.16E-06	0.00E+00	5.04E-05

Note:  
1. No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.  
2. Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Road)

PTI ID	Route	Source ID	Type	Line Source				Area/Polyarea/Line					Hourly Emission Rate (g/s or g/s/sq. m)																											
				X	Y	X2	Y2	Width	Base Elevation	Release Height [1]	Initial Vertical Dim [2]	Percentage of Routing	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23				
				(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(%)																												
PTI06_PLBD	Route A	PTI06_D_A01	LINE	817176.2	831511.7	817179.6	831544.9	9.5	14	1.7	1.58	20%	2.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-08	1.92E-08	3.33E-08	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	6.88E-09	8.60E-09	8.60E-09	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09		
		PTI06_D_A02	LINE	817179.6	831544.9	817201.1	831585.2	9.5	13.9	1.7	1.58	20%	2.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-08	1.92E-08	3.33E-08	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	6.88E-09	8.60E-09	8.60E-09	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	
		PTI06_D_A03	LINE	817201.1	831585.2	817227.8	831611.2	9.5	13.7	1.7	1.58	20%	2.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-08	1.92E-08	3.33E-08	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	6.88E-09	8.60E-09	8.60E-09	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	
		PTI06_D_A04	LINE	817227.8	831611.2	817228.4	831625.8	9.5	14.5	1.7	1.58	20%	2.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-08	1.92E-08	3.33E-08	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	6.88E-09	8.60E-09	8.60E-09	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	
		PTI06_D_A05	LINE	817228.4	831625.8	817188.6	831653.4	12.5	15.4	1.7	1.58	20%	1.96E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-08	1.46E-08	2.53E-08	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	5.23E-09	6.54E-09	6.54E-09	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	
		PTI06_D_A06	LINE	817188.6	831653.4	817137.9	831700.9	12.5	15	1.7	1.58	20%	1.96E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-08	1.46E-08	2.53E-08	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	5.23E-09	6.54E-09	6.54E-09	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	
		PTI06_D_A07	LINE	817137.9	831700.9	817077.6	831773.6	12.5	14.4	1.7	1.58	20%	1.96E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-08	1.46E-08	2.53E-08	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	5.23E-09	6.54E-09	6.54E-09	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	
		PTI06_D_A08	LINE	817077.6	831773.6	817041.8	831806.8	12.5	14	1.7	1.58	20%	1.96E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-08	1.46E-08	2.53E-08	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	5.23E-09	6.54E-09	6.54E-09	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	
		PTI06_D_A09	LINE	817041.8	831806.8	816976.6	831865.2	12.5	13.6	1.7	1.58	20%	1.96E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-08	1.46E-08	2.53E-08	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	5.23E-09	6.54E-09	6.54E-09	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	
		PTI06_D_A10	LINE	816976.6	831865.2	816947.5	831889.3	12.5	13.6	1.7	1.58	20%	1.96E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-08	1.46E-08	2.53E-08	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	5.23E-09	6.54E-09	6.54E-09	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	
		PTI06_D_A11	LINE	816947.5	831889.3	816906.5	831847.2	13	12.5	1.7	1.58	20%	1.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-08	1.40E-08	2.43E-08	6.29E-09	6.29E-09	5.03E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09	5.03E-09	6.29E-09	6.29E-09	6.29E-09	6.29E-09	5.03E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09
		PTI06_D_A12	LINE	816906.5	831847.2	816867.0	831803.3	13	12.4	1.7	1.58	20%	1.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-08	1.40E-08	2.43E-08	6.29E-09	6.29E-09	5.03E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09	5.03E-09	6.29E-09	6.29E-09	6.29E-09	6.29E-09	5.03E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09
PTI06_D_B01	LINE	817176.2	831511.7	817179.6	831544.9	9.5	14	1.7	1.58	80%	1.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-08	7.68E-08	1.33E-07	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	2.75E-08	3.44E-08	3.44E-08	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08			
PTI06_D_B02	LINE	817179.6	831544.9	817201.1	831585.2	9.5	13.9	1.7	1.58	80%	1.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-08	7.68E-08	1.33E-07	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	2.75E-08	3.44E-08	3.44E-08	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08			
PTI06_D_B03	LINE	817201.1	831585.2	817227.8	831611.2	9.5	13.7	1.7	1.58	80%	1.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-08	7.68E-08	1.33E-07	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	2.75E-08	3.44E-08	3.44E-08	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08			
PTI06_D_B04	LINE	817227.8	831611.2	817228.4	831625.8	9.5	14.5	1.7	1.58	80%	1.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-08	7.68E-08	1.33E-07	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	2.75E-08	3.44E-08	3.44E-08	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08			
PTI06_D_B05	LINE	817228.4	831625.8	817188.6	831653.4	12.5	15.4	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08			
PTI06_D_B06	LINE	817188.6	831653.4	817137.9	831700.9	12.5	15	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08			
PTI06_D_B07	LINE	817137.9	831700.9	817077.6	831773.6	12.5	14.4	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08			
PTI06_D_B08	LINE	817077.6	831773.6	817041.8	831806.8	12.5	14	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08			
PTI06_D_B09	LINE	817041.8	831806.8	816976.6	831865.2	12.5	13.6	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08			
PTI06_D_B10	LINE	816976.6	831865.2	816947.5	831889.3	12.5	13.6	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08			
PTI06_D_B11	LINE	816947.5	831889.3	816944.0	831907.1	12.5	12.8	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08															

Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Vertical Dim. (Sz) <sup>[3]</sup>	Hourly Emission Rate (g/s or g/s/sq, m)																							
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
				PTI06_PLBD	Planned PTI at Proposed Public Housing at Lam Tei North	PTI06_D_IO01	AREA	817174.8	831519.1	14.5	3.0	17.3	1.0	80.9	2.80	2.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.08E-06	8.46E-06	1.22E-05	7.89E-06	7.90E-06	6.31E-06	3.94E-06	3.94E-06	3.93E-06	3.91E-06	3.92E-06	6.28E-06	7.82E-06	7.82E-06	7.81E-06
		PTI06_D_IO02	AREA	817203.2	831445.7	15.5	3.0	20.1	1.0	61.3	2.80	2.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.08E-06	8.46E-06	1.22E-05	7.89E-06	7.90E-06	6.31E-06	3.94E-06	3.94E-06	3.93E-06	3.91E-06	3.92E-06	6.28E-06	7.82E-06	7.82E-06	7.81E-06	6.24E-06	3.90E-06	3.91E-06	3.91E-06

Note:

1. The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
3. According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.



Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source											Hourly Emission Rate (g/s or g/s/sq. m)																					
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m)																									
PTI06_PLBD	Planned PTI at Proposed Public Housing at Lam Tei North	PTI06_D_IO01	AREA	817174.8	831519.1	14.5	3.0	17.3	1.0	80.9	2.80	9.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-06	3.29E-06	4.73E-06	3.07E-06	3.07E-06	2.45E-06	1.53E-06	1.53E-06	1.53E-06	1.52E-06	1.53E-06	2.44E-06	3.04E-06	3.04E-06	3.04E-06	3.04E-06	2.43E-06	1.52E-06	1.52E-06	1.52E-06
		PTI06_D_IO02	AREA	817203.2	831445.7	15.5	3.0	20.1	1.0	61.3	2.80	9.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-06	3.29E-06	4.73E-06	3.07E-06	3.07E-06	2.45E-06	1.53E-06	1.53E-06	1.53E-06	1.52E-06	1.53E-06	2.44E-06	3.04E-06	3.04E-06	3.04E-06	3.04E-06	2.43E-06	1.52E-06	1.52E-06	1.52E-06

- Note:
- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
  - According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
  - According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.

**Annex - 4b**

Emission Inventory for PTIs and HGV/  
Coach Parking  
(Lam Tei Area, Year 2048, Short Term)

HCP02b

INDEX

Routing (m)			
Starting inside PTI/ Carpark <sup>(1)</sup>	80	11%	Bypass route
Starting on Public Road	500	71%	Running inside PTI/ Carpark <sup>(1)</sup>
Access Road - Arrival	120	17%	
Access Road - Departure	120		
Total Distance	700		

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Note: 1. The longest route within each parking site/ depot is used for assessment.

Vehicle Type: NFB8 13

Hour		No. of Trip <sup>(1)</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1							1	1												
1	2							1	1												
2	3							1	1												
3	4							1	1												
4	5							1	1												
5	6							1	1												
6	7							1	1												
7	8																				2
8	9																				3
9	10							1	1												1
10	11							1	1												1
11	12							1	1												1
12	13							1	1												1
13	14							1	1												1
14	15							1	1												1
15	16							1	1												1
16	17							1	1												1
17	18																				
18	19							1													
19	20							1	1												1
20	21							1	1												
21	22							1	1												
22	23							1	1												
23	0							1	1												

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	2.75E-04	3.65E-05	4.43E-04	2.28E-04	0.00E+00	0.00E+00	1.35E-04	1.80E-05	2.18E-04	1.12E-04
2	0.00E+00	0.00E+00	2.76E-04	3.65E-05	4.44E-04	2.28E-04	0.00E+00	0.00E+00	1.36E-04	1.80E-05	2.19E-04	1.12E-04
3	0.00E+00	0.00E+00	2.76E-04	3.65E-05	4.44E-04	2.28E-04	0.00E+00	0.00E+00	1.36E-04	1.80E-05	2.19E-04	1.12E-04
4	0.00E+00	0.00E+00	2.76E-04	3.65E-05	4.44E-04	2.28E-04	0.00E+00	0.00E+00	1.36E-04	1.80E-05	2.19E-04	1.12E-04
5	0.00E+00	0.00E+00	2.75E-04	3.65E-05	4.44E-04	2.28E-04	0.00E+00	0.00E+00	1.36E-04	1.80E-05	2.18E-04	1.12E-04
6	0.00E+00	0.00E+00	2.75E-04	3.65E-05	4.43E-04	2.28E-04	0.00E+00	0.00E+00	1.35E-04	1.80E-05	2.18E-04	1.12E-04
7	0.00E+00	0.00E+00	2.75E-04	3.65E-05	4.44E-04	2.28E-04	0.00E+00	0.00E+00	1.36E-04	1.80E-05	2.18E-04	1.12E-04
8	0.00E+00	0.00E+00	2.75E-04	1.69E-04	6.42E-04	1.06E-03	0.00E+00	0.00E+00	1.35E-04	8.34E-05	3.16E-04	5.21E-04
9	0.00E+00	0.00E+00	4.14E-04	2.54E-04	9.65E-04	1.59E-03	0.00E+00	0.00E+00	2.04E-04	1.25E-04	4.75E-04	7.82E-04
10	0.00E+00	0.00E+00	4.13E-04	1.17E-04	7.60E-04	7.34E-04	0.00E+00	0.00E+00	2.04E-04	5.79E-05	3.74E-04	3.62E-04
11	0.00E+00	0.00E+00	4.13E-04	1.17E-04	7.60E-04	7.34E-04	0.00E+00	0.00E+00	2.04E-04	5.79E-05	3.74E-04	3.62E-04
12	0.00E+00	0.00E+00	4.16E-04	1.17E-04	7.64E-04	7.34E-04	0.00E+00	0.00E+00	2.05E-04	5.79E-05	3.76E-04	3.62E-04
13	0.00E+00	0.00E+00	4.14E-04	1.17E-04	7.61E-04	7.34E-04	0.00E+00	0.00E+00	2.04E-04	5.79E-05	3.75E-04	3.62E-04
14	0.00E+00	0.00E+00	4.15E-04	1.17E-04	7.62E-04	7.34E-04	0.00E+00	0.00E+00	2.04E-04	5.79E-05	3.75E-04	3.62E-04
15	0.00E+00	0.00E+00	4.15E-04	1.17E-04	7.62E-04	7.34E-04	0.00E+00	0.00E+00	2.04E-04	5.79E-05	3.75E-04	3.62E-04
16	0.00E+00	0.00E+00	4.14E-04	1.17E-04	7.61E-04	7.34E-04	0.00E+00	0.00E+00	2.04E-04	5.79E-05	3.75E-04	3.62E-04
17	0.00E+00	0.00E+00	4.13E-04	1.17E-04	7.60E-04	7.34E-04	0.00E+00	0.00E+00	2.04E-04	5.79E-05	3.74E-04	3.62E-04
18	0.00E+00	0.00E+00	1.38E-04	1.48E-05	2.17E-04	9.26E-05	0.00E+00	0.00E+00	6.79E-05	7.30E-06	1.07E-04	4.56E-05
19	0.00E+00	0.00E+00	1.37E-04	1.48E-05	2.16E-04	9.26E-05	0.00E+00	0.00E+00	6.77E-05	7.30E-06	1.06E-04	4.56E-05
20	0.00E+00	0.00E+00	4.12E-04	1.21E-04	7.63E-04	7.57E-04	0.00E+00	0.00E+00	2.03E-04	5.97E-05	3.76E-04	3.73E-04
21	0.00E+00	0.00E+00	2.74E-04	3.65E-05	4.42E-04	2.28E-04	0.00E+00	0.00E+00	1.35E-04	1.80E-05	2.18E-04	1.12E-04
22	0.00E+00	0.00E+00	2.75E-04	3.65E-05	4.42E-04	2.28E-04	0.00E+00	0.00E+00	1.35E-04	1.80E-05	2.18E-04	1.12E-04
23	0.00E+00	0.00E+00	2.73E-04	3.65E-05	4.41E-04	2.28E-04	0.00E+00	0.00E+00	1.35E-04	1.80E-05	2.17E-04	1.12E-04
24	0.00E+00	0.00E+00	2.74E-04	3.65E-05	4.41E-04	2.28E-04	0.00E+00	0.00E+00	1.35E-04	1.80E-05	2.17E-04	1.12E-04





Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source					Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[2]</sup>	Hourly Emission Rate (g/s or g/s/sq. m)																								
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area				(m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
				(m)	(m)	(m)	(m)	(m2)																												
HCPO2b	Carpark near Tung Lei Path	HCPO2b_01	AREAPOLY	816541.6	831588.5	9.2	3.9	1881.4	816541.6 831588.5 816533.2 831574.6 816527.0 831577.9 816535.1 831593.1 816508.2 831612.2 816516.1 831626.5 816537.0 831623.9 816543.0 831637.1 816573.8 831613.6 816563.9 831598.8 816569.5 831594.5 816551.7 831593.1 816541.6 831588.5	13	3.64	1.65E-07	1.66E-07	1.66E-07	1.66E-07	1.66E-07	1.66E-07	1.66E-07	2.36E-07	3.55E-07	2.82E-07	2.82E-07	2.84E-07	2.83E-07	2.83E-07	2.83E-07	2.83E-07	2.82E-07	8.11E-08	8.09E-08	2.83E-07	1.65E-07	1.65E-07	1.65E-07	1.65E-07	

- Note:
1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
  3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.



Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source											Hourly Emission Rate (g/s or g/s/sq. m)																					
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
				(m)	(m)	(m)	(m)	(m2)				(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
HCPO2b	Carpark near Tung Lei Path	HCPO2b_01	AREAPOLY	816541.6	831588.5	9.2	3.9	1881.4	816541.6 831588.5 816533.2 831574.6 816527.0 831577.9 816535.1 831593.1 816508.2 831612.2 816516.1 831626.5 816537.0 831623.9 816543.0 831637.1 816573.8 831613.6 816563.9 831598.8 816569.5 831594.5 816551.7 831593.1 816541.6 831588.5	13	3.64	8.15E-08	8.17E-08	8.17E-08	8.17E-08	8.17E-08	8.15E-08	8.17E-08	1.16E-07	1.75E-07	1.39E-07	1.39E-07	1.40E-07	1.39E-07	1.39E-07	1.39E-07	1.39E-07	1.39E-07	1.39E-07	4.00E-08	3.98E-08	1.40E-07	8.13E-08	8.14E-08	8.11E-08	8.12E-08

Note:

1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.

