Appendix 3.4 - Emission Inventory on Bus, Minibus and Taxi Termini, Heavy Goods Vehicle and Coach Parking Sites

AERMOD Input Parameters

PTI/Carpark	Type of PTI/Carpark	Vehicle Type	Spread Distance Range	Source in AERMOD Model	Model ID	X-Coordinate	Y-Coordinate	Base Elevation	Length of Portal	Average Vehicle Height	Release Height	Initial Lateral Dimension Coefficient	Initial Vertical Dimension Coefficient	Area	Number of Volume Source	Total Emissions				Baseline Emission Rates							
																NO	NO2	RSP	FSP	NO	NO2	RSP	FSP	NO	NO2	RSP	FSP
(Name)	(Type)	(Type)	(m)	(Type)	(#)	(HK1980)	(HK1980)	(mAG)	(m)	(m)	(m)	(σy)	(σz)	(m2)	(#)	(g/s)	(g/s)	(g/s)	(g/s)	(g/s)	(g/s)	(g/s)	(g/s)	(g/s/m2)	(g/s/m2)	(g/s/m2)	(g/s/m2)
Choi Yuen Bus Terminus	Semi-confined	FBDD	0-140	VOLUME	**CYE_BD101**	831036.02	840171.32	8.90	5.50	4.40	2.75	1.279	2.558	1603.98	4	2.054E-02	1.387E-03	6.733E-04	6.204E-04	1.795E-03	1.212E-04	5.884E-05	5.422E-05	-	-	-	-
		FBDD	0-140	VOLUME	**CYE_BD102**	831041.52	840171.32	8.90	5.50	4.40	2.75	1.279	2.558							1.795E-03	1.212E-04	5.884E-05	5.422E-05	-	-	-	-
		FBDD	0-140	VOLUME	**CYE_BD103**	831034.84	840082.44	8.90	5.50	4.40	2.75	1.279	2.558							1.795E-03	1.212E-04	5.884E-05	5.422E-05	-	-	-	-
		FBDD	0-140	VOLUME	**CYE_BD104**	831040.34	840082.44	8.90	5.50	4.40	2.75	1.279	2.558							1.795E-03	1.212E-04	5.884E-05	5.422E-05	-	-	-	-
	Open-area	FBDD	0-140	AREA_POLY	**CYE_BDA1**	(See next page)		8.90	-	4.40	3.48	-	-	1948.68	-					-	-	-	-	4.476E-06	3.023E-07	1.467E-07	1.352E-07
		FBDD	0-140	AREA_POLY	**CYE_BDA2**	(See next page)		8.90	-	4.40	3.48	-	-	1035.69						-	-	-	-	4.476E-06	3.023E-07	1.467E-07	1.352E-07
Choi Yuen Bus Terminus - Spread Distance	Open-area	FBDD	140-700	AREA_POLY	**CYE_BDSW**	(See next page)		9.30	-	4.40	3.48	-	-	3744.46	-	6.550E-04	5.043E-05	0.000E+00	0.000E+00	-	-	-	-	1.749E-07	1.347E-08	0.000E+00	0.000E+00
		FBDD	140-700	AREA_POLY	**CYE_BDSE**	(See next page)		9.30	-	4.40	3.48	-	-	3763.31		1.965E-03	1.513E-04	0.000E+00	0.000E+00	-	-	-	-	5.221E-07	4.020E-08	0.000E+00	0.000E+00
Tai Ping Estate PTI	Open-area	FBDD	0-80	AREA_POLY	**TAI_BDA1**	(See next page)		10.80	-	4.40	3.48	-	-	3280.06	-	2.097E-02	1.411E-03	7.003E-04	6.454E-04	-	-	-	-	6.392E-06	4.303E-07	2.135E-07	1.968E-07
Tai Ping Estate PTI - Spread Distance	Open-area	FBDD	80-700	AREA_POLY	**TAI_BDSW**	(See next page)		11.80	-	4.40	3.48	-	-	4509.31		2.311E-03	1.854E-04	0.000E+00	0.000E+00	-	-	-	-	5.125E-07	4.111E-08	0.000E+00	0.000E+00
		FBDD	80-700	AREA_POLY	**TAI_BDSN1**	(See next page)		11.80	-	4.40	3.48	-	-	2642.32		1.485E-03	1.156E-04	0.000E+00	0.000E+00	-	-	-	-	3.625E-07	2.823E-08	0.000E+00	0.000E+00
		FBDD	80-700	AREA_POLY	**TAI_BDSN2**	(See next page)		14.70	-	4.40	3.48	-	-	1453.21						-	-	-	-	3.625E-07	2.823E-08	0.000E+00	0.000E+00
		FBDD	80-700	AREA_POLY	**TAI_BDSS**	(See next page)		11.80	-	4.40	3.48	-	-	5430.45		7.252E-04	5.583E-05	0.000E+00	0.000E+00	-	-	-	-	1.335E-07	1.028E-08	0.000E+00	0.000E+00
Ching Ho Estate PTI	Open-area	FBDD	0-90	AREA_POLY	**CHE_BDA1**	(See next page)		11.50	-	4.40	3.48	-	-	4035.83	-	2.291E-02	1.546E-03	7.252E-04	6.690E-04	-	-	-	-	5.676E-06	3.832E-07	1.797E-07	1.658E-07
		FBSD	0-90	AREA_POLY	**CHE_BSA1**	(See next page)		11.50	-	3.80	3.00	-	-	4035.83		3.511E-04	6.375E-05	8.395E-06	7.772E-06	-	-	-	-	8.701E-08	1.580E-08	2.080E-09	1.926E-09
		PLB DIESEL	0-90	AREA_POLY	**CHE_PDA1**	(See next page)		11.50	-	2.65	2.10	-	-	4035.83		4.177E-04	1.625E-04	2.777E-05	2.567E-05	-	-	-	-	1.035E-07	4.025E-08	6.880E-09	6.361E-09
		PLB LPG	0-90	AREA_POLY	**CHE_PLA1**	(See next page)		11.50	-	2.65	2.10	-	-	4035.83		1.080E-03	5.434E-06	7.345E-07	7.345E-07	-	-	-	-	2.677E-07	1.346E-09	1.820E-10	1.820E-10
		TAXI LPG	0-90	AREA_POLY	**CHE_TLA1**	(See next page)		11.50	-	1.53	1.21	-	-	4035.83		1.790E-02	5.008E-04	6.187E-05	6.187E-05	-	-	-	-	4.436E-06	1.241E-07	1.533E-08	1.533E-08
		TAXI PETROL	n/a	AREA_POLY	**CHE_TPA1**	(See next page)		11.50	-	1.53	1.21	-	-	4035.83		2.856E-08	1.487E-09	4.137E-09	3.910E-09	-	-	-	-	7.077E-12	3.685E-13	1.025E-12	9.689E-13
Ching Ho Estate PTI - Spread Distance	Open-area	FBDD	90-700	AREA_POLY	**CHE_BDSW**	(See next page)		11.20	-	4.40	3.48	-	-	4295.61	-	2.882E-04	2.205E-05	0.000E+00	0.000E+00	-	-	-	-	6.709E-08	5.133E-09	0.000E+00	0.000E+00
		FBDD	90-700	AREA_POLY	**CHE_BDSN1**	(See next page)		11.80	-	4.40	3.48	-	-	3714.49		8.646E-04	6.615E-05	0.000E+00	0.000E+00	-	-	-	-	1.934E-07	1.480E-08	0.000E+00	0.000E+00
		FBDD	90-700	AREA_POLY	**CHE_BDSN2**	(See next page)		14.70	-	4.40	3.48	-	-	756.05						-	-	-	-	1.934E-07	1.480E-08	0.000E+00	0.000E+00
		FBDD	90-700	AREA_POLY	**CHE_BDSS1**	(See next page)		11.80	-	4.40	3.48	-	-	3525.19		3.458E-03	2.646E-04	0.000E+00	0.000E+00	-	-	-	-	6.380E-07	4.882E-08	0.000E+00	0.000E+00
		FBDD	90-700	AREA_POLY	**CHE_BDSS2**	(See next page)		13.00	-	4.40	3.48	-	-	277.99						-	-	-	-	6.380E-07	4.882E-08	0.000E+00	0.000E+00
		FBDD	90-700	AREA_POLY	**CHE_BDSS3**	(See next page)		13.00	-	4.40	3.48	-	-	372.08						-	-	-	-	6.380E-07	4.882E-08	0.000E+00	0.000E+00
		FBDD	90-700	AREA_POLY	**CHE_BDSS4**	(See next page)		16.90	-	4.40	3.48	-	-	215.70						-	-	-	-	6.380E-07	4.882E-08	0.000E+00	0.000E+00
		FBDD	90-700	AREA_POLY	**CHE_BDSS5**	(See next page)		17.60	-	4.40	3.48	-	-	1029.06						-	-	-	-	6.380E-07	4.882E-08	0.000E+00	0.000E+00