HCP04

INDEX

Vehicle Type: NFB6 11

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																			2	
8	9																				
9	10																			1	
10	11																				1
11	12																				
12	13																				
13	14																				
14	15																				
15	16																				
16	17																			1	
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

INDEX

Vehicle Type: NFB7 12

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																			1	
8	9																				
9	10																			1	
10	11																				1
11	12																				
12	13																				
13	14																				
14	15																				
15	16																				
16	17																			1	
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	150	21%	Bypass route
Starting on Public Road	510	73%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	40	6%	
Access Road - Departure	40		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	1.25E-04	1.88E-04	8.78E-05	6.39E-04	0.00E+00	0.00E+00	4.85E-05	7.31E-05	3.41E-05	2.48E-04
9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	0.00E+00	0.00E+00	6.25E-05	9.39E-05	4.39E-05	3.19E-04	0.00E+00	0.00E+00	2.43E-05	3.65E-05	1.71E-05	1.24E-04
11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	0.00E+00	0.00E+00	6.29E-05	9.39E-05	4.40E-05	3.19E-04	0.00E+00	0.00E+00	2.45E-05	3.65E-05	1.71E-05	1.24E-04
13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	0.00E+00	0.00E+00	6.25E-05	9.39E-05	4.39E-05	3.19E-04	0.00E+00	0.00E+00	2.43E-05	3.65E-05	1.71E-05	1.24E-04
18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	150	21%	Bypass route
Starting on Public Road	510	73%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	40	6%	
Access Road - Departure	40		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

INDEX

Vehicle Type: NFB8 13

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				1
1	2																				1
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																	2			6
8	9																				
9	10																				3
10	11									2											
11	12																				3
12	13																				2
13	14																				2
14	15																				
15	16		2																		
16	17		2																		3
17	18			1						1											2
18	19									1					1	1			1		2
19	20		2							1	1						1				3
20	21									1										1	3
21	22																				1
22	23																				1
23	0																				1

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

INDEX

Vehicle Type: HGVB 7

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				
8	9																				
9	10																				
10	11																				
11	12		2																		
12	13																				
13	14																				
14	15																				
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	150	21%	Bypass route
Starting on Public Road	510	73%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	40	6%	
Access Road - Departure	40		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	2.14E-04	1.59E-04	1.07E-04	5.40E-04	0.00E+00	0.00E+00	1.05E-04	7.82E-05	5.27E-05	2.66E-04
2	0.00E+00	0.00E+00	2.15E-04	1.59E-04	1.07E-04	5.40E-04	0.00E+00	0.00E+00	1.06E-04	7.82E-05	5.28E-05	2.66E-04
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	1.71E-03	1.27E-03	8.55E-04	4.30E-03	0.00E+00	0.00E+00	8.44E-04	6.23E-04	4.21E-04	2.12E-03
9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	0.00E+00	0.00E+00	6.45E-04	4.76E-04	3.22E-04	1.62E-03	0.00E+00	0.00E+00	3.17E-04	2.35E-04	1.58E-04	7.97E-04
11	0.00E+00	0.00E+00	4.30E-04	8.14E-05	1.51E-04	2.77E-04	0.00E+00	0.00E+00	2.12E-04	4.01E-05	7.46E-05	1.36E-04
12	0.00E+00	0.00E+00	6.48E-04	4.76E-04	3.23E-04	1.62E-03	0.00E+00	0.00E+00	3.19E-04	2.35E-04	1.59E-04	7.97E-04
13	0.00E+00	0.00E+00	4.30E-04	3.17E-04	2.15E-04	1.08E-03	0.00E+00	0.00E+00	2.12E-04	1.56E-04	1.06E-04	5.32E-04
14	0.00E+00	0.00E+00	4.31E-04	3.17E-04	2.15E-04	1.08E-03	0.00E+00	0.00E+00	2.12E-04	1.56E-04	1.06E-04	5.32E-04
15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	0.00E+00	0.00E+00	4.31E-04	9.93E-06	1.33E-04	3.38E-05	0.00E+00	0.00E+00	2.12E-04	4.88E-06	6.53E-05	1.66E-05
17	0.00E+00	0.00E+00	1.07E-03	4.86E-04	4.54E-04	1.65E-03	0.00E+00	0.00E+00	5.29E-04	2.39E-04	2.24E-04	8.14E-04
18	0.00E+00	0.00E+00	8.59E-04	3.77E-04	3.60E-04	1.28E-03	0.00E+00	0.00E+00	4.23E-04	1.86E-04	1.77E-04	6.31E-04
19	0.00E+00	0.00E+00	1.29E-03	8.16E-04	6.05E-04	2.77E-03	0.00E+00	0.00E+00	6.33E-04	4.02E-04	2.98E-04	1.37E-03
20	0.00E+00	0.00E+00	1.07E-03	2.54E-04	3.91E-04	8.64E-04	0.00E+00	0.00E+00	5.27E-04	1.25E-04	1.92E-04	4.25E-04
21	0.00E+00	0.00E+00	1.07E-03	6.63E-04	4.99E-04	2.25E-03	0.00E+00	0.00E+00	5.26E-04	3.26E-04	2.46E-04	1.11E-03
22	0.00E+00	0.00E+00	2.14E-04	1.59E-04	1.07E-04	5.40E-04	0.00E+00	0.00E+00	1.05E-04	7.82E-05	5.27E-05	2.66E-04
23	0.00E+00	0.00E+00	2.13E-04	1.59E-04	1.07E-04	5.40E-04	0.00E+00	0.00E+00	1.05E-04	7.82E-05	5.25E-05	2.66E-04
24	0.00E+00	0.00E+00	2.13E-04	1.59E-04	1.07E-04	5.40E-04	0.00E+00	0.00E+00	1.05E-04	7.82E-05	5.26E-05	2.66E-04

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	150	21%	Bypass route
Starting on Public Road	510	73%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	40	6%	
Access Road - Departure	40		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1



Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source					Source Points String	Number of Points	Vertical Dim. (St) <sup>[2]</sup>	Hourly Emission Rate (g/s or g/s/sq. m)																								
				X (m)	Y (m)	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	Source Area (m2)				Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
HCP04	Carpark near Tat Fuk Road	HCP04_01	AREAPOLY	817041.1	831045.1	18.5	3.5	5137.6	817041.1 831045.1 817047.2 831048.9 817065.6 831041.3 817075.9 831035.3 817079.1 831039.5 817091.8 831034.2 817110.4 831051.2 817117.5 831047.2 817123.1 831052.2 817132.1 831039.9 817127.1 831035.0 817132.1 831027.7 817130.9 831026.1 817130.8 831021.3 817117.3 830993.0 817136.7 830978.7 817123.9 830968.9 817120.4 830962.1 817111.6 830964.1 817110.8 830974.9 817099.6 830975.0 817052.5 830993.6 817043.0 831030.6 817041.1 831045.1	24	3.26	7.26E-08	7.27E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-07	0.00E+00	2.98E-07	9.95E-08	3.74E-07	1.46E-07	1.46E-07	0.00E+00	8.57E-08	3.84E-07	2.41E-07	4.09E-07	2.58E-07	3.37E-07	7.25E-08	7.24E-08	7.24E-08

Note:

1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.





Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source											Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m2)																												(m)		
HCP04	Carpark near Tat Fuk Road	HCP04_01	AREAPOLY	817041.1	831045.1	18.5	3.5	5137.6	817041.1 831045.1 817047.2 831048.9 817065.6 831041.3 817075.9 831035.3 817079.1 831039.5 817091.8 831034.2 817110.4 831051.2 817117.5 831047.2 817123.1 831052.2 817132.1 831039.9 817127.1 831035.0 817132.1 831027.7 817130.9 831026.1 817130.8 831021.3 817117.3 830993.0 817136.7 830978.7 817123.9 830968.9 817120.4 830962.1 817111.6 830964.1 817110.8 830974.9 817099.6 830975.0 817052.5 830993.6 817043.0 831030.6 817041.1 831045.1	24	3.26	3.57E-08	3.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-07	0.00E+00	1.44E-07	4.90E-08	1.81E-07	7.17E-08	7.18E-08	0.00E+00	4.22E-08	1.86E-07	1.19E-07	2.01E-07	1.27E-07	1.66E-07	3.57E-08	3.56E-08	3.57E-08		

- Note:
1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
  3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.

**HCP09**

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Vehicle Type: NFB8 13

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1							1	1												
1	2							1	1												
2	3							1	1												
3	4							1	1												
4	5							1	1												
5	6							1	1												
6	7							1	1												
7	8																				2
8	9																				2
9	10							1		1											1
10	11							1		1											1
11	12							1		1											1
12	13							1		1											1
13	14							1		1											1
14	15							1		1											1
15	16							1		1											1
16	17							1		1											1
17	18								1												
18	19								1												
19	20								1		1										
20	21								1		1										
21	22								1		1										
22	23								1		1										
23	0								1		1										

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

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Vehicle Type: HGV8 7

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				1
8	9																				2
9	10					1	1														1
10	11					1	1														1
11	12					1	1														1
12	13					1	1														1
13	14					1	1														1
14	15					1	1														1
15	16					1	1														1
16	17					1	1														1
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	100	14%	Bypass route
Starting on Public Road	600	86%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	3.48E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.71E-04	2.25E-05	0.00E+00	1.35E-04
2	0.00E+00	0.00E+00	3.48E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.72E-04	2.25E-05	0.00E+00	1.35E-04
3	0.00E+00	0.00E+00	3.48E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.72E-04	2.25E-05	0.00E+00	1.35E-04
4	0.00E+00	0.00E+00	3.49E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.72E-04	2.25E-05	0.00E+00	1.35E-04
5	0.00E+00	0.00E+00	3.48E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.72E-04	2.25E-05	0.00E+00	1.35E-04
6	0.00E+00	0.00E+00	3.48E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.71E-04	2.25E-05	0.00E+00	1.35E-04
7	0.00E+00	0.00E+00	3.48E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.72E-04	2.25E-05	0.00E+00	1.35E-04
8	0.00E+00	0.00E+00	3.48E-04	2.12E-04	0.00E+00	1.27E-03	0.00E+00	0.00E+00	1.71E-04	1.04E-04	0.00E+00	6.25E-04
9	0.00E+00	0.00E+00	3.49E-04	2.12E-04	0.00E+00	1.27E-03	0.00E+00	0.00E+00	1.72E-04	1.04E-04	0.00E+00	6.25E-04
10	0.00E+00	0.00E+00	5.23E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.58E-04	7.23E-05	0.00E+00	4.34E-04
11	0.00E+00	0.00E+00	5.23E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.58E-04	7.23E-05	0.00E+00	4.34E-04
12	0.00E+00	0.00E+00	5.26E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.59E-04	7.23E-05	0.00E+00	4.34E-04
13	0.00E+00	0.00E+00	5.24E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.58E-04	7.23E-05	0.00E+00	4.34E-04
14	0.00E+00	0.00E+00	5.25E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.59E-04	7.23E-05	0.00E+00	4.34E-04
15	0.00E+00	0.00E+00	5.25E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.58E-04	7.23E-05	0.00E+00	4.34E-04
16	0.00E+00	0.00E+00	5.24E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.58E-04	7.23E-05	0.00E+00	4.34E-04
17	0.00E+00	0.00E+00	5.23E-04	1.47E-04	0.00E+00	8.81E-04	0.00E+00	0.00E+00	2.58E-04	7.23E-05	0.00E+00	4.34E-04
18	0.00E+00	0.00E+00	1.74E-04	1.85E-05	0.00E+00	1.11E-04	0.00E+00	0.00E+00	8.58E-05	9.12E-06	0.00E+00	5.47E-05
19	0.00E+00	0.00E+00	1.74E-04	1.85E-05	0.00E+00	1.11E-04	0.00E+00	0.00E+00	8.56E-05	9.12E-06	0.00E+00	5.47E-05
20	0.00E+00	0.00E+00	3.47E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.71E-04	2.25E-05	0.00E+00	1.35E-04
21	0.00E+00	0.00E+00	3.47E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.71E-04	2.25E-05	0.00E+00	1.35E-04
22	0.00E+00	0.00E+00	3.47E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.71E-04	2.25E-05	0.00E+00	1.35E-04
23	0.00E+00	0.00E+00	3.46E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.70E-04	2.25E-05	0.00E+00	1.35E-04
24	0.00E+00	0.00E+00	3.46E-04	4.56E-05	0.00E+00	2.74E-04	0.00E+00	0.00E+00	1.70E-04	2.25E-05	0.00E+00	1.35E-04

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	100	14%	Bypass route
Starting on Public Road	600	86%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	

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Vehicle Type: HGV9 17

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				5
8	9																				7
9	10		1		1	2	2	2	1												
10	11		1		1	2	2	2	1												
11	12		1		1	2	2	2	1												
12	13		1		1	2	2	2	1												
13	14		1		1	2	2	2	1												
14	15		1		1	2	2	2	1												
15	16		1		1	2	2	2	1												
16	17		1		1	2	2	2	1												
17	18		2						1												
18	19		2						1												
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	100	14%	Bypass route
Starting on Public Road	600	86%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	7.54E-04	5.29E-04	0.00E+00	3.18E-03	0.00E+00	0.00E+00	3.71E-04	2.61E-04	0.00E+00	1.56E-03
9	0.00E+00	0.00E+00	1.06E-03	7.41E-04	0.00E+00	4.45E-03	0.00E+00	0.00E+00	5.21E-04	3.65E-04	0.00E+00	2.19E-03
10	0.00E+00	0.00E+00	1.36E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.70E-04	6.19E-05	0.00E+00	3.71E-04
11	0.00E+00	0.00E+00	1.36E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.70E-04	6.19E-05	0.00E+00	3.71E-04
12	0.00E+00	0.00E+00	1.37E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.74E-04	6.19E-05	0.00E+00	3.71E-04
13	0.00E+00	0.00E+00	1.36E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.71E-04	6.19E-05	0.00E+00	3.71E-04
14	0.00E+00	0.00E+00	1.37E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.73E-04	6.19E-05	0.00E+00	3.71E-04
15	0.00E+00	0.00E+00	1.36E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.72E-04	6.19E-05	0.00E+00	3.71E-04
16	0.00E+00	0.00E+00	1.36E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.71E-04	6.19E-05	0.00E+00	3.71E-04
17	0.00E+00	0.00E+00	1.36E-03	1.26E-04	0.00E+00	7.54E-04	0.00E+00	0.00E+00	6.70E-04	6.19E-05	0.00E+00	3.71E-04
18	0.00E+00	0.00E+00	4.54E-04	3.38E-05	0.00E+00	2.03E-04	0.00E+00	0.00E+00	2.23E-04	1.66E-05	0.00E+00	9.96E-05
19	0.00E+00	0.00E+00	4.52E-04	3.38E-05	0.00E+00	2.03E-04	0.00E+00	0.00E+00	2.23E-04	1.66E-05	0.00E+00	9.96E-05
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source					Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[2]</sup> (m)	Hourly Emission Rate (g/s or g/s/sq. m)																								
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area				Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
				(m)	(m)	(m)	(m)	(m2)																												
HCP09	Carpark near To Lai Road	HCP09_01	AREAPOLY	816806.1	830848.6	16.1	3.4	3346.8	816806.1 830848.6 816861.9 830832.3 816862.7 830816.6 816856.9 830807.7 816857.0 830801.1 816855.4 830794.4 816846.7 830793.5 816846.1 830788.7 816842.4 830787.5 816836.3 830792.4 816830.4 830786.7 816783.8 830791.5 816773.8 830795.1 816778.0 830814.3 816791.8 830810.0 816798.4 830809.6 816807.1 830821.3 816807.9 830832.9 816806.1 830848.6	19	3.18	1.17E-07	1.18E-07	1.18E-07	1.18E-07	1.18E-07	1.18E-07	1.18E-07	1.18E-07	6.27E-07	8.59E-07	8.17E-07	8.17E-07	8.22E-07	8.19E-07	8.20E-07	8.20E-07	8.19E-07	8.17E-07	2.03E-07	2.03E-07	1.17E-07	1.17E-07	1.17E-07	1.17E-07	1.17E-07

Note:

1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.