		FBSD	90-700	AREA_POLY	**CHE_BSSN1**	(See next page)		11.80	-	3.80	3.00	-	-	3714.49		1.196E-05	2.241E-06	0.000E+00	0.000E+00	-	-	-	-	2.675E-09	5.014E-10	0.000E+00	0.000E+00
		FBSD	90-700	AREA_POLY	**CHE_BSSN2**	(See next page)		14.70	-	3.80	3.00	-	-	756.05						-	-	-	-	2.675E-09	5.014E-10	0.000E+00	0.000E+00
		FBSD	90-700	AREA_POLY	**CHE_BSSS1**	(See next page)		11.80	-	3.80	3.00	-	-	3525.19		7.175E-05	1.345E-05	0.000E+00	0.000E+00	-	-	-	-	1.324E-08	2.481E-09	0.000E+00	0.000E+00
		FBSD	90-700	AREA_POLY	**CHE_BSSS2**	(See next page)		13.00	-	3.80	3.00	-	-	277.99						-	-	-	-	1.324E-08	2.481E-09	0.000E+00	0.000E+00
		FBSD	90-700	AREA_POLY	**CHE_BSSS3**	(See next page)		13.00	-	3.80	3.00	-	-	372.08						-	-	-	-	1.324E-08	2.481E-09	0.000E+00	0.000E+00
		FBSD	90-700	AREA_POLY	**CHE_BSSS4**	(See next page)		16.90	-	3.80	3.00	-	-	215.70						-	-	-	-	1.324E-08	2.481E-09	0.000E+00	0.000E+00
		FBSD	90-700	AREA_POLY	**CHE_BSSS5**	(See next page)		17.60	-	3.80	3.00	-	-	1029.06						-	-	-	-	1.324E-08	2.481E-09	0.000E+00	0.000E+00
		PLB DIESEL	90-700	AREA_POLY	**CHE_PDSW**	(See next page)		11.20	-	2.65	2.10	-	-	4295.61		3.336E-05	1.293E-05	0.000E+00	0.000E+00	-	-	-	-	7.766E-09	3.011E-09	0.000E+00	0.000E+00
		PLB LPG	90-150	AREA_POLY	**CHE_PLSW**	(See next page)		11.20	-	2.65	2.10	-	-	419.99		6.121E-05	3.085E-07	0.000E+00	0.000E+00	-	-	-	-	1.457E-07	7.347E-10	0.000E+00	0.000E+00
		TAXI LPG	90-150	AREA_POLY	**CHE_TLSW**	(See next page)		11.20	-	1.53	1.21	-	-	419.99		1.057E-05	2.969E-07	0.000E+00	0.000E+00	-	-	-	-	2.517E-08	7.070E-10	0.000E+00	0.000E+00
		TAXI LPG	90-150	AREA_POLY	**CHE_TLSE**	(See next page)		11.00	-	1.53	1.21	-	-	502.80		9.515E-05	2.672E-06	0.000E+00	0.000E+00	-	-	-	-	1.892E-07	5.315E-09	0.000E+00	0.000E+00
Sheung Shui Bus Terminus	Semi-confined	FBDD	0-120	VOLUME	**SSB_BD401**	831262.67	840294.66	7.90	7.00	4.40	3.50	1.628	3.256	4359.78	16	3.376E-02	2.280E-03	1.085E-03	1.000E-03	1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD402**	831263.39	840301.67	7.90	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD403**	831264.12	840308.67	7.90	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD404**	831264.84	840315.67	7.90	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD405**	831265.57	840322.68	7.90	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD406**	831266.29	840329.68	7.90	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD407**	831267.02	840336.68	7.90	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD408**	831267.74	840343.69	7.90	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD409**	831180.19	840305.93	7.70	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD410**	831184.80	840300.61	7.70	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD411**	831175.87	840313.37	7.70	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD412**	831176.60	840320.37	7.70	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD413**	831177.32	840327.37	7.70	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD414**	831178.05	840334.38	7.70	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD415**	831178.78	840341.38	7.70	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
		FBDD	0-120	VOLUME	**SSB_BD416**	831179.50	840348.38	7.70	7.00	4.40	3.50	1.628	3.256							1.094E-03	7.389E-05	3.517E-05	3.242E-05	-	-	-	-
	Open-area	FBDD	0-120	AREA_POLY	**SSB_BDA1**	(See next page)		7.70	-	4.40	3.48	-	-	2570.71	-					-	-	-	-	4.015E-06	2.712E-07	1.291E-07	1.190E-07
		FBDD	0-120	AREA_POLY	**SSB_BDA2**	(See next page)		7.90	-	4.40	3.48	-	-	1476.55						-	-	-	-	4.015E-06	2.712E-07	1.291E-07	1.190E-07
	Semi-confined	FBSD	0-120	VOLUME	**SSB_BS401**	831262.67	840294.66	7.90	7.00	3.80	3.50	1.628	3.256	4359.78	16	7.425E-04	1.346E-04	1.943E-05	1.795E-05	2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS402**	831263.39	840301.67	7.90	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS403**	831264.12	840308.67	7.90	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS404**	831264.84	840315.67	7.90	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS405**	831265.57	840322.68	7.90	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS406**	831266.29	840329.68	7.90	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS407**	831267.02	840336.68	7.90	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS408**	831267.74	840343.69	7.90	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS409**	831180.19	840305.93	7.70	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS410**	831184.80	840300.61	7.70	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS411**	831175.87	840313.37	7.70	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS412**	831176.60	840320.37	7.70	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS413**	831177.32	840327.37	7.70	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS414**	831178.05	840334.38	7.70	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS415**	831178.78	840341.38	7.70	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
		FBSD	0-120	VOLUME	**SSB_BS416**	831179.50	840348.38	7.70	7.00	3.80	3.50	1.628	3.256							2.407E-05	4.364E-06	6.298E-07	5.817E-07	-	-	-	-
	Open-area	FBSD	0-120	AREA_POLY	**SSB_BSA1**	(See next page)		7.70	-	3.80	3.00	-	-	2570.71	-					-	-	-	-	8.832E-08	1.602E-08	2.311E-09	2.135E-09
		FBSD	0-120	AREA_POLY	**SSB_BSA2**	(See next page)		7.90	-	3.80	3.00	-	-	1476.55						-	-	-	-	8.832E-08	1.602E-08	2.311E-09	2.135E-09

Appendix 3.4 - Emission Inventory on Bus, Minibus and Taxi Termini, Heavy Goods Vehicle and Coach Parking Sites

AERMOD Input Parameters

PTI/Carpark	Type of PTI/Carpark	Vehicle Type	Spread Distance Range	Source in AERMOD Model	Model ID	X-Coordinate	Y-Coordinate	Base Elevation	Length of Portal	Average Vehicle Height	Release Height	Initial Lateral Dimension Coefficient	Initial Vertical Dimension Coefficient	Area	Number of Volume Source	Total Emissions				Baseline Emission Rates							
																NO	NO2	RSP	FSP	NO	NO2	RSP	FSP	NO	NO2	RSP	FSP
(Name)	(Type)	(Type)	(m)	(Type)	(#)	(HK1980)	(HK1980)	(mAG)	(m)	(m)	(m)	(σy)	(σz)	(m2)	(#)	(g/s)	(g/s)	(g/s)	(g/s)	(g/s)	(g/s)	(g/s)	(g/s)	(g/s/m2)	(g/s/m2)	(g/s/m2)	(g/s/m2)
	Semi-confined	NFB7	0-120	VOLUME	**SSB_B7401**	831262.67	840294.66	7.90	7.00	3.80	3.50	1.628	3.256	4359.78	16	1.370E-03	6.747E-04	2.913E-05	2.693E-05	4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7402**	831263.39	840301.67	7.90	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7403**	831264.12	840308.67	7.90	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7404**	831264.84	840315.67	7.90	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7405**	831265.57	840322.68	7.90	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7406**	831266.29	840329.68	7.90	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7407**	831267.02	840336.68	7.90	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7408**	831267.74	840343.69	7.90	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7409**	831180.19	840305.93	7.70	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7410**	831184.80	840300.61	7.70	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7411**	831175.87	840313.37	7.70	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7412**	831176.60	840320.37	7.70	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7413**	831177.32	840327.37	7.70	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7414**	831178.05	840334.38	7.70	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7415**	831178.78	840341.38	7.70	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
		NFB7	0-120	VOLUME	**SSB_B7416**	831179.50	840348.38	7.70	7.00	3.80	3.50	1.628	3.256							4.440E-05	2.187E-05	9.442E-07	8.727E-07	-	-	-	-
	Open-area	NFB7	0-120	AREA_POLY	**SSB_B7A1**	(See next page)		7.70	-	3.80	3.00	-	-	2570.71	-					-	-	-	-	1.629E-07	8.025E-08	3.465E-09	3.203E-09
		NFB7	0-120	AREA_POLY	**SSB_B7A2**	(See next page)		7.90	-	3.80	3.00	-	-	1476.55						-	-	-	-	1.629E-07	8.025E-08	3.465E-09	3.203E-09
Sheung Shui Bus Terminus - Spread Distance	Open-area	FBDD	120-700	AREA_POLY	**SSB_BDSN**	(See next page)		8.10	-	4.40	3.48	-	-	5680.80	-	9.831E-04	7.506E-05	0.000E+00	0.000E+00	-	-	-	-	1.731E-07	1.321E-08	0.000E+00	0.000E+00
		FBDD	120-700	AREA_POLY	**SSB_BDSS**	(See next page)		8.90	-	4.40	3.48	-	-	5115.81		4.494E-03	3.431E-04	0.000E+00	0.000E+00	-	-	-	-	8.785E-07	6.707E-08	0.000E+00	0.000E+00
		FBDD	120-700	AREA_POLY	**SSB_BDSE**	(See next page)		8.00	-	4.40	3.48	-	-	6732.21		1.234E-04	9.587E-06	0.000E+00	0.000E+00	-	-	-	-	1.833E-08	1.424E-09	0.000E+00	0.000E+00
		FBSD	120-700	AREA_POLY	**SSB_BSSN**	(See next page)		8.10	-	3.80	3.00	-	-	5680.80		1.022E-05	1.921E-06	0.000E+00	0.000E+00	-	-	-	-	1.799E-09	3.382E-10	0.000E+00	0.000E+00
		FBSD	120-700	AREA_POLY	**SSB_BSSS**	(See next page)		8.90	-	3.80	3.00	-	-	5115.81		4.514E-05	8.486E-06	0.000E+00	0.000E+00	-	-	-	-	8.823E-09	1.659E-09	0.000E+00	0.000E+00
		FBSD	120-700	AREA_POLY	**SSB_BSSE**	(See next page)		8.00	-	3.80	3.00	-	-	6732.21		8.517E-07	1.601E-07	0.000E+00	0.000E+00	-	-	-	-	1.265E-10	2.378E-11	0.000E+00	0.000E+00
		NFB7	120-700	AREA_POLY	**SSB_B7SS**	(See next page)		8.90	-	3.80	3.00	-	-	5115.81		2.657E-04	1.309E-04	0.000E+00	0.000E+00	-	-	-	-	5.194E-08	2.558E-08	0.000E+00	0.000E+00
Sheung Shui Station Minibus Terminus	Open-area	PLB DIESEL	0-60	AREA_POLY	**SSM_PDA1**	(See next page)		8.00	-	2.65	2.10	-	-	3374.66	-	3.888E-03	1.512E-03	1.959E-04	1.828E-04	-	-	-	-	1.152E-06	4.482E-07	5.805E-08	5.418E-08
		PLB LPG	0-60	AREA_POLY	**SSM_PLA1**	(See next page)		8.00	-	2.65	2.10	-	-	3374.66		9.402E-03	4.721E-05	1.394E-05	1.394E-05	-	-	-	-	2.786E-06	1.399E-08	4.130E-09	4.130E-09
		TAXI LPG	0-60	AREA_POLY	**SSM_TLA1**	(See next page)		8.00	-	1.53	1.21	-	-	3374.66		1.771E-02	4.955E-04	6.718E-05	6.718E-05	-	-	-	-	5.249E-06	1.468E-07	1.991E-08	1.991E-08
		TAXI PETROL	n/a	AREA_POLY	**SSM_TPA1**	(See next page)		8.00	-	1.53	1.21	-	-	3374.66		2.348E-08	1.223E-09	3.289E-09	3.131E-09	-	-	-	-	6.958E-12	3.624E-13	9.746E-13	9.277E-13
Sheung Shui Station Minibus Terminus - Spread Distance	Open-area	PLB DIESEL	60-700	AREA_POLY	**SSM_PDSN**	(See next page)		8.10	-	2.65	2.10	-	-	4526.71	-	5.335E-07	2.069E-07	0.000E+00	0.000E+00	-	-	-	-	1.179E-10	4.571E-11	0.000E+00	0.000E+00
		PLB DIESEL	60-700	AREA_POLY	**SSM_PDSW**	(See next page)		8.10	-	2.65	2.10	-	-	4317.91		1.120E-05	4.345E-06	0.000E+00	0.000E+00	-	-	-	-	2.595E-09	1.006E-09	0.000E+00	0.000E+00
		PLB DIESEL	60-700	AREA_POLY	**SSM_PDSE**	(See next page)		8.10	-	2.65	2.10	-	-	5861.63		2.534E-06	9.829E-07	0.000E+00	0.000E+00	-	-	-	-	4.323E-10	1.677E-10	0.000E+00	0.000E+00
		PLB DIESEL	60-700	AREA_POLY	**SSM_PDSS**	(See next page)		8.10	-	2.65	2.10	-	-	6484.12		4.001E-06	1.552E-06	0.000E+00	0.000E+00	-	-	-	-	6.171E-10	2.393E-10	0.000E+00	0.000E+00
		PLB LPG	60-150	AREA_POLY	**SSM_PLSA**	(See next page)		8.10	-	2.65	2.10	-	-	1521.46		4.641E-05	2.339E-07	0.000E+00	0.000E+00	-	-	-	-	3.050E-08	1.537E-10	0.000E+00	0.000E+00
		TAXI LPG	60-150	AREA_POLY	**SSM_TLSA**	(See next page)		8.10	-	1.53	1.21	-	-	1521.46		1.504E-04	4.220E-06	0.000E+00	0.000E+00	-	-	-	-	9.884E-08	2.774E-09	0.000E+00	0.000E+00
Tin Ping Estate Bus Terminus	Open-area	FBDD	0-50	AREA_POLY	**TIN_BDA1**	(See next page)		10.20	-	4.40	3.48	-	-	1376.46	-	5.228E-03	3.531E-04	1.642E-04	1.515E-04	-	-	-	-	3.799E-06	2.565E-07	1.193E-07	1.101E-07
		FBSD	0-50	AREA_POLY	**TIN_BSA1**	(See next page)		10.20	-	3.80	3.00	-	-	1376.46		9.915E-04	1.798E-04	2.465E-05	2.281E-05	-	-	-	-	7.203E-07	1.306E-07	1.791E-08	1.657E-08
Tin Ping Estate Bus Terminus - Spread Distance	Open-area	FBDD	50-700	AREA_POLY	**TIN_BDSN**	(See next page)		10.00	-	4.40	3.48	-	-	3694.35	-	2.365E-03	1.798E-04	0.000E+00	0.000E+00	-	-	-	-	6.401E-07	4.867E-08	0.000E+00	0.000E+00
		FBDD	50-700	AREA_POLY	**TIN_BDSW**	(See next page)		10.00	-	4.40	3.48	-	-	4489.14		2.164E-03	1.692E-04	0.000E+00	0.000E+00	-	-	-	-	4.820E-07	3.769E-08	0.000E+00	0.000E+00
		FBDD	50-700	AREA_POLY	**TIN_BDSS**	(See next page)		10.00	-	4.40	3.48	-	-	4103.93		7.423E-03	5.948E-04	0.000E+00	0.000E+00	-	-	-	-	1.809E-06	1.449E-07	0.000E+00	0.000E+00
		FBSD	50-700	AREA_POLY	**TIN_BSSS**	(See next page)		10.00	-	3.80	3.00	-	-	4103.93		7.598E-04	1.428E-04	0.000E+00	0.000E+00	-	-	-	-	1.851E-07	3.479E-08	0.000E+00	0.000E+00
Ma Sik Road Carpark	Open-area	HGV7	0-45	AREA_POLY	**MSR_H7A1**	(See next page)		10.50	-	3.50	2.77	-	-	5314.22	-	1.502E-04	6.867E-05	2.087E-06	1.934E-06	-	-	-	-	2.826E-08	1.292E-08	3.926E-10	3.639E-10
		HGV8	0-45	AREA_POLY	**MSR_H8A1**	(See next page)		10.50	-	4.00	3.16	-	-	5314.22		1.235E-03	4.046E-04	1.959E-05	1.809E-05	-	-	-	-	2.324E-07	7.613E-08	3.687E-09	3.404E-09
		NFB6	0-45	AREA_POLY	**MSR_B6A1**	(See next page)		10.50	-	2.65	2.10	-	-	5314.22		1.416E-04	5.506E-05	4.077E-06	3.767E-06	-	-	-	-	2.664E-08	1.036E-08	7.672E-10	7.088E-10
Ma Sik Road - Spread Distance	Open-area	HGV7	45-700	AREA_POLY	**MSR_H7SE**	(See next page)		10.40	-	3.50	2.77	-	-	5268.80	-	2.657E-04	1.252E-04	0.000E+00	0.000E+00	-	-	-	-	5.043E-08	2.375E-08	0.000E+00	0.000E+00
		HGV7	45-700	AREA_POLY	**MSR_H7SS**	(See next page)		10.40	-	3.50	2.77	-	-	5428.32		2.657E-04	1.252E-04	0.000E+00	0.000E+00	-	-	-	-	4.894E-08	2.306E-08	0.000E+00	0.000E+00
		HGV8	45-700	AREA_POLY	**MSR_H8SE**	(See next page)		10.40	-	4.00	3.16	-	-	5268.80		2.292E-03	6.394E-04	0.000E+00	0.000E+00	-	-	-	-	4.350E-07	1.214E-07	0.000E+00	0.000E+00
		HGV8	45-700	AREA_POLY	**MSR_H8SS**	(See next page)		10.40	-	4.00	3.16	-	-	5428.32		2.292E-03	6.394E-04	0.000E+00	0.000E+00	-	-	-	-	4.222E-07	1.178E-07	0.000E+00	0.000E+00
		NFB6	45-700	AREA_POLY	**MSR_B6SE**	(See next page)		10.40	-	2.65	2.10	-	-	5268.80		3.371E-04	1.311E-04	0.000E+00	0.000E+00	-	-	-	-	6.398E-08	2.488E-08	0.000E+00	0.000E+00
		NFB6	45-700	AREA_POLY	**MSR_B6SS**	(See next page)		10.40	-	2.65	2.10	-	-	5428.32		3.371E-04	1.311E-04	0.000E+00	0.000E+00	-	-	-	-	6.210E-08	2.415E-08	0.000E+00	0.000E+00