HCP11

INDEX

Vehicle Type: NFB6 11

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				1
8	9																				1
9	10																				
10	11																				
11	12									1											1
12	13																				
13	14																				
14	15																				
15	16																				
16	17																				
17	18		1																		
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

INDEX

Vehicle Type: NFB7 12

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				1
8	9																				1
9	10																				
10	11																				
11	12									1											1
12	13																				
13	14																				
14	15																				
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route 0
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup> 320
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	7.53E-05	1.10E-04	9.32E-05	2.76E-04	0.00E+00	0.00E+00	2.93E-05	4.26E-05	3.63E-05	1.07E-04
9	0.00E+00	0.00E+00	7.55E-05	1.10E-04	9.34E-05	2.76E-04	0.00E+00	0.00E+00	2.94E-05	4.26E-05	3.63E-05	1.07E-04
10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	0.00E+00	0.00E+00	1.52E-04	1.45E-04	1.51E-04	3.63E-04	0.00E+00	0.00E+00	5.91E-05	5.62E-05	5.87E-05	1.41E-04
13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	0.00E+00	0.00E+00	7.55E-05	3.42E-06	4.18E-05	8.61E-06	0.00E+00	0.00E+00	2.94E-05	1.33E-06	1.62E-05	3.35E-06
19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route 0
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup> 320
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

INDEX

Vehicle Type: NFB8 13

Hour	No. of Trip <sup>[1]</sup>																					
	Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1		1																			
1	2		1																			
2	3																				1	
3	4																				1	
4	5																				1	
5	6																				1	
6	7																				1	
7	8																				3	
8	9																				3	
9	10			1			1															
10	11										1											
11	12										3											3
12	13																					
13	14		1																			
14	15		3											1	1							
15	16										1											
16	17			1				1														
17	18		3						1													
18	19																					
19	20																					
20	21			1																		
21	22			1																		
22	23			1																		
23	0			1																		

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

INDEX

Vehicle Type: HGV7 6

Hour	No. of Trip <sup>[1]</sup>																					
	Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																					
1	2																					
2	3																					
3	4																					
4	5																					
5	6																					
6	7																					
7	8																				1	
8	9																					
9	10																				2	
10	11																					
11	12																					
12	13																					
13	14																					
14	15																					
15	16																					
16	17																					
17	18																					
18	19																					
19	20																					
20	21																					
21	22																					
22	23																					
23	0																					

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	2.59E-04	5.79E-06	1.40E-04	1.46E-05	0.00E+00	0.00E+00	1.27E-04	2.85E-06	6.90E-05	7.16E-06
2	0.00E+00	0.00E+00	2.59E-04	5.79E-06	1.41E-04	1.46E-05	0.00E+00	0.00E+00	1.28E-04	2.85E-06	6.92E-05	7.16E-06
3	0.00E+00	0.00E+00	2.59E-04	1.85E-04	2.28E-04	4.66E-04	0.00E+00	0.00E+00	1.28E-04	9.12E-05	1.12E-04	2.29E-04
4	0.00E+00	0.00E+00	2.59E-04	1.85E-04	2.28E-04	4.66E-04	0.00E+00	0.00E+00	1.28E-04	9.12E-05	1.12E-04	2.29E-04
5	0.00E+00	0.00E+00	2.59E-04	1.85E-04	2.28E-04	4.66E-04	0.00E+00	0.00E+00	1.28E-04	9.12E-05	1.12E-04	2.29E-04
6	0.00E+00	0.00E+00	2.59E-04	1.85E-04	2.27E-04	4.66E-04	0.00E+00	0.00E+00	1.27E-04	9.12E-05	1.12E-04	2.29E-04
7	0.00E+00	0.00E+00	2.59E-04	1.85E-04	2.28E-04	4.66E-04	0.00E+00	0.00E+00	1.28E-04	9.12E-05	1.12E-04	2.29E-04
8	0.00E+00	0.00E+00	2.59E-04	5.56E-04	6.82E-04	1.40E-03	0.00E+00	0.00E+00	3.82E-04	2.74E-04	3.36E-04	6.88E-04
9	0.00E+00	0.00E+00	7.79E-04	5.56E-04	6.84E-04	1.40E-03	0.00E+00	0.00E+00	3.83E-04	2.74E-04	3.37E-04	6.88E-04
10	0.00E+00	0.00E+00	5.19E-04	3.47E-05	2.93E-04	8.73E-05	0.00E+00	0.00E+00	2.56E-04	1.71E-05	1.44E-04	4.30E-05
11	0.00E+00	0.00E+00	2.59E-04	5.90E-05	1.67E-04	1.48E-04	0.00E+00	0.00E+00	1.28E-04	2.91E-05	8.20E-05	7.31E-05
12	0.00E+00	0.00E+00	1.57E-03	7.33E-04	1.19E-03	1.84E-03	0.00E+00	0.00E+00	7.71E-04	3.61E-04	5.85E-04	9.07E-04
13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	0.00E+00	0.00E+00	2.60E-04	5.79E-06	1.41E-04	1.46E-05	0.00E+00	0.00E+00	1.28E-04	2.85E-06	6.95E-05	7.16E-06
15	0.00E+00	0.00E+00	1.30E-03	2.95E-04	8.35E-04	7.42E-04	0.00E+00	0.00E+00	6.41E-04	1.45E-04	4.11E-04	3.65E-04
16	0.00E+00	0.00E+00	5.20E-04	2.21E-04	3.84E-04	5.56E-04	0.00E+00	0.00E+00	2.56E-04	1.09E-04	1.89E-04	2.74E-04
17	0.00E+00	0.00E+00	5.19E-04	5.79E-05	3.04E-04	1.46E-04	0.00E+00	0.00E+00	2.56E-04	2.85E-05	1.50E-04	7.17E-05
18	0.00E+00	0.00E+00	1.04E-03	4.98E-05	5.75E-04	1.25E-04	0.00E+00	0.00E+00	5.11E-04	2.45E-05	2.83E-04	6.16E-05
19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	2.58E-04	5.79E-06	1.40E-04	1.46E-05	0.00E+00	0.00E+00	1.27E-04	2.85E-06	6.89E-05	7.16E-06
22	0.00E+00	0.00E+00	2.58E-04	5.79E-06	1.40E-04	1.46E-05	0.00E+00	0.00E+00	1.27E-04	2.85E-06	6.90E-05	7.16E-06
23	0.00E+00	0.00E+00	2.57E-04	5.79E-06	1.40E-04	1.46E-05	0.00E+00	0.00E+00	1.27E-04	2.85E-06	6.87E-05	7.16E-06
24	0.00E+00	0.00E+00	2.58E-04	5.79E-06	1.40E-04	1.46E-05	0.00E+00	0.00E+00	1.27E-04	2.85E-06	6.88E-05	7.16E-06

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

INDEX

Vehicle Type: HGV8 7

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3															1				1	
3	4															1				1	
4	5															1				1	
5	6															1				1	
6	7															1				1	
7	8																			3	
8	9															2				2	
9	10																			5	
10	11																				
11	12																				
12	13					2															
13	14																				
14	15																			2	
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

INDEX

Vehicle Type: HGV9 17

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																			1	
3	4																			1	
4	5																			1	
5	6																			1	
6	7																			1	
7	8																			7	
8	9																			2	
9	10																				
10	11																				
11	12																				
12	13																				
13	14																				
14	15			2																4	
15	16																				
16	17																				
17	18																				
18	19			2																	
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
0 to 8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	4.51E-04	3.59E-04	4.14E-04	9.02E-04	0.00E+00	0.00E+00	2.22E-04	1.77E-04	2.04E-04	4.44E-04
4	0.00E+00	0.00E+00	4.51E-04	3.59E-04	4.14E-04	9.02E-04	0.00E+00	0.00E+00	2.22E-04	1.77E-04	2.04E-04	4.44E-04
5	0.00E+00	0.00E+00	4.51E-04	3.59E-04	4.14E-04	9.02E-04	0.00E+00	0.00E+00	2.22E-04	1.77E-04	2.04E-04	4.44E-04
6	0.00E+00	0.00E+00	4.50E-04	3.59E-04	4.13E-04	9.02E-04	0.00E+00	0.00E+00	2.22E-04	1.77E-04	2.04E-04	4.44E-04
7	0.00E+00	0.00E+00	4.51E-04	3.59E-04	4.14E-04	9.02E-04	0.00E+00	0.00E+00	2.22E-04	1.77E-04	2.04E-04	4.44E-04
8	0.00E+00	0.00E+00	6.75E-04	5.56E-04	6.29E-04	1.40E-03	0.00E+00	0.00E+00	3.32E-04	2.74E-04	3.09E-04	6.88E-04
9	0.00E+00	0.00E+00	9.03E-04	7.18E-04	8.28E-04	1.80E-03	0.00E+00	0.00E+00	4.44E-04	3.53E-04	4.08E-04	8.88E-04
10	0.00E+00	0.00E+00	1.13E-03	9.26E-04	1.05E-03	2.33E-03	0.00E+00	0.00E+00	5.55E-04	4.56E-04	5.16E-04	1.15E-03
11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	0.00E+00	0.00E+00	4.52E-04	3.94E-05	2.59E-04	9.90E-05	0.00E+00	0.00E+00	2.22E-04	1.94E-05	1.28E-04	4.87E-05
14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	0.00E+00	0.00E+00	4.52E-04	3.71E-04	4.20E-04	9.32E-04	0.00E+00	0.00E+00	2.23E-04	1.82E-04	2.07E-04	4.59E-04
16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	175	25%	Bypass route
Starting on Public Road	440	63%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	85	12%	
Access Road - Departure	85		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Road)

PTI ID	Route	Line Source	Source ID	Type	X2		Y2	Width (m)	Base Elevation (m)	Release Height (m) <sup>(1)</sup>	Area/Polyarea/Line (m <sup>2</sup> )	Percentage of Routing %	Hourly Emission Rate (g/s or g/s/m)																								
					X	Y							Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
					(m)	(m)							(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
HCP11	Route A	HCP11_A01	LINE	816487.8	830538.4	816448.8	830551.5	9.5	7.9	1.7	1.58	1.1%	3.34E-11	3.34E-11	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	1.68E-08	1.12E-08	7.79E-09	3.41E-10	6.54E-09	2.27E-10	3.34E-11	8.19E-09	1.28E-09	3.34E-10	3.07E-10	6.69E-11	0.00E+00	3.34E-11	3.34E-11	3.34E-11	3.34E-11
		HCP11_A02	LINE	816448.8	830551.5	816430.3	830555.7	9.5	7.7	1.7	1.58	1.1%	3.34E-11	3.34E-11	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	1.68E-08	1.12E-08	7.79E-09	3.41E-10	6.54E-09	2.27E-10	3.34E-11	8.19E-09	1.28E-09	3.34E-10	3.07E-10	6.69E-11	0.00E+00	3.34E-11	3.34E-11	3.34E-11	3.34E-11	
		HCP11_A03	LINE	816430.3	830555.7	816405.4	830562.9	9.5	7.6	1.7	1.58	1.1%	3.34E-11	3.34E-11	4.21E-09	4.21E-09	4.21E-09	4.21E-09	4.21E-09	1.68E-08	1.12E-08	7.79E-09	3.41E-10	6.54E-09	2.27E-10	3.34E-11	8.19E-09	1.28E-09	3.34E-10	3.07E-10	6.69E-11	0.00E+00	3.34E-11	3.34E-11	3.34E-11	3.34E-11	
		HCP11_A04	LINE	816405.4	830562.9	816403.6	830570.8	15	7.4	1.7	1.58	1.1%	2.12E-11	2.12E-11	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	1.06E-08	7.12E-09	4.93E-09	2.16E-10	4.14E-09	1.44E-10	2.12E-11	5.19E-09	8.08E-10	2.12E-10	1.95E-10	4.24E-11	0.00E+00	2.12E-11	2.12E-11	2.12E-11	2.12E-11
		HCP11_A05	LINE	816403.6	830570.8	816404.3	830588.5	15	7.3	1.7	1.58	1.1%	2.12E-11	2.12E-11	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	1.06E-08	7.12E-09	4.93E-09	2.16E-10	4.14E-09	1.44E-10	2.12E-11	5.19E-09	8.08E-10	2.12E-10	1.95E-10	4.24E-11	0.00E+00	2.12E-11	2.12E-11	2.12E-11	2.12E-11
		HCP11_A06	LINE	816404.3	830588.5	816388.5	830593.5	10.5	7.2	1.7	1.58	1.1%	3.03E-11	3.03E-11	3.81E-09	3.81E-09	3.81E-09	3.81E-09	3.81E-09	3.81E-09	1.52E-08	1.02E-08	7.05E-09	3.08E-10	5.92E-09	2.06E-10	3.03E-11	7.41E-09	1.15E-09	3.02E-10	2.78E-10	6.05E-11	0.00E+00	3.03E-11	3.03E-11	3.03E-11	3.03E-11
		HCP11_A07	LINE	816388.5	830593.5	816370.1	830596.3	10.5	7.1	1.7	1.58	1.1%	3.03E-11	3.03E-11	3.81E-09	3.81E-09	3.81E-09	3.81E-09	3.81E-09	3.81E-09	1.52E-08	1.02E-08	7.05E-09	3.08E-10	5.92E-09	2.06E-10	3.03E-11	7.41E-09	1.15E-09	3.02E-10	2.78E-10	6.05E-11	0.00E+00	3.03E-11	3.03E-11	3.03E-11	3.03E-11
		HCP11_A08	LINE	816370.1	830596.3	816347.1	830596.3	10.5	7.1	1.7	1.58	1.1%	3.03E-11	3.03E-11	3.81E-09	3.81E-09	3.81E-09	3.81E-09	3.81E-09	3.81E-09	1.52E-08	1.02E-08	7.05E-09	3.08E-10	5.92E-09	2.06E-10	3.03E-11	7.41E-09	1.15E-09	3.02E-10	2.78E-10	6.05E-11	0.00E+00	3.03E-11	3.03E-11	3.03E-11	3.03E-11
		HCP11_A09	LINE	816347.1	830596.3	816328.4	830593.2	10.5	7.1	1.7	1.58	1.1%	3.03E-11	3.03E-11	3.81E-09	3.81E-09	3.81E-09	3.81E-09	3.81E-09	3.81E-09	1.52E-08	1.02E-08	7.05E-09	3.08E-10	5.92E-09	2.06E-10	3.03E-11	7.41E-09	1.15E-09	3.02E-10	2.78E-10	6.05E-11	0.00E+00	3.03E-11	3.03E-11	3.03E-11	3.03E-11
		HCP11_A10	LINE	816328.4	830593.2	816313.7	830588.1	10.5	7.1	1.7	1.58	1.1%	3.03E-11	3.03E-11	3.81E-09	3.81E-09	3.81E-09	3.81E-09	3.81E-09	3.81E-09	1.52E-08	1.02E-08	7.05E-09	3.08E-10	5.92E-09	2.06E-10	3.03E-11	7.41E-09	1.15E-09	3.02E-10	2.78E-10	6.05E-11	0.00E+00	3.03E-11	3.03E-11	3.03E-11	3.03E-11
		HCP11_A11	LINE	816313.7	830588.1	816292.8	830576.5	10.5	6.4	1.7	1.58	1.1%	3.03E-11	3.03E-11	3.81E-09	3.81E-09	3.81E-09	3.81E-09	3.81E-09	3.81E-09	1.52E-08	1.02E-08	7.05E-09	3.08E-10	5.92E-09	2.06E-10	3.03E-11	7.41E-09	1.15E-09	3.02E-10	2.78E-10	6.05E-11	0.00E+00	3.03E-11	3.03E-11	3.03E-11	3.03E-11
		HCP11_A12	LINE	816292.8	830576.5	816279.7	830593.9	10.5	6.4	1.7	1.58	1.1%	2.12E-11	2.12E-11	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	1.06E-08	7.12E-09	4.93E-09	2.16E-10	4.14E-09	1.44E-10	2.12E-11	5.19E-09	8.08E-10	2.12E-10	1.95E-10	4.24E-11	0.00E+00	2.12E-11	2.12E-11	2.12E-11	2.12E-11
		HCP11_A13	LINE	816279.7	830593.9	816271.9	830597.8	15	6.3	1.7	1.58	1.1%	2.12E-11	2.12E-11	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	1.06E-08	7.12E-09	4.93E-09	2.16E-10	4.14E-09	1.44E-10	2.12E-11	5.19E-09	8.08E-10	2.12E-10	1.95E-10	4.24E-11	0.00E+00	2.12E-11	2.12E-11	2.12E-11	2.12E-11
		HCP11_A14	LINE	816271.9	830597.8	816260.2	830594.6	15	6.2	1.7	1.58	1.1%	2.12E-11	2.12E-11	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	1.06E-08	7.12E-09	4.93E-09	2.16E-10	4.14E-09	1.44E-10	2.12E-11	5.19E-09	8.08E-10	2.12E-10	1.95E-10	4.24E-11	0.00E+00	2.12E-11	2.12E-11	2.12E-11	2.12E-11
		HCP11_A15	LINE	816260.2	830594.6	816257.5	830593.9	13	6.2	1.7	1.58	1.1%	2.44E-11	2.44E-11	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	1.23E-08	8.22E-09	5.69E-09	2.49E-10	4.78E-09	1.66E-10	2.44E-11	5.98E-09	9.33E-10	2.44E-10	2.25E-10	4.89E-11	0.00E+00	2.44E-11	2.44E-11	2.44E-11	2.44E-11
		HCP11_A16	LINE	816257.5	830593.9	816249.1	830596.3	13	6.2	1.7	1.58	1.1%	2.44E-11	2.44E-11	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	1.23E-08	8.22E-09	5.69E-09	2.49E-10	4.78E-09	1.66E-10	2.44E-11	5.98E-09	9.33E-10	2.44E-10	2.25E-10	4.89E-11	0.00E+00	2.44E-11	2.44E-11	2.44E-11	2.44E-11
		HCP11_A17	LINE	816249.1	830596.3	816243.7	830605.7	13	6.1	1.7	1.58	1.1%	2.44E-11	2.44E-11	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	1.23E-08	8.22E-09	5.69E-09	2.49E-10	4.78E-09	1.66E-10	2.44E-11	5.98E-09	9.33E-10	2.44E-10	2.25E-10	4.89E-11	0.00E+00	2.44E-11	2.44E-11	2.44E-11	2.44E-11
		HCP11_A18	LINE	816243.7	830605.7	816241.3	830628.5	13	6.1	1.7	1.58	1.1%	2.44E-11	2.44E-11	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	1.23E-08	8.22E-09	5.69E-09	2.49E-10	4.78E-09	1.66E-10	2.44E-11	5.98E-09	9.33E-10	2.44E-10	2.25E-10	4.89E-11	0.00E+00	2.44E-11	2.44E-11	2.44E-11	2.44E-11
		HCP11_A19	LINE	816241.3	830628.5	816235	830649.8	13	5.9	1.7	1.58	1.1%	2.44E-11	2.44E-11	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	1.23E-08	8.22E-09	5.69E-09	2.49E-10	4.78E-09	1.66E-10	2.44E-11	5.98E-09	9.33E-10	2.44E-10	2.25E-10	4.89E-11	0.00E+00	2.44E-11	2.44E-11	2.44E-11	2.44E-11
		HCP11_A20	LINE	816235	830649.8	816227.5	830666.2	13	5.8	1.7	1.58	1.1%	2.44E-11	2.44E-11	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	1.23E-08	8.22E-09	5.69E-09	2.49E-10	4.78E-09	1.66E-10	2.44E-11	5.98E-09	9.33E-10	2.44E-10	2.25E-10	4.89E-11	0.00E+00	2.44E-11	2.44E-11	2.44E-11	2.44E-11
		HCP11_A21	LINE	816227.5	830666.2	816210.4	830686.2	13	5.6	1.7	1.58	1.1%	2.44E-11	2.44E-11	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	1.23E-08	8.22E-09	5.69E-09	2.49E-10	4.78E-09	1.66E-10	2.44E-11	5.98E-09	9.33E-10	2.44E-10	2.25E-10	4.89E-11	0.00E+00	2.44E-11	2.44E-11	2.44E-11	2.44E-11
		HCP11_A22	LINE	816210.4	830686.2	816175.6	830719.3	13	5.4	1.7	1.58	1.1%	2.44E-11	2.44E-11	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	3.08E-09	1.23E-08	8.22E-09	5.69E-09	2.49E-10	4.78E-09	1.66E-10	2.44E-11	5.98E-09	9.33E-10	2.44E-10	2.25E-10	4.89E-11	0.00E+00	2.44E-11	2.44E-11	2.44E-11	2.44E-11
		HCP11_A23	LINE	816175.6	830719.3	816157.1	830717.1	11.5	5.3	1.7	1.58	1.1%	2.76E-11	2.76E-11	3.48E-09	3.48E-09	3.48E-09	3.48E-09	3.48E-09	3.48E-09	1.39E-08	9.29E-09	6.43E-09	2.82E-10	5.40E-09	1.88E-10	2.76E-11	6.77E-09	1.05E-09	2.76E-10	2.54E-10	5.52E-11	0.00E+00	2.76E-11	2.76E-11	2.76E-11	2.76E-11
		HCP11_A24	LINE	816157.1	830717.1	816143.4	830691.4	11.5	5.4	1.7	1.58	1.1%	2.76E-11	2.76E-11	3.48E-09	3.48E-09	3.48E-09	3.48E-09	3.48E-09	3.48E-09	1.39E-08	9.29E-09	6.43E-09	2.82E-10	5.40E-09	1.88E-10	2.76E-11	6.77E-09	1.05E-09	2.76E-10	2.54E-10	5.52E-11	0.00E+00	2.76E-11	2.76E-11	2.76E-11	2.76E-11
		HCP11_A25	LINE	816143.4</																																	

Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source										Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>																										
				(m)	(m)	(m)	(m)	(m2)				(m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
HCP11	Carpark near Fu Hang Road	HCP11_01	AREAPOLY	816550.1	830599.7	10.0	3.1	6682.6	816550.1 830599.7 816553.1 830603.0 816565.8 830600.0 816574.2 830595.4 816589.6 830589.6 816595.9 830578.8 816606.4 830571.4 816605.5 830552.6 816601.5 830542.8 816600.0 830521.1 816583.8 830502.5 816517.7 830522.4 816486.7 830534.6 816493.7 830558.0 816532.5 830542.8 816541.6 830561.6 816531.2 830567.8 816540.5 830592.0 816545.5 830590.3 816550.1 830599.7	20	2.84	3.96E-08	3.97E-08	2.49E-07	2.49E-07	2.49E-07	2.49E-07	2.49E-07	2.49E-07	9.28E-07	6.38E-07	4.75E-07	4.77E-08	4.59E-07	7.35E-08	3.98E-08	6.77E-07	1.11E-07	8.63E-08	1.75E-07	6.89E-08	0.00E+00	3.95E-08	3.95E-08	3.94E-08	3.94E-08	

Note:

1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.





Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source					Source Area (m2)	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>																													
				(m)	(m)	(m)	(m)	Hr 00					Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
HCP11	Carpark near Fu Hang Road	HCP11_01	AREAPOLY	816550.1	830599.7	10.0	3.1	6682.6	816550.1 830599.7 816553.1 830603.0 816565.8 830600.0 816574.2 830595.4 816589.6 830589.6 816595.9 830578.8 816606.4 830571.4 816605.5 830552.6 816601.5 830542.8 816600.0 830521.1 816583.8 830502.5 816517.7 830522.4 816486.7 830534.6 816493.7 830558.0 816532.5 830542.8 816541.6 830561.6 816531.2 830567.8 816540.5 830592.0 816545.5 830590.3 816550.1 830599.7	20	2.84	1.95E-08	1.95E-08	1.23E-07	1.23E-07	1.23E-07	1.22E-07	1.23E-07	4.54E-07	3.11E-07	2.34E-07	2.35E-08	2.21E-07	3.62E-08	1.96E-08	3.33E-07	5.46E-08	4.25E-08	8.47E-08	3.39E-08	0.00E+00	1.94E-08	1.95E-08	1.94E-08	1.94E-08	

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.

**PTI05 - Bus**

INDEX

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	320	46%	Bypass route
Starting on Public Road	380	54%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
Total Distance	700		

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Note: 1. The routes within the PTI is based on tentative layout plan provided by CEDD.

Vehicle Type: FBDD 15

Hour		No. of Trip <sup>[1][2]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1					8															
1	2																				
2	3																				
3	4																				
4	5																				
5	6					12												2			
6	7					20												2			
7	8					24												3			
8	9					24															
9	10					24															
10	11					20															
11	12					12															
12	13					12															
13	14					12															
14	15					12															
15	16					12															
16	17					20															
17	18					24															
18	19					24															
19	20					24															
20	21					20															
21	22					12															
22	23					12															
23	0					12															

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	1.10E-04	4.82E-03	7.95E-04	0.00E+00	9.45E-04	0.00E+00	4.51E-05	1.97E-03	3.25E-04	0.00E+00	3.86E-04
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	1.23E-03	8.45E-03	2.81E-03	0.00E+00	3.34E-03	0.00E+00	5.03E-04	3.45E-03	1.15E-03	0.00E+00	1.36E-03
7	0.00E+00	1.34E-03	1.33E-02	3.60E-03	0.00E+00	4.28E-03	0.00E+00	5.48E-04	5.43E-03	1.47E-03	0.00E+00	1.75E-03
8	0.00E+00	1.93E-03	1.63E-02	4.81E-03	0.00E+00	5.71E-03	0.00E+00	7.88E-04	6.65E-03	1.96E-03	0.00E+00	2.33E-03
9	0.00E+00	3.31E-04	1.45E-02	2.39E-03	0.00E+00	2.83E-03	0.00E+00	1.35E-04	5.93E-03	9.75E-04	0.00E+00	1.16E-03
10	0.00E+00	3.31E-04	1.45E-02	2.39E-03	0.00E+00	2.83E-03	0.00E+00	1.35E-04	5.93E-03	9.75E-04	0.00E+00	1.16E-03
11	0.00E+00	2.76E-04	1.21E-02	1.99E-03	0.00E+00	2.36E-03	0.00E+00	1.13E-04	4.94E-03	8.12E-04	0.00E+00	9.65E-04
12	0.00E+00	1.66E-04	7.30E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.98E-03	4.87E-04	0.00E+00	5.79E-04
13	0.00E+00	1.66E-04	7.27E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.97E-03	4.87E-04	0.00E+00	5.79E-04
14	0.00E+00	1.66E-04	7.29E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.98E-03	4.87E-04	0.00E+00	5.79E-04
15	0.00E+00	1.66E-04	7.28E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.97E-03	4.87E-04	0.00E+00	5.79E-04
16	0.00E+00	1.66E-04	7.27E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.97E-03	4.87E-04	0.00E+00	5.79E-04
17	0.00E+00	2.76E-04	1.21E-02	1.99E-03	0.00E+00	2.36E-03	0.00E+00	1.13E-04	4.94E-03	8.12E-04	0.00E+00	9.65E-04
18	0.00E+00	3.31E-04	1.45E-02	2.39E-03	0.00E+00	2.83E-03	0.00E+00	1.35E-04	5.93E-03	9.75E-04	0.00E+00	1.16E-03
19	0.00E+00	3.31E-04	1.45E-02	2.39E-03	0.00E+00	2.83E-03	0.00E+00	1.35E-04	5.91E-03	9.75E-04	0.00E+00	1.16E-03
20	0.00E+00	3.31E-04	1.45E-02	2.39E-03	0.00E+00	2.83E-03	0.00E+00	1.35E-04	5.91E-03	9.75E-04	0.00E+00	1.16E-03
21	0.00E+00	2.76E-04	1.20E-02	1.99E-03	0.00E+00	2.36E-03	0.00E+00	1.13E-04	4.92E-03	8.12E-04	0.00E+00	9.65E-04
22	0.00E+00	1.66E-04	7.23E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.95E-03	4.87E-04	0.00E+00	5.79E-04
23	0.00E+00	1.66E-04	7.20E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.94E-03	4.87E-04	0.00E+00	5.79E-04
24	0.00E+00	1.66E-04	7.21E-03	1.19E-03	0.00E+00	1.42E-03	0.00E+00	6.77E-05	2.94E-03	4.87E-04	0.00E+00	5.79E-04

Note:  
 1. No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.  
 2. Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.









Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source							Area Polygon Source		Hourly Emission Rate (g/s or g/s/sq. m)																								
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Source Area	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m2)	(m)																									
PTI05_Bus	Planned PTI at Proposed Public Housing at Nai Wai	PTI05_I001	AREA	816881.6	831305.9	12.6	3.0	26.9	1.0	82.3	26.9	2.80	4.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.61E-05	1.40E-04	1.77E-04	1.33E-04	1.33E-04	1.10E-04	6.66E-05	6.64E-05	6.65E-05	6.65E-05	6.64E-05	1.10E-04	1.33E-04	1.32E-04	1.32E-04	1.10E-04	6.61E-05	6.58E-05	6.59E-05
		PTI05_I002	AREA	816886.7	831228.7	12.7	3.0	1.0	26.2	0.3	26.2	2.80	4.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.61E-05	1.40E-04	1.77E-04	1.33E-04	1.33E-04	1.10E-04	6.66E-05	6.64E-05	6.65E-05	6.65E-05	6.64E-05	1.10E-04	1.33E-04	1.32E-04	1.32E-04	1.10E-04	6.61E-05	6.58E-05	6.59E-05

- Note:
- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
  - According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
  - According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.

PT105 - PLB - Diesel

INDEX

Vehicle Type: PLB-D 22

Hour		No. of Trip <sup>[1][2]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	6	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
6	7	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
7	8	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
8	9	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	11	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	12	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	13	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	14	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	15	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	16	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	17	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	18	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	19	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	20	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	21	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	22	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	23	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note:

- No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.
- Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	55	8%	Bypass route
Starting on Public Road	645	92%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
Total Distance	700		

Note: 1. The routes within the PTI is based on tentative layout plan provided by CEDD.

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	2.56E-05	4.93E-05	6.75E-06	0.00E+00	7.91E-05	0.00E+00	9.96E-06	1.92E-05	2.62E-06	0.00E+00	3.07E-05
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	6.67E-05	9.86E-05	4.35E-05	0.00E+00	5.10E-04	0.00E+00	2.59E-05	3.84E-05	1.69E-05	0.00E+00	1.98E-04
7	0.00E+00	9.23E-05	1.48E-04	5.02E-05	0.00E+00	5.89E-04	0.00E+00	3.59E-05	5.76E-05	1.95E-05	0.00E+00	2.29E-04
8	0.00E+00	1.09E-04	1.81E-04	5.47E-05	0.00E+00	6.41E-04	0.00E+00	4.25E-05	7.03E-05	2.13E-05	0.00E+00	2.49E-04
9	0.00E+00	8.53E-05	1.65E-04	2.25E-05	0.00E+00	2.64E-04	0.00E+00	3.32E-05	6.41E-05	8.74E-06	0.00E+00	1.02E-04
10	0.00E+00	8.53E-05	1.65E-04	2.25E-05	0.00E+00	2.64E-04	0.00E+00	3.32E-05	6.41E-05	8.74E-06	0.00E+00	1.02E-04
11	0.00E+00	6.83E-05	1.32E-04	1.80E-05	0.00E+00	2.11E-04	0.00E+00	2.65E-05	5.13E-05	6.99E-06	0.00E+00	8.20E-05
12	0.00E+00	4.27E-05	8.29E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	3.22E-05	4.37E-06	0.00E+00	5.12E-05
13	0.00E+00	4.27E-05	8.25E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	3.21E-05	4.37E-06	0.00E+00	5.12E-05
14	0.00E+00	4.27E-05	8.27E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	3.22E-05	4.37E-06	0.00E+00	5.12E-05
15	0.00E+00	4.27E-05	8.26E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	3.21E-05	4.37E-06	0.00E+00	5.12E-05
16	0.00E+00	4.27E-05	8.26E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	3.21E-05	4.37E-06	0.00E+00	5.12E-05
17	0.00E+00	6.83E-05	1.32E-04	1.80E-05	0.00E+00	2.11E-04	0.00E+00	2.65E-05	5.13E-05	6.99E-06	0.00E+00	8.20E-05
18	0.00E+00	8.53E-05	1.65E-04	2.25E-05	0.00E+00	2.64E-04	0.00E+00	3.32E-05	6.41E-05	8.74E-06	0.00E+00	1.02E-04
19	0.00E+00	8.53E-05	1.64E-04	2.25E-05	0.00E+00	2.64E-04	0.00E+00	3.32E-05	6.39E-05	8.74E-06	0.00E+00	1.02E-04
20	0.00E+00	8.53E-05	1.64E-04	2.25E-05	0.00E+00	2.64E-04	0.00E+00	3.32E-05	6.38E-05	8.74E-06	0.00E+00	1.02E-04
21	0.00E+00	6.83E-05	1.31E-04	1.80E-05	0.00E+00	2.11E-04	0.00E+00	2.65E-05	5.10E-05	6.99E-06	0.00E+00	8.20E-05
22	0.00E+00	4.27E-05	8.21E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	3.19E-05	4.37E-06	0.00E+00	5.12E-05
23	0.00E+00	4.27E-05	8.17E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	3.18E-05	4.37E-06	0.00E+00	5.12E-05
24	0.00E+00	4.27E-05	8.18E-05	1.12E-05	0.00E+00	1.32E-04	0.00E+00	1.66E-05	3.18E-05	4.37E-06	0.00E+00	5.12E-05

Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Road)

PTI ID	Route	Source ID	Type	Line Source					Area/Polyarea/Line					Hourly Emission Rate (g/s or g/s/sq. m)																									
				X	Y	X2	Y2	Width	Base Elevation	Release Height <sup>(1)</sup>	Initial Vertical Dim <sup>(2)</sup>	Percentage of Routing	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(%)																											
PTI05_PLBD	Route A	PTI05_D_A01	LINE	816885.0	831287.9	816890.2	831279.0	9.5	12.8	1.7	1.58	100%	1.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-08	9.60E-08	1.05E-07	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	3.44E-08	4.30E-08	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08		
		PTI05_D_A02	LINE	816890.2	831279.0	816893.9	831217.6	9.5	12.8	1.7	1.58	100%	1.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-08	9.60E-08	1.05E-07	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	3.44E-08	4.30E-08	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	
		PTI05_D_A03	LINE	816893.9	831217.6	816889.3	831177.9	9.5	12.4	1.7	1.58	100%	1.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-08	9.60E-08	1.05E-07	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	3.44E-08	4.30E-08	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	
		PTI05_D_A04	LINE	816889.3	831177.9	816876.7	831159.5	9.5	12.3	1.7	1.58	100%	1.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-08	9.60E-08	1.05E-07	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	3.44E-08	4.30E-08	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	
		PTI05_D_A05	LINE	816876.7	831159.5	816842.0	831141.0	9.5	13.5	1.7	1.58	100%	1.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-08	9.60E-08	1.05E-07	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	3.44E-08	4.30E-08	4.30E-08	4.30E-08	3.44E-08	2.15E-08	2.15E-08	2.15E-08	2.15E-08	
		PTI05_D_A06	LINE	816842.0	831141.0	816817.1	831171.4	11	12.9	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08
		PTI05_D_A07	LINE	816817.1	831171.4	816750.7	831216.9	11	12	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	
		PTI05_D_A08	LINE	816750.7	831216.9	816690.2	831278.3	11	11.2	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	
		PTI05_D_A09	LINE	816690.2	831278.3	816667.6	831307.6	11	12	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	
		PTI05_D_A10	LINE	816667.6	831307.6	816647.5	831329.9	11	11.2	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	
		PTI05_D_A11	LINE	816647.5	831329.9	816628.1	831347.7	11	10	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	
		PTI05_D_A12	LINE	816628.1	831347.7	816601.0	831369.9	11	10	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	
		PTI05_D_A13	LINE	816601.0	831369.9	816575.6	831393.0	11	10	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	
		PTI05_D_A14	LINE	816575.6	831393.0	816564.3	831405.2	11	10	1.7	1.58	100%	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-08	8.29E-08	9.03E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	2.97E-08	3.71E-08	3.71E-08	3.71E-08	2.97E-08	1.86E-08	1.86E-08	1.86E-08	1.86E-08	
		PTI05_D_A15	LINE	816564.3	831405.2	816544.8	831430.4	13	10	1.7	1.58	100%	9.42E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-08	7.01E-08	7.64E-08	3.14E-08	3.14E-08	2.51E-08	1.57E-08	1.57E-08	1.57E-08	1.57E-08	1.57E-08	2.51E-08	3.14E-08	3.14E-08	3.14E-08	2.51E-08	1.57E-08	1.57E-08	1.57E-08	1.57E-08		
		PTI05_D_A16	LINE	816544.8	831430.4	816509.1	831388.2	17	9.5	1.7	1.58	100%	7.21E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-08	5.36E-08	5.84E-08	2.40E-08	2.40E-08	1.92E-08	1.20E-08	1.20E-08	1.20E-08	1.20E-08	1.20E-08	1.20E-08	1.92E-08	2.40E-08	2.40E-08	2.40E-08	1.92E-08	1.20E-08	1.20E-08	1.20E-08		

Note:  
 1. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicles travel on the roads which consist of a combination of light-duty and heavy-duty traffic. A generalized weighted vehicle height of 2.0m for modeling the start emission spreading on public roads outside PTI/carpark has been adopted.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15.

Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source						Area Polygon Source		Hourly Emission Rate (g/s or g/s/sq. m)																								
				X (m)	Y (m)	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	x dim. (m)	y dim. (m)	Rotation angle (o)	Source Area (m2)	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
PTI05_PLBD	Planned PTI at Proposed Public Housing at Nai Wai	PTI05_D_IO01	AREA	816881.6	831305.9	12.6	3.0	26.9	1.0	82.3	26.9	2.80	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-06	5.47E-06	6.49E-06	5.14E-06	5.13E-06	4.11E-06	2.58E-06	2.57E-06	2.57E-06	2.57E-06	2.57E-06	4.11E-06	5.13E-06	5.12E-06	5.12E-06	4.09E-06	2.56E-06	2.55E-06	2.56E-06
		PTI05_D_IO02	AREA	816886.7	831228.7	12.7	3.0	1.0	26.2	0.3	26.2	2.80	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-06	5.47E-06	6.49E-06	5.14E-06	5.13E-06	4.11E-06	2.58E-06	2.57E-06	2.57E-06	2.57E-06	2.57E-06	4.11E-06	5.13E-06	5.12E-06	5.12E-06	4.09E-06	2.56E-06	2.55E-06	2.56E-06

- Note:
- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
  - According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
  - According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.

Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Road)

PTI ID	Route	Source ID	Type	Line Source					Area/Polyarea/Line					Hourly Emission Rate (g/s or g/s/sq. m)																									
				X	Y	X2	Y2	Width	Base Elevation	Release Height <sup>(1)</sup>	Initial Vertical Dim <sup>(2)</sup>	Percentage of Routing	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(%)																											
PTI05_PLBD	Route A	PTI05_D_A01	LINE	816885.0	831287.9	816890.2	831279.0	9.5	12.8	1.7	1.58	100%	5.01E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-08	3.73E-08	4.06E-08	1.67E-08	1.67E-08	1.34E-08	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09	1.34E-08	1.67E-08	1.67E-08	1.67E-08	1.34E-08	8.35E-09	8.35E-09	8.35E-09	8.35E-09	
		PTI05_D_A02	LINE	816890.2	831279.0	816893.9	831217.6	9.5	12.8	1.7	1.58	100%	5.01E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-08	3.73E-08	4.06E-08	1.67E-08	1.67E-08	1.34E-08	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09	1.34E-08	1.67E-08	1.67E-08	1.67E-08	1.34E-08	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09
		PTI05_D_A03	LINE	816893.9	831217.6	816889.3	831177.9	9.5	12.4	1.7	1.58	100%	5.01E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-08	3.73E-08	4.06E-08	1.67E-08	1.67E-08	1.34E-08	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09	1.34E-08	1.67E-08	1.67E-08	1.67E-08	1.34E-08	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09
		PTI05_D_A04	LINE	816889.3	831177.9	816876.7	831159.5	9.5	12.3	1.7	1.58	100%	5.01E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-08	3.73E-08	4.06E-08	1.67E-08	1.67E-08	1.34E-08	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09	1.34E-08	1.67E-08	1.67E-08	1.67E-08	1.34E-08	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09
		PTI05_D_A05	LINE	816876.7	831159.5	816842.0	831141.0	9.5	13.5	1.7	1.58	100%	5.01E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-08	3.73E-08	4.06E-08	1.67E-08	1.67E-08	1.34E-08	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09	1.34E-08	1.67E-08	1.67E-08	1.67E-08	1.34E-08	8.35E-09	8.35E-09	8.35E-09	8.35E-09	8.35E-09
		PTI05_D_A06	LINE	816842.0	831141.0	816817.1	831171.4	11	12.9	1.7	1.58	100%	4.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-08	3.22E-08	3.51E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	1.15E-08	1.44E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09
		PTI05_D_A07	LINE	816817.1	831171.4	816750.7	831216.9	11	12	1.7	1.58	100%	4.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-08	3.22E-08	3.51E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	1.15E-08	1.44E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09
		PTI05_D_A08	LINE	816750.7	831216.9	816690.2	831278.3	11	11.2	1.7	1.58	100%	4.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-08	3.22E-08	3.51E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	1.15E-08	1.44E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09
		PTI05_D_A09	LINE	816690.2	831278.3	816667.6	831307.6	11	12	1.7	1.58	100%	4.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-08	3.22E-08	3.51E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	1.15E-08	1.44E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09
		PTI05_D_A10	LINE	816667.6	831307.6	816647.5	831329.9	11	11.2	1.7	1.58	100%	4.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-08	3.22E-08	3.51E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	1.15E-08	1.44E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09
		PTI05_D_A11	LINE	816647.5	831329.9	816628.1	831347.7	11	10	1.7	1.58	100%	4.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-08	3.22E-08	3.51E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	1.15E-08	1.44E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09
		PTI05_D_A12	LINE	816628.1	831347.7	816601.0	831369.9	11	10	1.7	1.58	100%	4.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-08	3.22E-08	3.51E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	1.15E-08	1.44E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09
		PTI05_D_A13	LINE	816601.0	831369.9	816575.6	831393.0	11	10	1.7	1.58	100%	4.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-08	3.22E-08	3.51E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	1.15E-08	1.44E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09
		PTI05_D_A14	LINE	816575.6	831393.0	816564.3	831405.2	11	10	1.7	1.58	100%	4.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-08	3.22E-08	3.51E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09	1.15E-08	1.44E-08	1.44E-08	1.44E-08	1.15E-08	7.21E-09	7.21E-09	7.21E-09	7.21E-09	7.21E-09
		PTI05_D_A15	LINE	816564.3	831405.2	816544.8	831430.4	13	10	1.7	1.58	100%	3.66E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-08	2.73E-08	2.97E-08	1.22E-08	1.22E-08	9.76E-09	6.10E-09	6.10E-09	6.10E-09	6.10E-09	6.10E-09	6.10E-09	9.76E-09	1.22E-08	1.22E-08	1.22E-08	9.76E-09	6.10E-09	6.10E-09	6.10E-09	6.10E-09	6.10E-09
		PTI05_D_A16	LINE	816544.8	831430.4	816509.1	831388.2	17	9.5	1.7	1.58	100%	2.80E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-08	2.08E-08	2.27E-08	9.33E-09	9.33E-09	7.46E-09	4.67E-09	4.67E-09	4.67E-09	4.67E-09	4.67E-09	4.67E-09	7.46E-09	9.33E-09	9.33E-09	9.33E-09	9.33E-09	4.67E-09	4.67E-09	4.67E-09	4.67E-09	4.67E-09

Note:

1. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicles travel on the roads which consist of a combination of light-duty and heavy-duty traffic. A generalized weighted vehicle height of 2.0m for modeling the start emission spreading on public roads outside PTI/carpark has been adopted.
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15.



Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source							Area Polygon Source		Hourly Emission Rate (g/s or g/s/sq. m)																							
				X (m)	Y (m)	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	x dim. (m)	y dim. (m)	Rotation angle (o)	Source Area (m2)	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
PTI05_PLBD	Planned PTI at Proposed Public Housing at Nai Wai	PTI05_D_IO01	AREA	816881.6	831305.9	12.6	3.0	26.9	1.0	82.3	26.9	2.80	5.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-06	2.13E-06	2.53E-06	2.00E-06	2.00E-06	1.60E-06	1.00E-06	9.99E-07	1.00E-06	1.00E-06	9.99E-07	1.60E-06	2.00E-06	1.99E-06	1.99E-06	1.59E-06	9.95E-07	9.93E-07	9.94E-07
		PTI05_D_IO02	AREA	816886.7	831228.7	12.7	3.0	1.0	26.2	0.3	26.2	2.80	5.98E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-06	2.13E-06	2.53E-06	2.00E-06	2.00E-06	1.60E-06	1.00E-06	9.99E-07	1.00E-06	1.00E-06	9.99E-07	1.60E-06	2.00E-06	1.99E-06	1.99E-06	1.59E-06	9.95E-07	9.93E-07	9.94E-07

- Note:
1. The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
  3. According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.

PTI06 - Bus

INDEX

Vehicle Type: FBDD 15

Hour		No. of Trip <sup>[1][2]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1					6															
1	2																				
2	3																				
3	4																				
4	5																				
5	6					9											1				
6	7					15											1				
7	8					18											2				
8	9					18															
9	10					18															
10	11					15															
11	12					9															
12	13					9															
13	14					9															
14	15					9															
15	16					9															
16	17					15															
17	18					18															
18	19					18															
19	20					18															
20	21					15															
21	22					9															
22	23					9															
23	0					9															

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	310	44%	Bypass route
Starting on Public Road	390	56%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
Total Distance	700		

Note: 1. The routes within the PTI is based on tentative layout plan provided by CEDD.

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	8.28E-05	3.34E-03	5.78E-04	0.00E+00	7.27E-04	0.00E+00	3.38E-05	1.36E-03	2.36E-04	0.00E+00	2.97E-04
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	6.57E-04	5.57E-03	1.65E-03	0.00E+00	2.08E-03	0.00E+00	2.68E-04	2.28E-03	6.74E-04	0.00E+00	8.48E-04
7	0.00E+00	7.40E-04	8.93E-03	2.23E-03	0.00E+00	2.80E-03	0.00E+00	3.02E-04	3.65E-03	9.10E-04	0.00E+00	1.14E-03
8	0.00E+00	1.31E-03	1.11E-02	3.30E-03	0.00E+00	4.15E-03	0.00E+00	5.37E-04	4.55E-03	1.35E-03	0.00E+00	1.70E-03
9	0.00E+00	2.49E-04	1.01E-02	1.73E-03	0.00E+00	2.18E-03	0.00E+00	1.01E-04	4.11E-03	7.08E-04	0.00E+00	8.91E-04
10	0.00E+00	2.49E-04	1.01E-02	1.73E-03	0.00E+00	2.18E-03	0.00E+00	1.01E-04	4.10E-03	7.08E-04	0.00E+00	8.91E-04
11	0.00E+00	2.07E-04	8.38E-03	1.44E-03	0.00E+00	1.82E-03	0.00E+00	8.46E-05	3.42E-03	5.90E-04	0.00E+00	7.43E-04
12	0.00E+00	1.24E-04	5.06E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.07E-05	2.07E-03	3.54E-04	0.00E+00	4.46E-04
13	0.00E+00	1.24E-04	5.03E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.07E-05	2.06E-03	3.54E-04	0.00E+00	4.46E-04
14	0.00E+00	1.24E-04	5.05E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.07E-05	2.06E-03	3.54E-04	0.00E+00	4.46E-04
15	0.00E+00	1.24E-04	5.04E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.07E-05	2.06E-03	3.54E-04	0.00E+00	4.46E-04
16	0.00E+00	1.24E-04	5.04E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.08E-05	2.06E-03	3.54E-04	0.00E+00	4.46E-04
17	0.00E+00	2.07E-04	8.38E-03	1.44E-03	0.00E+00	1.82E-03	0.00E+00	8.46E-05	3.42E-03	5.90E-04	0.00E+00	7.43E-04
18	0.00E+00	2.49E-04	1.01E-02	1.73E-03	0.00E+00	2.18E-03	0.00E+00	1.01E-04	4.10E-03	7.08E-04	0.00E+00	8.91E-04
19	0.00E+00	2.49E-04	1.00E-02	1.73E-03	0.00E+00	2.18E-03	0.00E+00	1.01E-04	4.09E-03	7.08E-04	0.00E+00	8.91E-04
20	0.00E+00	2.48E-04	1.00E-02	1.73E-03	0.00E+00	2.18E-03	0.00E+00	1.02E-04	4.09E-03	7.08E-04	0.00E+00	8.91E-04
21	0.00E+00	2.07E-04	8.33E-03	1.44E-03	0.00E+00	1.82E-03	0.00E+00	8.46E-05	3.40E-03	5.90E-04	0.00E+00	7.43E-04
22	0.00E+00	1.24E-04	5.00E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.08E-05	2.04E-03	3.54E-04	0.00E+00	4.46E-04
23	0.00E+00	1.24E-04	4.98E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.08E-05	2.04E-03	3.54E-04	0.00E+00	4.46E-04
24	0.00E+00	1.24E-04	4.99E-03	8.67E-04	0.00E+00	1.09E-03	0.00E+00	5.08E-05	2.04E-03	3.54E-04	0.00E+00	4.46E-04

Note:

- No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.
- Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.



Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source											Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m)																											
PTI06_Bus	Planned PTI at Proposed Public Housing at Lam Tei North	PTI06_IO01	AREA	817174.8	831519.1	14.5	3.0	17.3	1.0	80.9	2.80	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-04	3.18E-04	4.21E-04	3.22E-04	3.22E-04	2.68E-04	1.62E-04	1.61E-04	1.61E-04	1.61E-04	1.61E-04	1.61E-04	2.68E-04	3.22E-04	3.21E-04	3.21E-04	2.67E-04	1.60E-04	1.60E-04	1.60E-04		
		PTI06_IO02	AREA	817203.2	831445.7	15.5	3.0	20.1	1.0	61.3	2.80	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-04	3.18E-04	4.21E-04	3.22E-04	3.22E-04	2.68E-04	1.62E-04	1.61E-04	1.61E-04	1.61E-04	1.61E-04	1.61E-04	2.68E-04	3.22E-04	3.21E-04	3.21E-04	2.67E-04	1.60E-04	1.60E-04	1.60E-04		

Note:

- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
- According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
- According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.



Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source											Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m)																											
PTI06_Bus	Planned PTI at Proposed Public Housing at Lam Tei North	PTI06_IO01	AREA	817174.8	831519.1	14.5	3.0	17.3	1.0	80.9	2.80	4.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.60E-05	1.30E-04	1.72E-04	1.31E-04	1.31E-04	1.10E-04	6.60E-05	6.58E-05	6.59E-05	6.59E-05	6.58E-05	1.10E-04	1.31E-04	1.31E-04	1.31E-04	1.09E-04	6.55E-05	6.53E-05	6.53E-05			
		PTI06_IO02	AREA	817203.2	831445.7	15.5	3.0	20.1	1.0	61.3	2.80	4.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.60E-05	1.30E-04	1.72E-04	1.31E-04	1.31E-04	1.10E-04	6.60E-05	6.58E-05	6.59E-05	6.59E-05	6.58E-05	1.10E-04	1.31E-04	1.31E-04	1.31E-04	1.09E-04	6.55E-05	6.53E-05	6.53E-05			

- Note:
- The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
  - According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
  - According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.