Notes:

(a) Emission profiles and input parameters are the same in Without DNR Scenario and With DNR Scenario.

(b) For Opened-Area PTI and Spread Distances, Release Height is referenced from Appendix J.3.3 of "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" (2013) from USEPA. Release Height = Average Vehicle Height × 1.7 ÷ 2.15.

(c) For Covered-Area PTI, Initial Lateral Dimension Coefficient, Initial Vertical Dimension Coefficient and Release Height are referenced from Table 3-2 in the USEPA's "User's Guide for the AMS/EPA Regulatory Model (AERMOD)". Initial Lateral Dimension Coefficient = Length of Portal ÷ 4.3; Initial Vertical Dimension Coefficient = Length of Portal ÷ 2.15; Release Height = Length of Portal ÷ 2.

Appendix 3.4 - Emission Inventory on Bus, Minibus and Taxi Termini, Heavy Goods Vehicle and Coach Parking Sites

Legend:

XX = Vehicle Type	BD = FBDD	PD = PLB Diesel	TL = TAXI LPG	B6 = NFB6	H7 = HGV7
	BS = FBSD	PL = PLB LPG	TP = TAXI Petrol	B7 = NFB7	H8 = HGV8

AERMOD Input Parameters - XY Coordinate of PTI Area Source

Choi Yuen Bus Terminus

Model_ID	X	Y
CYE_XXA1	831140.45	840197.94
CYE_XXA1	831147.15	840192.66
CYE_XXA1	831142.33	840192.74
CYE_XXA1	831137.74	840190.49
CYE_XXA1	831116.40	840167.00
CYE_XXA1	831116.54	840158.22
CYE_XXA1	831116.53	840103.33
CYE_XXA1	831115.01	840088.57
CYE_XXA1	831111.40	840082.20
CYE_XXA1	831103.50	840074.57
CYE_XXA1	831099.44	840071.77
CYE_XXA1	831095.27	840070.04
CYE_XXA1	831032.54	840069.98
CYE_XXA1	831032.94	840085.22
CYE_XXA1	831042.10	840085.26
CYE_XXA1	831043.44	840082.55
CYE_XXA1	831046.05	840080.81
CYE_XXA1	831096.51	840080.52
CYE_XXA1	831098.37	840081.71
CYE_XXA1	831102.05	840085.25
CYE_XXA1	831105.10	840091.69
CYE_XXA1	831105.79	840100.01
CYE_XXA1	831106.28	840128.56
CYE_XXA1	831106.28	840143.18
CYE_XXA1	831105.51	840157.81
CYE_XXA1	831105.44	840163.07
CYE_XXA1	831113.14	840173.52
CYE_XXA2	831135.03	840202.35
CYE_XXA2	831140.45	840197.94
CYE_XXA2	831113.14	840173.52
CYE_XXA2	831091.63	840174.36
CYE_XXA2	831074.31	840174.18
CYE_XXA2	831050.89	840174.14
CYE_XXA2	831046.84	840172.24
CYE_XXA2	831043.84	840168.49
CYE_XXA2	831033.21	840168.54
CYE_XXA2	831033.61	840183.62
CYE_XXA2	831111.92	840183.80
CYE_XXA2	831116.90	840184.64
CYE_XXA2	831121.00	840186.84

Tai Ping Estate PTI

Model_ID	X	Y
TAI_XXA1	830989.69	839809.68
TAI_XXA1	830998.51	839805.69
TAI_XXA1	830994.50	839799.95
TAI_XXA1	830996.61	839796.88
TAI_XXA1	830997.16	839792.51
TAI_XXA1	830994.70	839760.62
TAI_XXA1	830991.98	839744.68
TAI_XXA1	830977.59	839758.55
TAI_XXA1	830932.28	839775.93
TAI_XXA1	830925.13	839780.11
TAI_XXA1	830920.19	839787.59
TAI_XXA1	830920.19	839796.17
TAI_XXA1	830924.14	839805.40
TAI_XXA1	830932.88	839809.89

Ching Ho Estate PTI

Model_ID	X	Y
CHE_XXA1	831168.93	839439.41
CHE_XXA1	831179.06	839443.03
CHE_XXA1	831185.68	839446.73
CHE_XXA1	831193.66	839450.31
CHE_XXA1	831193.48	839440.65
CHE_XXA1	831208.62	839449.40
CHE_XXA1	831229.59	839465.56
CHE_XXA1	831239.63	839476.26
CHE_XXA1	831261.60	839498.69
CHE_XXA1	831264.95	839506.09
CHE_XXA1	831265.05	839509.13
CHE_XXA1	831260.39	839511.87
CHE_XXA1	831253.79	839510.55
CHE_XXA1	831266.57	839529.42
CHE_XXA1	831265.86	839525.26
CHE_XXA1	831266.98	839521.00
CHE_XXA1	831269.51	839518.16
CHE_XXA1	831281.28	839509.95
CHE_XXA1	831285.34	839504.16
CHE_XXA1	831286.25	839500.01
CHE_XXA1	831286.35	839495.64
CHE_XXA1	831277.93	839465.52
CHE_XXA1	831276.01	839462.07
CHE_XXA1	831248.56	839433.34
CHE_XXA1	831244.60	839430.66
CHE_XXA1	831238.28	839427.79
CHE_XXA1	831199.86	839424.93
CHE_XXA1	831192.26	839426.66
CHE_XXA1	831186.68	839430.36
CHE_XXA1	831181.86	839435.55
CHE_XXA1	831177.49	839438.72
CHE_XXA1	831174.11	839439.24

Sheung Shui Bus Terminus

Model_ID	X	Y
SSB_XXA1	831183.25	840351.52
SSB_XXA1	831179.26	840312.18
SSB_XXA1	831191.05	840298.45
SSB_XXA1	831182.30	840299.48
SSB_XXA1	831177.72	840299.75
SSB_XXA1	831168.23	840303.70
SSB_XXA1	831161.27	840309.35
SSB_XXA1	831143.47	840326.45
SSB_XXA1	831140.64	840355.57
SSB_XXA1	831138.49	840360.56
SSB_XXA1	831133.50	840363.39
SSB_XXA1	831126.08	840362.98
SSB_XXA1	831121.36	840357.19
SSB_XXA1	831121.63	840348.02
SSB_XXA1	831113.86	840360.79
SSB_XXA1	831120.56	840370.94
SSB_XXA1	831128.64	840376.47
SSB_XXA1	831137.41	840378.22
SSB_XXA1	831153.45	840375.25
SSB_XXA1	831160.19	840370.26
SSB_XXA1	831164.64	840358.26
SSB_XXA1	831168.96	840354.22
SSB_XXA1	831174.48	840352.47
SSB_XXA2	831263.97	840345.95
SSB_XXA2	831276.07	840345.46
SSB_XXA2	831284.18	840356.42
SSB_XXA2	831294.81	840362.54
SSB_XXA2	831310.83	840362.22
SSB_XXA2	831318.47	840346.33
SSB_XXA2	831312.76	840353.26
SSB_XXA2	831306.04	840353.49
SSB_XXA2	831298.38	840350.78
SSB_XXA2	831290.84	840344.65
SSB_XXA2	831287.07	840338.52
SSB_XXA2	831286.36	840333.46
SSB_XXA2	831284.00	840322.02
SSB_XXA2	831280.82	840308.11
SSB_XXA2	831275.87	840298.45
SSB_XXA2	831265.85	840292.56
SSB_XXA2	831258.90	840291.49
SSB_XXA2	831263.85	840337.82