**PTI06 - PLB - Diesel**

INDEX

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	65	9%	Bypass route 0
Starting on Public Road	635	91%	Running inside PTI/ Carpark <sup>[1]</sup> 130
Access Road Lane - Arrival	0	0%	
Access Road Lane - Departure	0		
Total Distance	700		

Idling time (min) <sup>[1]</sup>	
Bypass	0.5
Terminating	2
Max Adjustment	1

Note: 1. Idling time for planned PTI is derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Vehicle Type: PLB-D 22

Hour		No. of Trip <sup>[1][2]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	6	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
6	7	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
7	8	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
8	9	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	11	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	12	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	13	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	14	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	15	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	16	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	17	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	18	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	19	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	20	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	21	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	22	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	23	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	2.56E-05	5.82E-05	7.97E-06	0.00E+00	7.79E-05	0.00E+00	9.96E-06	2.27E-05	3.10E-06	0.00E+00	3.03E-05
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	6.67E-05	1.17E-04	5.14E-05	0.00E+00	5.02E-04	0.00E+00	2.59E-05	4.53E-05	2.00E-05	0.00E+00	1.95E-04
7	0.00E+00	9.23E-05	1.75E-04	5.93E-05	0.00E+00	5.80E-04	0.00E+00	3.59E-05	6.81E-05	2.31E-05	0.00E+00	2.25E-04
8	0.00E+00	1.33E-04	2.33E-04	1.03E-04	0.00E+00	1.00E-03	0.00E+00	5.18E-05	9.07E-05	3.99E-05	0.00E+00	3.90E-04
9	0.00E+00	8.53E-05	1.95E-04	2.66E-05	0.00E+00	2.60E-04	0.00E+00	3.32E-05	7.58E-05	1.03E-05	0.00E+00	1.01E-04
10	0.00E+00	8.53E-05	1.95E-04	2.66E-05	0.00E+00	2.60E-04	0.00E+00	3.32E-05	7.57E-05	1.03E-05	0.00E+00	1.01E-04
11	0.00E+00	6.83E-05	1.56E-04	2.13E-05	0.00E+00	2.08E-04	0.00E+00	2.65E-05	6.06E-05	8.26E-06	0.00E+00	8.07E-05
12	0.00E+00	4.27E-05	9.80E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.81E-05	5.16E-06	0.00E+00	5.04E-05
13	0.00E+00	4.27E-05	9.75E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.79E-05	5.16E-06	0.00E+00	5.04E-05
14	0.00E+00	4.27E-05	9.78E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.80E-05	5.16E-06	0.00E+00	5.04E-05
15	0.00E+00	4.27E-05	9.77E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.80E-05	5.16E-06	0.00E+00	5.04E-05
16	0.00E+00	4.27E-05	9.76E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.79E-05	5.16E-06	0.00E+00	5.04E-05
17	0.00E+00	6.83E-05	1.56E-04	2.13E-05	0.00E+00	2.08E-04	0.00E+00	2.65E-05	6.06E-05	8.26E-06	0.00E+00	8.07E-05
18	0.00E+00	8.53E-05	1.95E-04	2.66E-05	0.00E+00	2.60E-04	0.00E+00	3.32E-05	7.57E-05	1.03E-05	0.00E+00	1.01E-04
19	0.00E+00	8.53E-05	1.94E-04	2.66E-05	0.00E+00	2.60E-04	0.00E+00	3.32E-05	7.55E-05	1.03E-05	0.00E+00	1.01E-04
20	0.00E+00	8.53E-05	1.94E-04	2.66E-05	0.00E+00	2.60E-04	0.00E+00	3.32E-05	7.54E-05	1.03E-05	0.00E+00	1.01E-04
21	0.00E+00	6.83E-05	1.55E-04	2.13E-05	0.00E+00	2.08E-04	0.00E+00	2.65E-05	6.03E-05	8.26E-06	0.00E+00	8.07E-05
22	0.00E+00	4.27E-05	9.70E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.77E-05	5.16E-06	0.00E+00	5.04E-05
23	0.00E+00	4.27E-05	9.66E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.76E-05	5.16E-06	0.00E+00	5.04E-05
24	0.00E+00	4.27E-05	9.67E-05	1.33E-05	0.00E+00	1.30E-04	0.00E+00	1.66E-05	3.76E-05	5.16E-06	0.00E+00	5.04E-05

Note:  
1. No. of trips are derived based on bus services for the planned PTI provided by CEDD's Study on Site Formation and Infrastructure Works for proposed Public Housing Developments at Ping Shan South, Yuen Long, Lam Tei North and Nai Wai, Tuen Mun.  
2. Soaking times for planned PTI are derived based on site observation on some existing PTIs in New Territories West covering Hung Shui Kiu and Tuen Mun.

Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Road)

PTI ID	Route	Source ID	Type	Line Source				Area/Polyarea/Line					Hourly Emission Rate (g/s or g/s/sq. m)																									
				X	Y	X2	Y2	Width	Base Elevation	Release Height [1]	Initial Vertical Dim [2]	Percentage of Routing	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23		
				(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(%)																										
PTI06_PLBD	Route A	PTI06_D_A01	LINE	817176.2	831511.7	817179.6	831544.9	9.5	14	1.7	1.58	20%	2.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-08	1.92E-08	3.33E-08	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	6.88E-09	8.60E-09	8.60E-09	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	
		PTI06_D_A02	LINE	817179.6	831544.9	817201.1	831585.2	9.5	13.9	1.7	1.58	20%	2.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-08	1.92E-08	3.33E-08	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	6.88E-09	8.60E-09	8.60E-09	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09
		PTI06_D_A03	LINE	817201.1	831585.2	817227.8	831611.2	9.5	13.7	1.7	1.58	20%	2.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-08	1.92E-08	3.33E-08	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	6.88E-09	8.60E-09	8.60E-09	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09
		PTI06_D_A04	LINE	817227.8	831611.2	817228.4	831625.8	9.5	14.5	1.7	1.58	20%	2.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-08	1.92E-08	3.33E-08	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09	6.88E-09	8.60E-09	8.60E-09	8.60E-09	8.60E-09	6.88E-09	4.30E-09	4.30E-09	4.30E-09	4.30E-09
		PTI06_D_A05	LINE	817228.4	831625.8	817188.6	831653.4	12.5	15.4	1.7	1.58	20%	1.96E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-08	1.46E-08	2.53E-08	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	5.23E-09	6.54E-09	6.54E-09	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09
		PTI06_D_A06	LINE	817188.6	831653.4	817137.9	831700.9	12.5	15	1.7	1.58	20%	1.96E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-08	1.46E-08	2.53E-08	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	5.23E-09	6.54E-09	6.54E-09	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09
		PTI06_D_A07	LINE	817137.9	831700.9	817077.6	831773.6	12.5	14.4	1.7	1.58	20%	1.96E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-08	1.46E-08	2.53E-08	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	5.23E-09	6.54E-09	6.54E-09	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09
		PTI06_D_A08	LINE	817077.6	831773.6	817041.8	831806.8	12.5	14	1.7	1.58	20%	1.96E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-08	1.46E-08	2.53E-08	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	5.23E-09	6.54E-09	6.54E-09	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09
		PTI06_D_A09	LINE	817041.8	831806.8	816976.6	831865.2	12.5	13.6	1.7	1.58	20%	1.96E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-08	1.46E-08	2.53E-08	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	5.23E-09	6.54E-09	6.54E-09	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09
		PTI06_D_A10	LINE	816976.6	831865.2	816947.5	831889.3	12.5	13.6	1.7	1.58	20%	1.96E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-08	1.46E-08	2.53E-08	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09	5.23E-09	6.54E-09	6.54E-09	6.54E-09	6.54E-09	5.23E-09	3.27E-09	3.27E-09	3.27E-09	3.27E-09
		PTI06_D_A11	LINE	816947.5	831889.3	816906.5	831847.2	13	12.5	1.7	1.58	20%	1.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-08	1.40E-08	2.43E-08	6.29E-09	6.29E-09	5.03E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09	5.03E-09	6.29E-09	6.29E-09	6.29E-09	6.29E-09	5.03E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09
		PTI06_D_A12	LINE	816906.5	831847.2	816867.0	831803.3	13	12.4	1.7	1.58	20%	1.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-08	1.40E-08	2.43E-08	6.29E-09	6.29E-09	5.03E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09	5.03E-09	6.29E-09	6.29E-09	6.29E-09	6.29E-09	5.03E-09	3.14E-09	3.14E-09	3.14E-09	3.14E-09
PTI06_PLBD	Route B	PTI06_D_B01	LINE	817176.2	831511.7	817179.6	831544.9	9.5	14	1.7	1.58	80%	1.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-08	7.68E-08	1.33E-07	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	2.75E-08	3.44E-08	3.44E-08	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08
		PTI06_D_B02	LINE	817179.6	831544.9	817201.1	831585.2	9.5	13.9	1.7	1.58	80%	1.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-08	7.68E-08	1.33E-07	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	2.75E-08	3.44E-08	3.44E-08	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08
		PTI06_D_B03	LINE	817201.1	831585.2	817227.8	831611.2	9.5	13.7	1.7	1.58	80%	1.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-08	7.68E-08	1.33E-07	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	2.75E-08	3.44E-08	3.44E-08	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08
		PTI06_D_B04	LINE	817227.8	831611.2	817228.4	831625.8	9.5	14.5	1.7	1.58	80%	1.03E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.65E-08	7.68E-08	1.33E-07	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08	2.75E-08	3.44E-08	3.44E-08	3.44E-08	3.44E-08	2.75E-08	1.72E-08	1.72E-08	1.72E-08	1.72E-08
		PTI06_D_B05	LINE	817228.4	831625.8	817188.6	831653.4	12.5	15.4	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08
		PTI06_D_B06	LINE	817188.6	831653.4	817137.9	831700.9	12.5	15	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08
		PTI06_D_B07	LINE	817137.9	831700.9	817077.6	831773.6	12.5	14.4	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08
		PTI06_D_B08	LINE	817077.6	831773.6	817041.8	831806.8	12.5	14	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08
		PTI06_D_B09	LINE	817041.8	831806.8	816976.6	831865.2	12.5	13.6	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08
		PTI06_D_B10	LINE	816976.6	831865.2	816947.5	831889.3	12.5	13.6	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08
		PTI06_D_B11	LINE	816947.5	831889.3	816944.0	831907.1	12.5	12.8	1.7	1.58	80%	7.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-08	5.84E-08	1.01E-07	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08	2.09E-08	2.62E-08	2.62E-08	2.62E-08	2.62E-08	2.09E-08	1.31E-08	1.31E-08	1.31E-08	1.31E-08
		PTI06_D_B12	LINE	816944	831907.1	817008.8	831982.7	17	13.1	1.7	1.58	80%	5.77E-09	0.00E+00																								



Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source										Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23		
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m)																										
PTI06_PLBD	Planned PTI at Proposed Public Housing at Lam Tei North	PTI06_D_IO01	AREA	817174.8	831519.1	14.5	3.0	17.3	1.0	80.9	2.80	2.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-06	8.74E-06	1.25E-05	8.20E-06	8.20E-06	6.56E-06	4.12E-06	4.10E-06	4.11E-06	4.11E-06	4.11E-06	4.11E-06	6.56E-06	8.20E-06	8.18E-06	8.18E-06	6.54E-06	4.09E-06	4.08E-06	4.08E-06	
		PTI06_D_IO02	AREA	817203.2	831445.7	15.5	3.0	20.1	1.0	61.3	2.80	2.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-06	8.74E-06	1.25E-05	8.20E-06	8.20E-06	6.56E-06	4.12E-06	4.10E-06	4.11E-06	4.11E-06	4.11E-06	4.11E-06	6.56E-06	8.20E-06	8.18E-06	8.18E-06	6.54E-06	4.09E-06	4.08E-06	4.08E-06	

- Note:
1. The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
  3. According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.



Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Source											Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	x dim.	y dim.	Rotation angle	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m)	(m)	(o)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)		
PTI06_PLBD	Planned PTI at Proposed Public Housing at Lam Tei North	PTI06_D_IO01	AREA	817174.8	831519.1	14.5	3.0	17.3	1.0	80.9	2.80	9.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-06	3.40E-06	4.88E-06	3.19E-06	3.19E-06	2.55E-06	1.60E-06	1.60E-06	1.60E-06	1.60E-06	1.60E-06	2.55E-06	3.19E-06	3.18E-06	3.18E-06	2.54E-06	1.59E-06	1.59E-06	1.59E-06			
		PTI06_D_IO02	AREA	817203.2	831445.7	15.5	3.0	20.1	1.0	61.3	2.80	9.55E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-06	3.40E-06	4.88E-06	3.19E-06	3.19E-06	2.55E-06	1.60E-06	1.60E-06	1.60E-06	1.60E-06	1.60E-06	2.55E-06	3.19E-06	3.18E-06	3.18E-06	2.54E-06	1.59E-06	1.59E-06	1.59E-06			

- Note:
1. The planned PTI will be decked with the headroom of openings being 6m. Detailed design for the planned PTI is not available during the stage of this EIA. It is assumed that the emissions from the PTI are dispersed at the entry and exit openings without any forced mechanical ventilation and are modelled as AREA source with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height are estimated from the midpoint of the initial vertical dimension. Given the 6m headroom, the release height is 3m.
  3. According to User's Guide for the AMS/EPA Regulatory Model (AERMOD) issued by USEPA, initial vertical dimension = vertical dimension of source divided by 2.15. Vertical dimension of source is equal to the headroom of the openings, i.e., 6m.

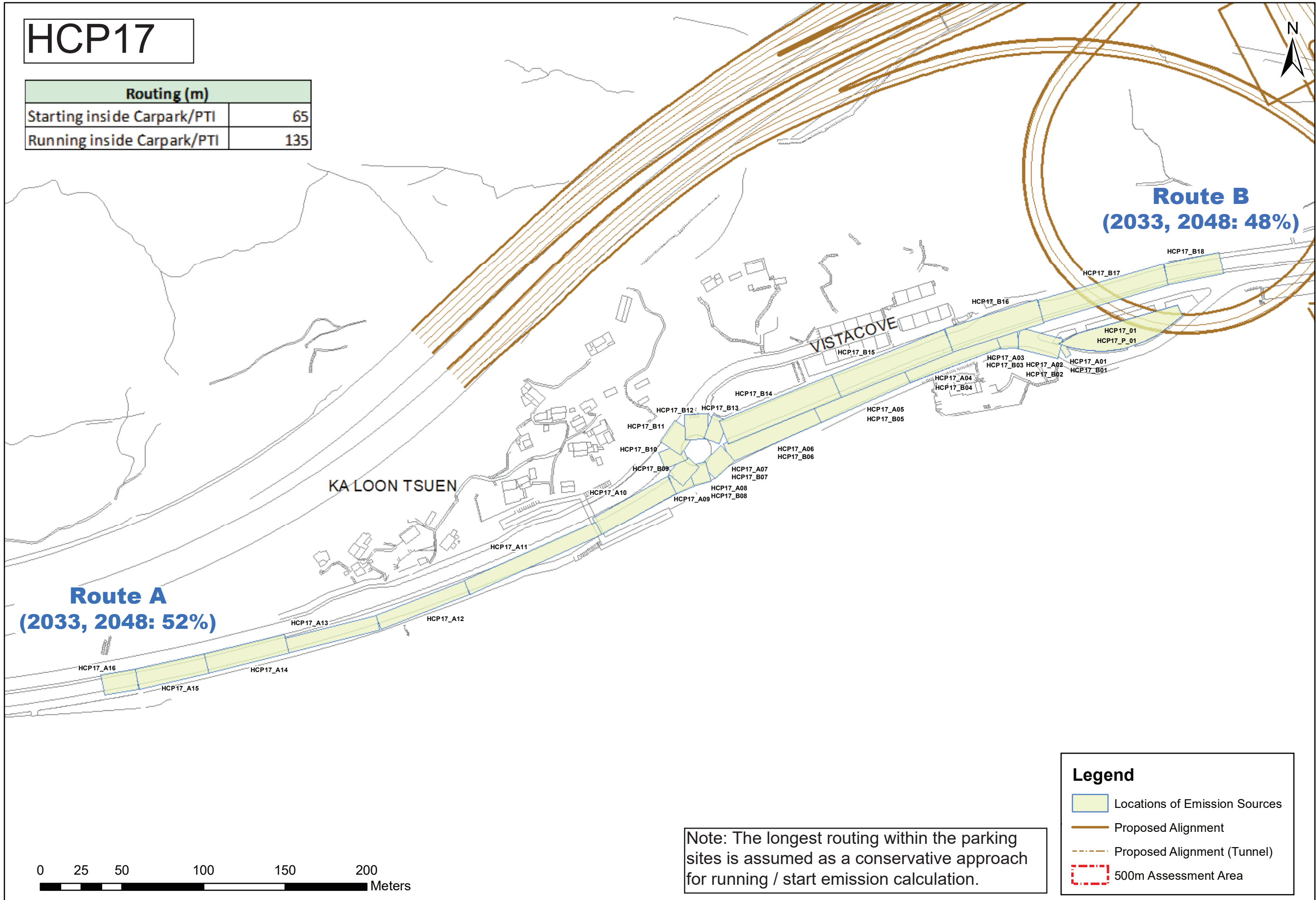
**Annex – 5**

Source Locations for HGV/ Coach  
Parking

(So Kwun Wat, Siu Lam and Tai Lam,  
Tsing Lung Tau and North Lantau Areas)

# HCP17

Routing (m)	
Starting inside Carpark/PTI	65
Running inside Carpark/PTI	135



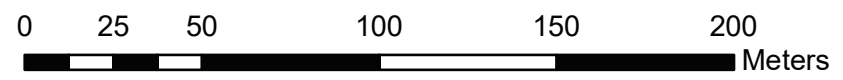
**Route B**  
(2033, 2048: 48%)

**Route A**  
(2033, 2048: 52%)

**Legend**

- Locations of Emission Sources
- Proposed Alignment
- Proposed Alignment (Tunnel)
- 500m Assessment Area

Note: The longest routing within the parking sites is assumed as a conservative approach for running / start emission calculation.



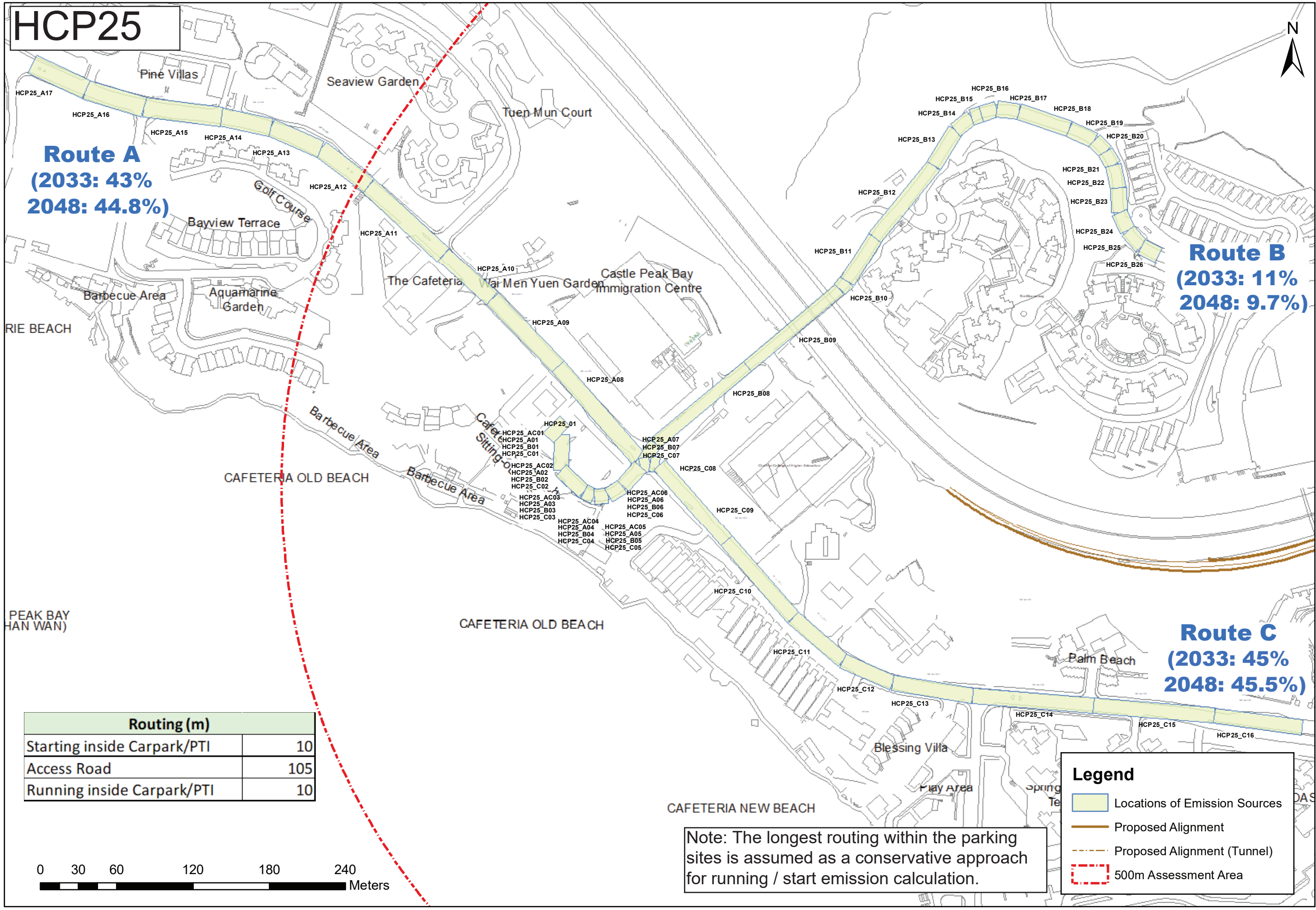
# HCP25



**Route A**  
(2033: 43%  
2048: 44.8%)

**Route B**  
(2033: 11%  
2048: 9.7%)

**Route C**  
(2033: 45%  
2048: 45.5%)

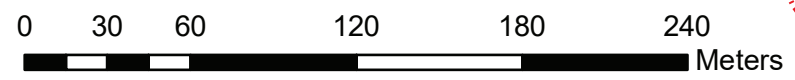


Routing (m)	
Starting inside Carpark/PTI	10
Access Road	105
Running inside Carpark/PTI	10

**Legend**

- Locations of Emission Sources
- Proposed Alignment
- Proposed Alignment (Tunnel)
- 500m Assessment Area

Note: The longest routing within the parking sites is assumed as a conservative approach for running / start emission calculation.



**Annex - 6**

Emission Inventory for HGV/ Coach  
Parking

(So Kwun Wat, Siu Lam and Tai Lam,  
Tsing Lung Tau and North Lantau Areas,  
Year 2033)



HCP17 - PC

INDEX

Routing (m)			
Starting inside PTI/ Carpark <sup>(1)</sup>	65	100%	Bypass route
Starting on Public Road	0	0%	Running inside PTI/ Carpark <sup>(1)</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	65		

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	0

Note: 1. The longest route within each parking site/ depot is used for assessment.

Vehicle Type: PC - Petrol 1

Day: 1

Hour	No. of Trip <sup>(1)</sup>																					
	Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																					
1	2																					
2	3																					
3	4																					
4	5																					
5	6																					
6	7																					
7	8																					
8	9		1							1												
9	10				1																	
10	11		1	1					1	1												
11	12		1																			
12	13			1		1				1		1										1
13	14		1	1																		
14	15																					
15	16																					
16	17																					
17	18																					
18	19																					
19	20																					
20	21																					
21	22																					
22	23																					
23	0																					

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.

Hour	Temperature °C	Relative Humidity %	RSP						FSP													
			Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road								
0 to 8760																						
1	8	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	6	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	7	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	7	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	7	23	0.00E+00	0.00E+00	7.20E-07	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-07	1.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	8	22	0.00E+00	0.00E+00	3.60E-07	4.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-07	3.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	8	22	0.00E+00	0.00E+00	1.44E-06	2.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-06	2.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	8	16	0.00E+00	0.00E+00	3.60E-07	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-07	1.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	9	19	0.00E+00	0.00E+00	1.80E-06	7.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-06	6.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	8	18	0.00E+00	0.00E+00	7.20E-07	3.33E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-07	3.06E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	8	19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	8	20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	8	22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	8	22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	8	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	8	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	8	27	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	8	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	8	30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	8	29	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00











Emission Inventory for PTI, Bus Depot & Coach Parking (RSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source											Hourly Emission Rate (g/s or g/s/sq. m)																					
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
				(m)	(m)	(m)	(m)	(m2)		(m)																										
HCP17	Carpark near Castle Peak Road - Tsing Lung Tau	HCP17_01	AREAPOLY	821778.7	824298.1	17.1	2.6	950.3	821778.7 824298.1 821839.8 824315.2 821842.5 824308.8 821828.9 824298.1 821819.4 824293.0 821806.7 824288.7 821794.4 824287.1 821784.6 824287.5 821775.7 824289.1 821767.3 824291.4 821778.7 824298.1	11	2.37	0.00E+00	0.00E+00	3.87E-09	3.87E-09	3.87E-09	3.87E-09	3.87E-09	3.87E-09	3.87E-09	0.00E+00	0.00E+00	3.87E-09	0.00E+00	4.45E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Note:

1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.





HCP25

INDEX

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	10	1%	Bypass route
Starting on Public Road	585	84%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	105	15%	
Access Road - Departure	105		
Total Distance	700		

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Note: 1. The longest route within each parking site/ depot is used for assessment.

Vehicle Type: NFB8 13

Day: 1

Hour	No. of Trip <sup>[1]</sup>																					
	Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																					
1	2																					
2	3																					
3	4																					
4	5																					
5	6																					
6	7																					
7	8																					1
8	9																					1
9	10							1		1												
10	11							1		1												
11	12							1		1												
12	13							1		1												
13	14							1		1												
14	15							1		1												
15	16							1		1												
16	17							1		1												
17	18								1													
18	19								1													
19	20								1		1											
20	21								1		1											
21	22																					
22	23																					
23	0																					

Hour	Temperature °C	Relative Humidity %	RSP						FSP													
			Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road								
0 to 8760																						
1	8	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	7	24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	6	25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	7	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	6	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	7	26	0.00E+00	0.00E+00	0.00E+00	2.72E-07	0.00E+00	5.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-07	0.00E+00	5.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	7	23	0.00E+00	0.00E+00	0.00E+00	2.72E-07	0.00E+00	5.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-07	0.00E+00	5.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	8	22	0.00E+00	0.00E+00	0.00E+00	5.44E-07	0.00E+00	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-07	0.00E+00	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	8	22	0.00E+00	0.00E+00	0.00E+00	5.44E-07	0.00E+00	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-07	0.00E+00	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	8	16	0.00E+00	0.00E+00	0.00E+00	5.44E-07	0.00E+00	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-07	0.00E+00	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	9	19	0.00E+00	0.00E+00	0.00E+00	5.44E-07	0.00E+00	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-07	0.00E+00	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	8	18	0.00E+00	0.00E+00	0.00E+00	5.44E-07	0.00E+00	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-07	0.00E+00	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	8	19	0.00E+00	0.00E+00	0.00E+00	5.44E-07	0.00E+00	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-07	0.00E+00	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	8	20	0.00E+00	0.00E+00	0.00E+00	5.44E-07	0.00E+00	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-07	0.00E+00	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	8	22	0.00E+00	0.00E+00	0.00E+00	5.44E-07	0.00E+00	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-07	0.00E+00	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	8	22	0.00E+00	0.00E+00	0.00E+00	2.72E-07	0.00E+00	5.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-07	0.00E+00	5.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	8	25	0.00E+00	0.00E+00	0.00E+00	2.72E-07	0.00E+00	5.72E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-07	0.00E+00	5.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	8	26	0.00E+00	0.00E+00	0.00E+00	5.44E-07	0.00E+00	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-07	0.00E+00	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	8	27	0.00E+00	0.00E+00	0.00E+00	5.44E-07	0.00E+00	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-07	0.00E+00	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	8	26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	8	30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	8	29	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey.





Emission Inventory for PTI, Bus Depot & Coach Parking (RSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source											Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m2)		(m)																												
HCP25	Carpark near Tsing Ying Road	HCP25_01	AREAPOLY	816554.6	826305.2	4.1	3.9	210.5	816554.6 826305.2 816541.6 826291.9 816533.4 826299.6 816546.7 826313.1 816554.6 826305.2	5	3.64	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-09	1.29E-09	2.59E-09	2.59E-09	2.59E-09	2.59E-09	2.59E-09	2.59E-09	2.59E-09	2.59E-09	2.59E-09	1.29E-09	1.29E-09	2.59E-09	2.59E-09	0.00E+00	0.00E+00	0.00E+00		

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.



Emission Inventory for PTI, Bus Depot & Coach Parking (FSP - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source											Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m2)		(m)																												
HCP25	Carpark near Tsing Ying Road	HCP25_01	AREAPOLY	816554.6	826305.2	4.1	3.9	210.5	816554.6 826305.2 816541.6 826291.9 816533.4 826299.6 816546.7 826313.1 816554.6 826305.2	5	3.64	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-09	1.19E-09	2.38E-09	2.38E-09	2.38E-09	2.38E-09	2.38E-09	2.38E-09	2.38E-09	2.38E-09	1.19E-09	1.19E-09	2.38E-09	2.38E-09	0.00E+00	0.00E+00	0.00E+00			

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.

**Annex – 7a**

Emission Inventory for HGV/ Coach  
Parking

(So Kwun Wat, Siu Lam and Tai Lam,  
Tsing Lung Tau and North Lantau Areas,  
Year 2048, Long Term)

HCP17 - PC

INDEX

Vehicle Type: PC - Petrol 1

Hour		No. of Trip																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				
8	9		1						1												
9	10			1																	
10	11		1	1					1	1											
11	12		1																		
12	13			1		1			1		1										1
13	14		1	1																	
14	15																				
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Routing (m)			
Starting inside PTI/ Carpark <sup>(1)</sup>	65	100%	Bypass route
Starting on Public Road	0	0%	Running inside PTI/ Carpark <sup>(1)</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	0		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	0

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	0.00E+00	0.00E+00	2.10E-06	2.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-07	1.22E-06	0.00E+00	0.00E+00
10	0.00E+00	0.00E+00	1.04E-06	1.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-08	5.83E-07	0.00E+00	0.00E+00
11	0.00E+00	0.00E+00	3.98E-06	4.41E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-07	2.33E-06	0.00E+00	0.00E+00
12	0.00E+00	0.00E+00	9.79E-07	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-08	5.28E-07	0.00E+00	0.00E+00
13	0.00E+00	0.00E+00	4.89E-06	5.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.63E-07	2.92E-06	0.00E+00	0.00E+00
14	0.00E+00	0.00E+00	1.94E-06	2.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-07	1.06E-06	0.00E+00	0.00E+00
15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>	Hourly Emission Rate (g/s or g/s/sq. m)																												
				(m)	(m)	(m)	(m)	(m2)			(m)	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23					
HCP17_PC	Carpark near Castle Peak Road - Tsing Lung Tau	HCP17_P_01	AREAPOLY	821778.7	824298.1	17.1	2.6	950.3	821778.7 824298.1 821839.8 824315.2 821842.5 824308.8 821828.9 824298.1 821819.4 824293.0 821806.7 824288.7 821794.4 824287.1 821784.6 824287.5 821775.7 824289.1 821767.3 824291.4 821778.7 824298.1	11	2.37	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-09	6.73E-10	2.69E-09	6.11E-10	3.35E-09	1.22E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

- Note:
1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark
  3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark



HCP17

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Vehicle Type: NFB8 13

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																			1	
3	4																			1	
4	5																			1	
5	6																			1	
6	7																			1	
7	8																			1	
8	9																			1	
9	10																				
10	11																				
11	12																			1	
12	13																				
13	14									1											
14	15																				
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

INDEX

Vehicle Type: LGV4 - Diesel 4

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				
8	9																				
9	10																				
10	11																				
11	12																				
12	13																				
13	14																				
14	15																				
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	65	9%	Bypass route
Starting on Public Road	635	91%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	1.02E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.02E-05	3.39E-05	0.00E+00	3.31E-04
4	0.00E+00	0.00E+00	1.02E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.02E-05	3.39E-05	0.00E+00	3.31E-04
5	0.00E+00	0.00E+00	1.02E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.03E-05	3.39E-05	0.00E+00	3.31E-04
6	0.00E+00	0.00E+00	1.02E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.04E-05	3.39E-05	0.00E+00	3.31E-04
7	0.00E+00	0.00E+00	1.03E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.07E-05	3.39E-05	0.00E+00	3.31E-04
8	0.00E+00	0.00E+00	1.03E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.06E-05	3.39E-05	0.00E+00	3.31E-04
9	0.00E+00	0.00E+00	1.03E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.07E-05	3.39E-05	0.00E+00	3.31E-04
10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	0.00E+00	0.00E+00	1.03E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.06E-05	3.39E-05	0.00E+00	3.31E-04
13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	0.00E+00	0.00E+00	1.02E-04	1.76E-05	0.00E+00	1.72E-04	0.00E+00	0.00E+00	5.04E-05	8.68E-06	0.00E+00	8.48E-05
15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	65	9%	Bypass route
Starting on Public Road	635	91%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	



Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source					Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[1]</sup> (m)	Hourly Emission Rate (g/s or g/s/sq. m)																												
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area				Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23					
				(m)	(m)	(m)	(m)	(m2)																																
HCP17	Carpark near Castle Peak Road - Tsing Lung Tau	HCP17_01	AREAPOLY	821778.7	824298.1	17.1	2.6	950.3	821778.7 824298.1 821839.8 824315.2 821842.5 824308.8 821828.9 824298.1 821819.4 824293.0 821806.7 824288.7 821794.4 824287.1 821784.6 824287.5 821775.7 824289.1 821767.3 824291.4 821778.7 824298.1	11	2.37	0.00E+00	0.00E+00	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.80E-07	1.81E-07	1.80E-07	1.81E-07	0.00E+00	0.00E+00	1.80E-07	0.00E+00	1.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.



Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>(1)</sup>	Area Polygon Source					Source Points String	Number of Points	Vertical Dim. (Sz) <sup>(3)</sup> (m)	Hourly Emission Rate (g/s or g/s/sq. m)																								
				X	Y	Base Elevation	Release Height <sup>(2)</sup>	Source Area																												
				(m)	(m)	(m)	(m)	(m2)				Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23	
HCP17	Carpark near Castle Peak Road - Tsing Lung Tau	HCP17_01	AREAPOLY	821778.7	824298.1	17.1	2.6	950.3	821778.7 824298.1 821839.8 824315.2 821842.5 824308.8 821828.9 824298.1 821819.4 824293.0 821806.7 824288.7 821794.4 824287.1 821784.6 824287.5 821775.7 824289.1 821767.3 824291.4 821778.7 824298.1	11	2.37	0.00E+00	0.00E+00	8.85E-08	8.85E-08	8.86E-08	8.87E-08	8.90E-08	8.88E-08	8.90E-08	0.00E+00	0.00E+00	8.89E-08	0.00E+00	6.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.

HCP25

INDEX

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	10	1%	Bypass route
Starting on Public Road	585	84%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	105	15%	
Access Road - Departure	105		
Total Distance	700		

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Note: 1. The longest route within each parking site/ depot is used for assessment.