Sheung Shui Station Minibus Terminus

Model_ID	X	Y
SSM_XXA1	831287.50	840292.41
SSM_XXA1	831285.12	840274.55
SSM_XXA1	831283.36	840274.66
SSM_XXA1	831275.47	840256.86
SSM_XXA1	831271.02	840248.88
SSM_XXA1	831262.12	840236.62
SSM_XXA1	831256.86	840233.90
SSM_XXA1	831253.50	840232.54
SSM_XXA1	831248.23	840232.99
SSM_XXA1	831243.51	840234.81
SSM_XXA1	831240.06	840237.35
SSM_XXA1	831189.05	840284.28
SSM_XXA1	831185.96	840285.55
SSM_XXA1	831184.42	840284.82
SSM_XXA1	831184.51	840282.57
SSM_XXA1	831172.63	840294.43
SSM_XXA1	831188.59	840292.41
SSM_XXA1	831277.91	840282.65
SSM_XXA1	831282.05	840284.33
SSM_XXA1	831285.24	840287.61

Tin Ping Estate Bus Terminus

Model_ID	X	Y
TIN_XXA1	831896.51	840410.53
TIN_XXA1	831889.93	840411.99
TIN_XXA1	831870.59	840412.51
TIN_XXA1	831865.89	840413.87
TIN_XXA1	831854.60	840425.16
TIN_XXA1	831831.53	840449.68
TIN_XXA1	831827.35	840453.86
TIN_XXA1	831825.60	840459.70
TIN_XXA1	831826.09	840474.40
TIN_XXA1	831824.30	840479.59

Ma Sik Road Carpark

Model_ID	X	Y
MSR_XXA1	832028.56	840423.02
MSR_XXA1	832092.56	840367.82
MSR_XXA1	832084.42	840359.26
MSR_XXA1	832076.24	840365.40
MSR_XXA1	832060.29	840346.63
MSR_XXA1	832056.16	840340.87
MSR_XXA1	832044.31	840327.90
MSR_XXA1	832029.95	840316.29
MSR_XXA1	831989.18	840350.93
MSR_XXA1	832016.95	840381.11
MSR_XXA1	832002.23	840394.35

Appendix 3.4 - Emission Inventory on Bus, Minibus and Taxi Termini, Heavy Goods Vehicle and Coach Parking Sites

Legend:

	BD = FBDD	PD = PLB Diesel	H7 = HGV7
XX = Vehicle Type	BS = FBSD	PL = PLB LPG	H8 = HGV8
	B6 = NFB6	TL = TAXI LPG	
	B7 = NFB7	TP = TAXI Petrol	

AERMOD Input Parameters - XY Coordinate of PTI Volume Source

Choi Yuen Bus Terminus

Model_ID	X	Y
CYE_XX101	831036.02	840171.32
CYE_XX102	831041.52	840171.32
CYE_XX103	831034.84	840082.44
CYE_XX104	831040.34	840082.44

Sheung Shui Bus Terminus

Model_ID	X	Y
SSB_XX401	831262.67	840294.66
SSB_XX402	831263.39	840301.67
SSB_XX403	831264.12	840308.67
SSB_XX404	831264.84	840315.67
SSB_XX405	831265.57	840322.68
SSB_XX406	831266.29	840329.68
SSB_XX407	831267.02	840336.68
SSB_XX408	831267.74	840343.69
SSB_XX409	831180.19	840305.93
SSB_XX410	831184.80	840300.61
SSB_XX411	831175.87	840313.37
SSB_XX412	831176.60	840320.37
SSB_XX413	831177.32	840327.37
SSB_XX414	831178.05	840334.38
SSB_XX415	831178.78	840341.38
SSB_XX416	831179.50	840348.38

Appendix 3.4 - Emission Inventory on Bus, Minibus and Taxi Termini, Heavy Goods Vehicle and Coach Parking Sites

Legend: BD = FBDD, PD = PLB Diesel, TL = TAXI LPG, B6 = NFB6, H7 = HGV7
XX = Vehicle Type, BS = FBSD, PL = PLB LPG, TP = TAXI Petrol, B7 = NFB7, H8 = HGV8

AERMOD Input Parameters - XY Coordinate of Spread Distances

Choi Yuen Bus Terminus

Model_ID	X	Y
CYE_XXSW	831135.03	840202.35
CYE_XXSW	831135.03	840208.59
CYE_XXSW	831130.32	840215.27
CYE_XXSW	831106.56	840233.33
CYE_XXSW	831057.95	840263.11
CYE_XXSW	830979.08	840306.71
CYE_XXSW	830951.90	840318.37
CYE_XXSW	830955.27	840325.35
CYE_XXSW	831069.78	840261.58
CYE_XXSW	831104.15	840240.78
CYE_XXSW	831142.47	840211.87
CYE_XXSW	831145.76	840216.03
CYE_XXSW	831176.96	840187.35
CYE_XXSW	831196.23	840172.68
CYE_XXSW	831212.98	840157.68
CYE_XXSW	831228.20	840139.72
CYE_XXSW	831236.52	840132.39
CYE_XXSW	831257.43	840113.89
CYE_XXSW	831263.67	840110.27
CYE_XXSW	831265.09	840101.51
CYE_XXSW	831261.37	840092.98
CYE_XXSW	831254.91	840086.41
CYE_XXSW	831248.89	840088.27
CYE_XXSW	831245.39	840089.36
CYE_XXSW	831239.36	840090.79
CYE_XXSW	831238.82	840096.70
CYE_XXSW	831232.58	840108.63
CYE_XXSW	831221.30	840130.97
CYE_XXSW	831215.28	840138.30
CYE_XXSW	831186.59	840163.70
CYE_XXSE	831135.03	840202.35
CYE_XXSE	831142.47	840211.87
CYE_XXSE	831145.76	840216.03
CYE_XXSE	831175.70	840188.55
CYE_XXSE	831196.23	840172.68
CYE_XXSE	831212.98	840157.68
CYE_XXSE	831228.20	840139.72
CYE_XXSE	831257.43	840113.89
CYE_XXSE	831263.67	840110.27
CYE_XXSE	831265.09	840101.51
CYE_XXSE	831261.37	840092.98
CYE_XXSE	831254.91	840086.41
CYE_XXSE	831227.62	840055.86
CYE_XXSE	831214.98	840036.15
CYE_XXSE	831201.02	840006.59
CYE_XXSE	831186.21	839953.19
CYE_XXSE	831173.59	839905.73
CYE_XXSE	831153.67	839820.99
CYE_XXSE	831155.42	839770.63
CYE_XXSE	831164.94	839744.03
CYE_XXSE	831158.05	839740.20
CYE_XXSE	831146.77	839771.62
CYE_XXSE	831143.92	839797.89
CYE_XXSE	831146.77	839821.32
CYE_XXSE	831167.35	839907.38
CYE_XXSE	831181.06	839954.70
CYE_XXSE	831195.54	840007.31
CYE_XXSE	831206.71	840031.39
CYE_XXSE	831221.05	840056.19
CYE_XXSE	831248.97	840087.23
CYE_XXSE	831255.05	840098.64
CYE_XXSE	831253.73	840105.62
CYE_XXSE	831227.13	840132.39
CYE_XXSE	831208.41	840153.90
CYE_XXSE	831152.76	840199.64
CYE_XXSE	831147.15	840192.66

Tai Ping Estate PTI

Model_ID	X	Y
TAI_XXSW	830998.51	839805.69
TAI_XXSW	831009.17	839802.07
TAI_XXSW	831006.64	839777.05
TAI_XXSW	831008.42	839753.26
TAI_XXSW	831012.65	839737.20
TAI_XXSW	831037.18	839680.86
TAI_XXSW	831048.27	839659.69
TAI_XXSW	831025.79	839648.16
TAI_XXSW	831010.24	839638.30
TAI_XXSW	830997.54	839629.33
TAI_XXSW	830980.03	839615.09
TAI_XXSW	830942.37	839577.14
TAI_XXSW	830928.35	839563.56
TAI_XXSW	830910.62	839551.38
TAI_XXSW	830886.89	839539.62
TAI_XXSW	830866.31	839532.18
TAI_XXSW	830859.01	839524.44
TAI_XXSW	830858.14	839517.14
TAI_XXSW	830863.98	839497.44
TAI_XXSW	830874.63	839476.42
TAI_XXSW	830887.04	839461.09
TAI_XXSW	830897.55	839452.33
TAI_XXSW	830915.67	839441.72
TAI_XXSW	830933.72	839435.54
TAI_XXSW	830956.57	839431.99
TAI_XXSW	831033.44	839437.06
TAI_XXSW	831033.85	839429.59
TAI_XXSW	830956.15	839423.57
TAI_XXSW	830920.39	839432.53
TAI_XXSW	830912.60	839435.74
TAI_XXSW	830892.15	839445.47
TAI_XXSW	830885.73	839452.48
TAI_XXSW	830870.54	839471.60
TAI_XXSW	830860.33	839489.26
TAI_XXSW	830854.80	839507.61
TAI_XXSW	830850.76	839522.40
TAI_XXSW	830847.79	839535.05
TAI_XXSW	830856.82	839537.51
TAI_XXSW	830869.82	839540.79
TAI_XXSW	830893.46	839550.86
TAI_XXSW	830915.51	839563.49
TAI_XXSW	830940.39	839583.34
TAI_XXSW	830982.29	839624.51
TAI_XXSW	830997.62	839635.60
TAI_XXSW	831019.02	839650.37
TAI_XXSW	831024.71	839653.66
TAI_XXSW	831032.52	839673.78
TAI_XXSW	831028.98	839681.81
TAI_XXSW	831020.52	839698.63
TAI_XXSW	831006.50	839731.91
TAI_XXSW	831000.08	839747.46
TAI_XXSW	831000.52	839767.82
TAI_XXSW	831000.66	839780.59
TAI_XXSW	831002.40	839794.57
TAI_XXSW	830994.50	839799.95
TAI_XXSN1	831140.30	839822.14
TAI_XXSN1	831146.77	839821.32
TAI_XXSN1	831142.18	839797.59
TAI_XXSN1	831142.30	839785.74
TAI_XXSN1	831143.66	839771.34
TAI_XXSN1	831145.70	839762.53
TAI_XXSN1	831154.46	839738.64
TAI_XXSN1	831162.25	839724.38
TAI_XXSN1	831151.79	839720.05
TAI_XXSN1	831051.48	839669.79
TAI_XXSN1	831036.73	839663.07
TAI_XXSN1	831032.52	839673.78
TAI_XXSN1	831028.98	839681.81
TAI_XXSN1	831020.52	839698.63
TAI_XXSN1	831000.08	839747.46
TAI_XXSN1	831000.66	839780.59
TAI_XXSN1	831002.40	839794.57
TAI_XXSN1	830994.50	839799.95

Ching Ho Estate PTI

Model_ID	X	Y
CHE_XXSW	831168.93	839439.41
CHE_XXSW	831146.25	839433.28
CHE_XXSW	831108.54	839429.19
CHE_XXSW	830991.86	839421.02
CHE_XXSW	830982.81	839417.42
CHE_XXSW	830949.04	839414.98
CHE_XXSW	830911.28	839426.37
CHE_XXSW	830881.11	839444.86
CHE_XXSW	830864.76	839463.16
CHE_XXSW	830857.46	839474.83
CHE_XXSW	830851.23	839485.83
CHE_XXSW	830841.02	839519.70
CHE_XXSW	830834.98	839542.76
CHE_XXSW	830850.65	839545.20
CHE_XXSW	830869.33	839549.77
CHE_XXSW	830898.43	839562.91
CHE_XXSW	830914.10	839571.86
CHE_XXSW	830960.03	839611.27
CHE_XXSW	830985.34	839633.46
CHE_XXSW	830999.70	839645.89
CHE_XXSW	831013.96	839656.40
CHE_XXSW	831017.95	839651.39
CHE_XXSW	830982.29	839624.51
CHE_XXSW	830940.39	839583.34
CHE_XXSW	830915.51	839563.49
CHE_XXSW	830868.65	839543.83
CHE_XXSW	830855.81	839540.82
CHE_XXSW	830847.83	839522.33
CHE_XXSW	830851.91	839506.66
CHE_XXSW	830860.33	839489.26
CHE_XXSW	830870.54	839471.60
CHE_XXSW	830892.15	839445.47
CHE_XXSW	830913.33	839433.65
CHE_XXSW	830919.59	839431.07
CHE_XXSW	830956.15	839423.57
CHE_XXSW	831028.97	839429.07
CHE_XXSW	831107.48	839435.08
CHE_XXSW	831114.54	839435.37
CHE_XXSW	831144.95	839438.21
CHE_XXSW	831175.80	839449.65
CHE_XXSW	831179.06	839443.03
CHE_XXSN1	831140.30	839822.14
CHE_XXSN1	831146.77	839821.32
CHE_XXSN1	831142.18	839797.59
CHE_XXSN1	831142.30	839785.74
CHE_XXSN1	831143.66	839771.34
CHE_XXSN1	831145.70	839762.53
CHE_XXSN1	831154.46	839738.64
CHE_XXSN1	831176.63	839713.92
CHE_XXSN1	831218.86	839667.70
CHE_XXSN1	831232.20	839652.03
CHE_XXSN1	831252.15	839636.26
CHE_XXSN1	831285.14	839613.30
CHE_XXSN1	831305.38	839601.42
CHE_XXSN1	831294.97	839587.12
CHE_XXSN1	831286.40	839574.66
CHE_XXSN1	831266.84	839543.23
CHE_XXSN1	831249.03	839517.15
CHE_XXSN1	831231.61	839493.89
CHE_XXSN1	831227.72	839489.39
CHE_XXSN1	831209.76	839471.19
CHE_XXSN1	831190.93	839458.00
CHE_XXSN1	831193.66	839450.31
CHE_XXSN1	831185.68	839446.73
CHE_XXSN1	831180.23	839460.26
CHE_XXSN1	831190.93	839466.39
CHE_XXSN1	831205.04	839476.90
CHE_XXSN1	831225.09	839494.71
CHE_XXSN1	831261.68	839548.62
CHE_XXSN1	831289.90	839591.44
CHE_XXSN1	831289.52	839599.81
CHE_XXSN1	831282.12	839607.59
CHE_XXSN1	831256.23	839624.14

Sheung Shui Bus Terminus

Model_ID	X	Y
SSB_XXSN	831331.27	840335.68
SSB_XXSN	831318.05	840322.05
SSB_XXSN	831307.46	840307.19
SSB_XXSN	831300.89	840290.60
SSB_XXSN	831293.07	840240.61
SSB_XXSN	831280.43	840220.90
SSB_XXSN	831266.80	840213.84
SSB_XXSN	831257.11	840212.20
SSB_XXSN	831242.66	840214.49
SSB_XXSN	831208.50	840244.88
SSB_XXSN	831197.17	840251.12
SSB_XXSN	831174.84	840272.88
SSB_XXSN	831127.29	840318.20
SSB_XXSN	831109.04	840339.88
SSB_XXSN	831100.31	840359.19
SSB_XXSN	831092.92	840382.18
SSB_XXSN	831097.34	840408.61
SSB_XXSN	831115.98	840580.38
SSB_XXSN	831119.93	840580.69
SSB_XXSN	831120.25	840561.91
SSB_XXSN	831114.08	840509.72
SSB_XXSN	831101.64	840406.59
SSB_XXSN	831098.81	840389.88
SSB_XXSN	831103.16	840379.70
SSB_XXSN	831107.03	840363.26
SSB_XXSN	831125.90	840341.08
SSB_XXSN	831137.29	840327.29
SSB_XXSN	831184.50	840282.57
SSB_XXSN	831239.89	840231.20
SSB_XXSN	831246.78	840225.42
SSB_XXSN	831254.58	840222.95
SSB_XXSN	831264.52	840223.65
SSB_XXSN	831271.79	840226.77
SSB_XXSN	831278.31	840234.32
SSB_XXSN	831281.49	840243.84
SSB_XXSN	831287.50	840292.41
SSB_XXSN	831301.84	840319.35
SSB_XXSN	831322.00	840344.56
SSB_XXSS	831325.23	840341.67
SSB_XXSS	831331.27	840335.68
SSB_XXSS	831318.05	840322.05
SSB_XXSS	831307.46	840307.19
SSB_XXSS	831300.89	840290.60
SSB_XXSS	831296.95	840274.42
SSB_XXSS	831293.83	840249.30
SSB_XXSS	831291.12	840224.01
SSB_XXSS	831289.15	840205.29
SSB_XXSS	831289.47	840196.75
SSB_XXSS	831293.01	840190.92
SSB_XXSS	831315.96	840169.20
SSB_XXSS	831398.31	840093.57
SSB_XXSS	831426.48	840068.20
SSB_XXSS	831450.82	840045.54
SSB_XXSS	831474.68	840023.65
SSB_XXSS	831491.43	840012.45
SSB_XXSS	831509.04	839995.70
SSB_XXSS	831520.58	839979.93
SSB_XXSS	831573.05	839929.14
SSB_XXSS	831588.65	839914.36
SSB_XXSS	831599.16	839907.47
SSB_XXSS	831601.78	839905.18
SSB_XXSS	831594.39	839898.33
SSB_XXSS	831577.04	839914.47
SSB_XXSS	831442.80	840043.40
SSB_XXSS	831423.77	840060.74
SSB_XXSS	831284.45	840188.66
SSB_XXSS	831279.93	840195.80
SSB_XXSS	831279.19	840204.42
SSB_XXSS	831281.44	840219.71
SSB_XXSS	831281.49	840243.84
SSB_XXSS	831285.12	840274.55
SSB_XXSS	831287.50	840292.41
SSB_XXSS	831301.37	840318.24