Vehicle Type: NFB8 13

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				1
8	9																				1
9	10						1		1												
10	11						1		1												
11	12						1		1												
12	13						1		1												
13	14						1		1												
14	15						1		1												
15	16						1		1												
16	17						1		1												
17	18							1													
18	19							1													
19	20							1	1												
20	21							1	1												
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	14	61
2	13	63
3	13	63
4	13	63
5	13	62
6	13	61
7	12	61
8	13	59
9	14	53
10	15	49
11	17	44
12	18	42
13	18	42
14	18	44
15	19	44
16	18	45
17	17	48
18	16	54
19	15	58
20	15	59
21	15	60
22	15	61
23	14	61
24	14	62

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	7.60E-06	1.06E-05	2.71E-04	6.19E-04	0.00E+00	0.00E+00	3.74E-06	5.21E-06	1.33E-04	3.05E-04
9	0.00E+00	0.00E+00	7.63E-06	1.06E-05	2.71E-04	6.19E-04	0.00E+00	0.00E+00	3.76E-06	5.21E-06	1.34E-04	3.05E-04
10	0.00E+00	0.00E+00	1.53E-05	4.10E-06	3.64E-04	2.40E-04	0.00E+00	0.00E+00	7.52E-06	2.02E-06	1.79E-04	1.18E-04
11	0.00E+00	0.00E+00	1.52E-05	4.10E-06	3.63E-04	2.40E-04	0.00E+00	0.00E+00	7.51E-06	2.02E-06	1.79E-04	1.18E-04
12	0.00E+00	0.00E+00	1.52E-05	4.10E-06	3.63E-04	2.40E-04	0.00E+00	0.00E+00	7.49E-06	2.02E-06	1.79E-04	1.18E-04
13	0.00E+00	0.00E+00	1.52E-05	4.10E-06	3.63E-04	2.40E-04	0.00E+00	0.00E+00	7.49E-06	2.02E-06	1.79E-04	1.18E-04
14	0.00E+00	0.00E+00	1.52E-05	4.10E-06	3.61E-04	2.40E-04	0.00E+00	0.00E+00	7.46E-06	2.02E-06	1.78E-04	1.18E-04
15	0.00E+00	0.00E+00	1.51E-05	4.10E-06	3.59E-04	2.40E-04	0.00E+00	0.00E+00	7.41E-06	2.02E-06	1.77E-04	1.18E-04
16	0.00E+00	0.00E+00	1.51E-05	4.10E-06	3.61E-04	2.40E-04	0.00E+00	0.00E+00	7.45E-06	2.02E-06	1.78E-04	1.18E-04
17	0.00E+00	0.00E+00	1.51E-05	4.10E-06	3.61E-04	2.40E-04	0.00E+00	0.00E+00	7.45E-06	2.02E-06	1.78E-04	1.18E-04
18	0.00E+00	0.00E+00	7.52E-06	1.85E-06	1.77E-04	1.08E-04	0.00E+00	0.00E+00	3.70E-06	9.12E-07	8.74E-05	5.33E-05
19	0.00E+00	0.00E+00	7.52E-06	1.85E-06	1.77E-04	1.08E-04	0.00E+00	0.00E+00	3.70E-06	9.12E-07	8.73E-05	5.33E-05
20	0.00E+00	0.00E+00	1.50E-05	4.56E-06	3.63E-04	2.67E-04	0.00E+00	0.00E+00	7.39E-06	2.25E-06	1.79E-04	1.31E-04
21	0.00E+00	0.00E+00	1.50E-05	4.56E-06	3.63E-04	2.67E-04	0.00E+00	0.00E+00	7.38E-06	2.25E-06	1.79E-04	1.31E-04
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



Emission Inventory for PTI, Bus Depot & Coach Parking (Residual Nox - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source											Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>	Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04			Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23					
				(m)	(m)	(m)	(m)	(m2)		(m)																														
HCP25	Carpark near Tsing Ying Road	HCP25_01	AREAPOLY	816554.6	826305.2	4.1	3.9	210.5	816554.6 826305.2 816541.6 826291.9 816533.4 826299.6 816546.7 826313.1 816554.6 826305.2	5	3.64	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.64E-08	8.65E-08	9.21E-08	9.19E-08	9.18E-08	9.18E-08	9.15E-08	9.10E-08	9.13E-08	9.13E-08	4.45E-08	4.45E-08	9.30E-08	9.29E-08	0.00E+00	0.00E+00	0.00E+00				

- Note:
1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
  3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.





Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source										Number of Points	Vertical Dim. (Sz) <sup>[2]</sup> (m)	Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Hr 00	Hr 01	Hr 02	Hr 03			Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23				
				(m)	(m)	(m)	(m)	(m2)																															
HCP25	Carpark near Tsing Ying Road	HCP25_01	AREAPOLY	816554.6	826305.2	4.1	3.9	210.5	816554.6 826305.2 816541.6 826291.9 816533.4 826299.6 816546.7 826313.1 816554.6 826305.2	5	3.64	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.25E-08	4.26E-08	4.53E-08	4.53E-08	4.52E-08	4.52E-08	4.50E-08	4.48E-08	4.50E-08	4.50E-08	2.19E-08	2.19E-08	4.58E-08	4.57E-08	0.00E+00	0.00E+00	0.00E+00			

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.

**Annex – 7b**

Emission Inventory for HGV/ Coach  
Parking

(So Kwun Wat, Siu Lam and Tai Lam,  
Tsing Lung Tau and North Lantau Areas,  
Year 2048, Short Term)

HCP17 - PC

INDEX

Vehicle Type: PC - Petrol 1

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				
8	9		1							1											
9	10				1																
10	11		1	1						1	1										
11	12		1																		
12	13			1		1				1		1									1
13	14		1	1																	
14	15																				
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	65	100%	Bypass route
Starting on Public Road	0	0%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	0		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	0

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	0.00E+00	0.00E+00	2.58E-06	2.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-07	1.33E-06	0.00E+00	0.00E+00
10	0.00E+00	0.00E+00	1.28E-06	1.20E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.75E-08	6.39E-07	0.00E+00	0.00E+00
11	0.00E+00	0.00E+00	5.10E-06	4.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-07	2.61E-06	0.00E+00	0.00E+00
12	0.00E+00	0.00E+00	1.28E-06	1.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.13E-08	6.11E-07	0.00E+00	0.00E+00
13	0.00E+00	0.00E+00	6.30E-06	6.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-07	3.39E-06	0.00E+00	0.00E+00
14	0.00E+00	0.00E+00	2.56E-06	2.31E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-07	1.22E-06	0.00E+00	0.00E+00
15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source											Hourly Emission Rate (g/s or g/s/sq. m)																						
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23		
				(m)	(m)	(m)	(m)	(m2)		(m)																											
HCP17_PC	Carpark near Castle Peak Road - Tsing Lung Tau	HCP17_P_01	AREAPOLY	821778.7	824298.1	17.1	2.6	950.3	821778.7 824298.1 821839.8 824315.2 821842.5 824308.8 821828.9 824298.1 821819.4 824293.0 821806.7 824288.7 821794.4 824287.1 821784.6 824287.5 821775.7 824289.1 821767.3 824291.4 821778.7 824298.1	11	2.37	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-09	7.43E-10	3.03E-09	7.18E-10	3.92E-09	1.44E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Note:

1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.

HCP17

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Vehicle Type: NFB8 13

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				1
3	4																				1
4	5																				1
5	6																				1
6	7																				1
7	8																				1
8	9																				1
9	10																				
10	11																				
11	12																				1
12	13																				
13	14									1											
14	15																				
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

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Vehicle Type: LGV4 - Diesel 4

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				
8	9																				
9	10																				
10	11																				
11	12																				
12	13																				
13	14																				
14	15																				
15	16																				
16	17																				
17	18																				
18	19																				
19	20																				
20	21																				
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	65	9%	Bypass route
Starting on Public Road	635	91%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	1.09E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.39E-05	3.39E-05	0.00E+00	3.31E-04
4	0.00E+00	0.00E+00	1.09E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.39E-05	3.39E-05	0.00E+00	3.31E-04
5	0.00E+00	0.00E+00	1.09E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.39E-05	3.39E-05	0.00E+00	3.31E-04
6	0.00E+00	0.00E+00	1.09E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.39E-05	3.39E-05	0.00E+00	3.31E-04
7	0.00E+00	0.00E+00	1.09E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.39E-05	3.39E-05	0.00E+00	3.31E-04
8	0.00E+00	0.00E+00	1.09E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.39E-05	3.39E-05	0.00E+00	3.31E-04
9	0.00E+00	0.00E+00	1.10E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.39E-05	3.39E-05	0.00E+00	3.31E-04
10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	0.00E+00	0.00E+00	1.10E-04	6.88E-05	0.00E+00	6.72E-04	0.00E+00	0.00E+00	5.42E-05	3.39E-05	0.00E+00	3.31E-04
13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	0.00E+00	0.00E+00	1.10E-04	1.76E-05	0.00E+00	1.72E-04	0.00E+00	0.00E+00	5.41E-05	8.68E-06	0.00E+00	8.48E-05
15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	65	9%	Bypass route
Starting on Public Road	635	91%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	0	0%	
Access Road - Departure	0		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

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Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source											Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup>	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23			
				(m)	(m)	(m)	(m)	(m2)			(m)																											
HCP17	Carpark near Castle Peak Road - Tsing Lung Tau	HCP17_01	AREAPOLY	821778.7	824298.1	17.1	2.6	950.3	821778.7 824298.1 821839.8 824315.2 821842.5 824308.8 821828.9 824298.1 821819.4 824293.0 821806.7 824288.7 821794.4 824287.1 821784.6 824287.5 821775.7 824289.1 821767.3 824291.4 821778.7 824298.1	11	2.37	0.00E+00	0.00E+00	9.23E-08	9.24E-08	9.23E-08	9.22E-08	9.23E-08	9.22E-08	9.24E-08	0.00E+00	0.00E+00	9.27E-08	0.00E+00	7.01E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	

- Note:
1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.
  2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.
  3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.

HCP25

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Vehicle Type: NFB8 13

Hour		No. of Trip <sup>[1]</sup>																			
Start	End	0	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	
0	1																				
1	2																				
2	3																				
3	4																				
4	5																				
5	6																				
6	7																				
7	8																				1
8	9																				1
9	10							1		1											
10	11							1		1											
11	12							1		1											
12	13							1		1											
13	14							1		1											
14	15							1		1											
15	16							1		1											
16	17							1		1											
17	18									1											
18	19									1											
19	20									1		1									
20	21									1		1									
21	22																				
22	23																				
23	0																				

Note: 1. No. of trips at different soaking times for all vehicles in existing HGV/ Coach Parking/ depot are derived from site survey

Day: 1

Hour	Temperature	Relative Humidity
0 to 8760	°C	%
1	8	25
2	7	24
3	7	24
4	6	25
5	6	26
6	7	26
7	6	26
8	7	26
9	7	23
10	8	22
11	8	22
12	8	16
13	9	19
14	8	18
15	8	19
16	8	20
17	8	22
18	8	22
19	8	25
20	8	26
21	8	27
22	8	26
23	8	30
24	8	29

Routing (m)			
Starting inside PTI/ Carpark <sup>[1]</sup>	10	1%	Bypass route
Starting on Public Road	585	84%	Running inside PTI/ Carpark <sup>[1]</sup>
Access Road - Arrival	105	15%	
Access Road - Departure	105		
Total Distance	700		

Note: 1. The longest route within each parking site/ depot is used for assessment.

Idling time (min)	
Bypass	0
Terminating	0
Max Adjustment	1

Hour	Residual Nox (g/s)						Initial NO2 (g/s)					
	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road	Idling (Bypass)	Idling (Terminating)	Running within PTI/ Carpark	Start inside PTI/ Carpark	Start and Run on Access Road	Start on Public Road
8760												
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	0.00E+00	0.00E+00	8.09E-06	1.06E-05	2.81E-04	6.19E-04	0.00E+00	0.00E+00	3.98E-06	5.21E-06	1.38E-04	3.05E-04
9	0.00E+00	0.00E+00	8.11E-06	1.06E-05	2.81E-04	6.19E-04	0.00E+00	0.00E+00	3.99E-06	5.21E-06	1.39E-04	3.05E-04
10	0.00E+00	0.00E+00	1.62E-05	4.10E-06	3.84E-04	2.40E-04	0.00E+00	0.00E+00	7.99E-06	2.02E-06	1.89E-04	1.18E-04
11	0.00E+00	0.00E+00	1.62E-05	4.10E-06	3.84E-04	2.40E-04	0.00E+00	0.00E+00	7.99E-06	2.02E-06	1.89E-04	1.18E-04
12	0.00E+00	0.00E+00	1.63E-05	4.10E-06	3.86E-04	2.40E-04	0.00E+00	0.00E+00	8.03E-06	2.02E-06	1.90E-04	1.18E-04
13	0.00E+00	0.00E+00	1.62E-05	4.10E-06	3.84E-04	2.40E-04	0.00E+00	0.00E+00	8.00E-06	2.02E-06	1.89E-04	1.18E-04
14	0.00E+00	0.00E+00	1.63E-05	4.10E-06	3.85E-04	2.40E-04	0.00E+00	0.00E+00	8.02E-06	2.02E-06	1.90E-04	1.18E-04
15	0.00E+00	0.00E+00	1.63E-05	4.10E-06	3.85E-04	2.40E-04	0.00E+00	0.00E+00	8.01E-06	2.02E-06	1.89E-04	1.18E-04
16	0.00E+00	0.00E+00	1.62E-05	4.10E-06	3.84E-04	2.40E-04	0.00E+00	0.00E+00	8.00E-06	2.02E-06	1.89E-04	1.18E-04
17	0.00E+00	0.00E+00	1.62E-05	4.10E-06	3.84E-04	2.40E-04	0.00E+00	0.00E+00	7.99E-06	2.02E-06	1.89E-04	1.18E-04
18	0.00E+00	0.00E+00	8.11E-06	1.85E-06	1.90E-04	1.08E-04	0.00E+00	0.00E+00	3.99E-06	9.12E-07	9.34E-05	5.33E-05
19	0.00E+00	0.00E+00	8.08E-06	1.85E-06	1.89E-04	1.08E-04	0.00E+00	0.00E+00	3.98E-06	9.12E-07	9.32E-05	5.33E-05
20	0.00E+00	0.00E+00	1.61E-05	4.56E-06	3.87E-04	2.67E-04	0.00E+00	0.00E+00	7.95E-06	2.25E-06	1.91E-04	1.31E-04
21	0.00E+00	0.00E+00	1.61E-05	4.56E-06	3.87E-04	2.67E-04	0.00E+00	0.00E+00	7.94E-06	2.25E-06	1.90E-04	1.31E-04
22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



Emission Inventory for PTJ\_Bus Depot & Coach Parking (Residual Nox - Within PTJ/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	X	Y	Base Elevation (m)	Release Height <sup>[2]</sup> (m)	Area Polygon Source		Source Points String	Number of Points	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hourly Emission Rate (g/s or g/s/sq. m)																							
				(m)	(m)			(m2)	(m)				Hr 00	Hr 01	Hr 02	Hr 03	Hr 04	Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23
HCP25	Carpark near Tsing Ying Road	HCP25_01	AREAPOLY	816554.6	826305.2	4.1	3.9	210.5	816554.6 826305.2 816541.6 826291.9 816533.4 826299.6 816546.7 826313.1 816554.6 826305.2	5	3.64	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.87E-08	8.88E-08	9.65E-08	9.65E-08	9.70E-08	9.66E-08	9.68E-08	9.67E-08	9.67E-08	9.65E-08	4.73E-08	4.72E-08	9.84E-08	9.83E-08	0.00E+00	0.00E+00	0.00E+00

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix J of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.



Emission Inventory for PTI, Bus Depot & Coach Parking (Initial NO2 - Within PTI/Carpark)

PTI ID	Description	Source ID	Type <sup>[1]</sup>	Area Polygon Source											Number of Points	Vertical Dim. (Sz) <sup>[3]</sup> (m)	Hourly Emission Rate (g/s or g/s/sq. m)																							
				X	Y	Base Elevation	Release Height <sup>[2]</sup>	Source Area	Source Points String	Hr 00	Hr 01	Hr 02	Hr 03	Hr 04			Hr 05	Hr 06	Hr 07	Hr 08	Hr 09	Hr 10	Hr 11	Hr 12	Hr 13	Hr 14	Hr 15	Hr 16	Hr 17	Hr 18	Hr 19	Hr 20	Hr 21	Hr 22	Hr 23					
				(m)	(m)	(m)	(m)	(m <sup>2</sup> )																																
HCP25	Carpark near Tsing Ying Road	HCP25_01	AREAPOLY	816554.6	826305.2	4.1	3.9	210.5	816554.6 826305.2 816541.6 826291.9 816533.4 826299.6 816546.7 826313.1 816554.6 826305.2	5	3.64	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-08	4.37E-08	4.75E-08	4.75E-08	4.78E-08	4.76E-08	4.77E-08	4.76E-08	4.76E-08	4.75E-08	2.33E-08	2.32E-08	4.85E-08	4.84E-08	0.00E+00	0.00E+00	0.00E+00					

Note:  
 1. Since the parking sites are open sites without any forced mechanical ventilation, the carpark is modelled as AREAPOLY with vertical dimension.  
 2. According to Appendix j of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, release height = 0.5 x 1.7 x vehicle height. Vehicle height adopted is the weighted average height of vehicles inside the carpark.  
 3. According to Appendix j of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" issued by USEPA in Nov 2015, initial vertical dimension = 1.7 x vehicle height/ 2.15. Vehicle height adopted is the weighted average height of vehicles inside the carpark.