Sheung Shui Station Minibus Terminus

Model_ID	X	Y
SSM_XXSN	831174.84	840272.88
SSM_XXSN	831148.78	840296.96
SSM_XXSN	831128.31	840316.67
SSM_XXSN	831109.04	840339.88
SSM_XXSN	831100.31	840359.19
SSM_XXSN	831092.92	840382.18
SSM_XXSN	831097.63	840411.38
SSM_XXSN	831102.23	840452.76
SSM_XXSN	831110.69	840531.10
SSM_XXSN	831120.42	840623.84
SSM_XXSN	831118.40	840627.79
SSM_XXSN	831113.56	840631.28
SSM_XXSN	831098.37	840634.03
SSM_XXSN	831082.41	840637.14
SSM_XXSN	831059.01	840644.04
SSM_XXSN	831038.15	840653.89
SSM_XXSN	831013.85	840668.34
SSM_XXSN	830992.17	840684.60
SSM_XXSN	830982.15	840691.99
SSM_XXSN	830970.15	840701.60
SSM_XXSN	830959.81	840712.07
SSM_XXSN	830979.14	840728.09
SSM_XXSN	830983.19	840731.92
SSM_XXSN	830988.92	840726.94
SSM_XXSN	830984.84	840721.87
SSM_XXSN	830984.81	840700.99
SSM_XXSN	830990.85	840694.29
SSM_XXSN	830999.39	840687.56
SSM_XXSN	831038.32	840661.28
SSM_XXSN	831070.50	840645.51
SSM_XXSN	831110.74	840637.14
SSM_XXSN	831118.46	840636.07
SSM_XXSN	831125.48	840635.33
SSM_XXSN	831124.70	840626.30
SSM_XXSN	831124.00	840619.24
SSM_XXSN	831120.10	840583.85
SSM_XXSN	831119.93	840580.69
SSM_XXSN	831120.37	840563.40
SSM_XXSN	831119.46	840555.75
SSM_XXSN	831115.07	840516.78
SSM_XXSN	831114.08	840509.72
SSM_XXSN	831102.71	840416.44
SSM_XXSN	831101.64	840406.59
SSM_XXSN	831098.81	840389.88
SSM_XXSN	831103.16	840379.70
SSM_XXSN	831107.03	840363.26
SSM_XXSN	831125.90	840341.08
SSM_XXSN	831137.29	840327.29
SSM_XXSN	831170.57	840295.43
SSM_XXSN	831184.50	840282.57
SSM_XXSW	831174.84	840272.88
SSM_XXSW	831148.78	840296.96
SSM_XXSW	831128.31	840316.67
SSM_XXSW	831109.04	840339.88
SSM_XXSW	831100.31	840359.19
SSM_XXSW	831092.92	840382.18
SSM_XXSW	831097.63	840411.38
SSM_XXSW	831102.23	840452.76
SSM_XXSW	831110.69	840531.10
SSM_XXSW	831120.42	840623.84
SSM_XXSW	831118.40	840627.79
SSM_XXSW	831113.56	840631.28
SSM_XXSW	831098.37	840634.03
SSM_XXSW	831082.41	840637.14
SSM_XXSW	831059.01	840644.04
SSM_XXSW	831038.15	840653.89
SSM_XXSW	831013.85	840668.34
SSM_XXSW	830992.17	840684.60
SSM_XXSW	830982.15	840691.99
SSM_XXSW	830972.46	840690.84
SSM_XXSW	830957.85	840674.25
SSM_XXSW	830952.26	840679.18
SSM_XXSW	830977.55	840708.08

Tin Ping Estate Bus Terminus

Model_ID	X	Y
TIN_XXSN	831844.11	840468.25
TIN_XXSN	831840.22	840464.36
TIN_XXSN	831824.30	840479.59
TIN_XXSN	831804.67	840496.88
TIN_XXSN	831791.73	840507.68
TIN_XXSN	831767.11	840523.64
TIN_XXSN	831744.73	840537.44
TIN_XXSN	831706.48	840561.33
TIN_XXSN	831697.19	840568.38
TIN_XXSN	831688.04	840576.70
TIN_XXSN	831680.11	840585.51
TIN_XXSN	831672.90	840595.58
TIN_XXSN	831665.22	840609.11
TIN_XXSN	831661.28	840619.18
TIN_XXSN	831653.14	840652.57
TIN_XXSN	831644.27	840689.10
TIN_XXSN	831630.63	840754.57
TIN_XXSN	831628.29	840764.72
TIN_XXSN	831621.74	840792.60
TIN_XXSN	831615.98	840810.18
TIN_XXSN	831610.46	840822.54
TIN_XXSN	831604.93	840833.11
TIN_XXSN	831593.41	840849.12
TIN_XXSN	831583.91	840859.91
TIN_XXSN	831558.91	840880.56
TIN_XXSN	831540.24	840891.29
TIN_XXSN	831511.87	840904.71
TIN_XXSN	831487.41	840916.04
TIN_XXSN	831450.55	840936.67
TIN_XXSN	831452.82	840940.93
TIN_XXSN	831460.99	840935.94
TIN_XXSN	831470.24	840931.34
TIN_XXSN	831514.50	840908.54
TIN_XXSN	831544.53	840896.00
TIN_XXSN	831561.42	840885.01
TIN_XXSN	831573.46	840876.80
TIN_XXSN	831587.09	840864.68
TIN_XXSN	831596.50	840853.47
TIN_XXSN	831606.40	840839.77
TIN_XXSN	831609.44	840834.32
TIN_XXSN	831617.92	840820.01
TIN_XXSN	831621.85	840812.08
TIN_XXSN	831629.02	840785.81
TIN_XXSN	831641.67	840733.26
TIN_XXSN	831658.05	840661.75
TIN_XXSN	831666.81	840623.76
TIN_XXSN	831672.72	840606.90
TIN_XXSN	831691.77	840580.11
TIN_XXSN	831723.67	840555.95
TIN_XXSN	831756.88	840536.32
TIN_XXSN	831775.27	840524.09
TIN_XXSN	831796.47	840510.30
TIN_XXSN	831808.54	840500.53
TIN_XXSW	831840.22	840464.36
TIN_XXSW	831824.30	840479.59
TIN_XXSW	831804.67	840496.88
TIN_XXSW	831791.73	840507.68
TIN_XXSW	831767.11	840523.64
TIN_XXSW	831744.73	840537.44
TIN_XXSW	831724.68	840549.89
TIN_XXSW	831706.48	840561.33
TIN_XXSW	831697.19	840568.38
TIN_XXSW	831688.04	840576.70
TIN_XXSW	831680.11	840585.51
TIN_XXSW	831672.90	840595.58
TIN_XXSW	831665.22	840609.11
TIN_XXSW	831661.28	840619.18
TIN_XXSW	831656.90	840636.80
TIN_XXSW	831653.14	840652.57
TIN_XXSW	831650.62	840657.09
TIN_XXSW	831646.65	840660.09
TIN_XXSW	831640.86	840660.69
TIN_XXSW	831636.43	840659.14

Ma Sik Road Carpark

Model_ID	X	Y
MSR_XXSE	832084.42	840359.26
MSR_XXSE	832093.90	840369.21
MSR_XXSE	832107.40	840383.00
MSR_XXSE	832119.67	840395.70
MSR_XXSE	832125.80	840408.11
MSR_XXSE	832148.57	840428.69
MSR_XXSE	832165.21	840434.97
MSR_XXSE	832173.68	840439.64
MSR_XXSE	832198.35	840447.96
MSR_XXSE	832211.63	840449.28
MSR_XXSE	832236.82	840447.61
MSR_XXSE	832258.93	840441.48
MSR_XXSE	832289.70	840426.81
MSR_XXSE	832368.96	840381.81
MSR_XXSE	832383.96	840376.67
MSR_XXSE	832395.35	840370.43
MSR_XXSE	832407.28	840360.58
MSR_XXSE	832497.71	840309.78
MSR_XXSE	832530.23	840291.71
MSR_XXSE	832552.13	840280.54
MSR_XXSE	832584.53	840269.49
MSR_XXSE	832623.07	840262.92
MSR_XXSE	832667.74	840262.92
MSR_XXSE	832668.62	840255.36
MSR_XXSE	832653.73	840255.03
MSR_XXSE	832634.68	840254.82
MSR_XXSE	832612.67	840256.79
MSR_XXSE	832584.86	840261.82
MSR_XXSE	832548.40	840273.97
MSR_XXSE	832489.83	840305.72
MSR_XXSE	832465.20	840320.01
MSR_XXSE	832288.60	840417.62
MSR_XXSE	832267.47	840429.28
MSR_XXSE	832239.56	840438.25
MSR_XXSE	832212.80	840441.39
MSR_XXSE	832198.20	840439.35
MSR_XXSE	832182.87	840435.12
MSR_XXSE	832162.73	840424.46
MSR_XXSE	832140.69	840407.82
MSR_XXSE	832089.78	840353.68
MSR_XXSS	832084.42	840359.26
MSR_XXSS	832093.90	840369.21
MSR_XXSS	832107.40	840383.00
MSR_XXSS	832119.67	840395.70
MSR_XXSS	832125.80	840408.11
MSR_XXSS	832148.57	840428.69
MSR_XXSS	832165.21	840434.97
MSR_XXSS	832173.68	840439.64
MSR_XXSS	832198.35	840447.96
MSR_XXSS	832211.63	840449.28
MSR_XXSS	832236.82	840447.61
MSR_XXSS	832258.93	840441.48
MSR_XXSS	832289.70	840426.81
MSR_XXSS	832368.96	840381.81
MSR_XXSS	832383.96	840376.67
MSR_XXSS	832395.35	840370.43
MSR_XXSS	832407.28	840360.58
MSR_XXSS	832490.38	840314.05
MSR_XXSS	832474.39	840289.41
MSR_XXSS	832469.14	840272.77
MSR_XXSS	832467.50	840252.95
MSR_XXSS	832468.04	840234.45
MSR_XXSS	832471.11	840218.90
MSR_XXSS	832482.61	840163.94
MSR_XXSS	832489.28	840146.98
MSR_XXSS	832495.63	840120.81
MSR_XXSS	832495.91	840112.82
MSR_XXSS	832487.37	840112.49
MSR_XXSS	832460.93	840236.91
MSR_XXSS	832460.71	840258.26
MSR_XXSS	832468.04	840292.20
MSR_XXSS	832470.78	840300.52
MSR_XXSS	832465.20	840320.01

Appendix 3.4 - Emission Inventory on Bus, Minibus and Taxi Termini, Heavy Goods Vehicle and Coach Parking Sites

Legend:

BD = FBDD	PD = PLB Diesel	TL = TAXI LPG	B6 = NFB6	H7 = HGV7
BS = FBSD	PL = PLB LPG	TP = TAXI Petrol	B7 = NFB7	H8 = HGV8

XX = Vehicle Type

AERMOD Input Parameters - XY Coordinate of Spread Distances

Choi Yuen Bus Terminus

Model_ID	X	Y

Tai Ping Estate PTI

Model_ID	X	Y
TAI_XXSN1	830998.51	839805.69
TAI_XXSN1	831009.17	839802.07
TAI_XXSN1	831006.64	839777.05
TAI_XXSN1	831008.42	839753.26
TAI_XXSN1	831012.65	839737.20
TAI_XXSN1	831037.18	839680.86
TAI_XXSN1	831041.28	839676.65
TAI_XXSN1	831048.48	839676.11
TAI_XXSN1	831147.02	839725.70
TAI_XXSN1	831150.23	839732.70
TAI_XXSN1	831149.45	839738.93
TAI_XXSN1	831142.25	839755.96
TAI_XXSN1	831138.36	839771.92
TAI_XXSN1	831136.90	839787.20
TAI_XXSN1	831137.09	839797.42
TAI_XXSN1	831137.77	839811.82
TAI_XXSN2	831146.77	839821.32
TAI_XXSN2	831140.30	839822.14
TAI_XXSN2	831162.54	839907.97
TAI_XXSN2	831184.56	839991.28
TAI_XXSN2	831192.88	840016.75
TAI_XXSN2	831205.87	840041.86
TAI_XXSN2	831217.04	840058.90
TAI_XXSN2	831221.05	840056.19
TAI_XXSN2	831195.54	840007.31
TAI_XXSN2	831181.06	839954.70
TAI_XXSN2	831167.35	839907.38
TAI_XXSS	830998.51	839805.69
TAI_XXSS	831009.17	839802.07
TAI_XXSS	831006.64	839777.05
TAI_XXSS	831008.42	839753.26
TAI_XXSS	831012.65	839737.20
TAI_XXSS	831037.18	839680.86
TAI_XXSS	831041.28	839676.65
TAI_XXSS	831048.48	839676.11
TAI_XXSS	831147.02	839725.70
TAI_XXSS	831170.76	839733.66
TAI_XXSS	831186.46	839715.71
TAI_XXSS	831224.92	839674.87
TAI_XXSS	831242.58	839662.61
TAI_XXSS	831261.85	839647.87
TAI_XXSS	831270.61	839637.21
TAI_XXSS	831304.48	839614.58
TAI_XXSS	831348.78	839593.93
TAI_XXSS	831357.83	839590.20
TAI_XXSS	831405.57	839577.65
TAI_XXSS	831428.72	839573.64
TAI_XXSS	831450.61	839571.70
TAI_XXSS	831444.33	839559.60
TAI_XXSS	831442.20	839548.51
TAI_XXSS	831413.75	839553.87
TAI_XXSS	831407.38	839566.92
TAI_XXSS	831367.91	839577.14
TAI_XXSS	831330.32	839593.93
TAI_XXSS	831295.94	839611.81
TAI_XXSS	831265.58	839631.95
TAI_XXSS	831244.63	839648.16
TAI_XXSS	831224.85	839665.38
TAI_XXSS	831206.67	839684.21
TAI_XXSS	831177.48	839715.09
TAI_XXSS	831151.79	839720.05
TAI_XXSS	831051.48	839669.79
TAI_XXSS	831036.73	839663.07
TAI_XXSS	831032.52	839673.78
TAI_XXSS	831028.98	839681.81
TAI_XXSS	831020.52	839698.63
TAI_XXSS	831000.08	839747.46
TAI_XXSS	831000.66	839780.59
TAI_XXSS	831002.40	839794.57
TAI_XXSS	830994.50	839799.95
TAI_XXSS	830994.50	839799.95

Ching Ho Estate PTI

Model_ID	X	Y
CHE_XXSN1	831244.55	839627.84
CHE_XXSN1	831222.37	839647.11
CHE_XXSN1	831209.72	839663.26
CHE_XXSN1	831164.75	839712.11
CHE_XXSN1	831150.23	839732.70
CHE_XXSN1	831149.45	839738.93
CHE_XXSN1	831142.25	839755.96
CHE_XXSN1	831138.36	839771.92
CHE_XXSN1	831136.90	839787.20
CHE_XXSN1	831137.77	839811.82
CHE_XXSN2	831146.77	839821.32
CHE_XXSN2	831140.30	839822.14
CHE_XXSN2	831175.26	839956.15
CHE_XXSN2	831181.06	839954.70
CHE_XXSN2	831167.35	839907.38
CHE_XXSN2	831146.77	839821.32
CHE_XXSS1	831450.56	839650.75
CHE_XXSS1	831461.88	839648.37
CHE_XXSS1	831461.10	839647.50
CHE_XXSS1	831449.71	839633.78
CHE_XXSS1	831440.27	839617.24
CHE_XXSS1	831433.17	839601.96
CHE_XXSS1	831428.50	839584.54
CHE_XXSS1	831427.13	839576.56
CHE_XXSS1	831407.38	839566.92
CHE_XXSS1	831367.91	839577.14
CHE_XXSS1	831319.21	839599.72
CHE_XXSS1	831294.97	839587.12
CHE_XXSS1	831286.40	839574.66
CHE_XXSS1	831266.84	839543.23
CHE_XXSS1	831249.03	839517.15
CHE_XXSS1	831231.61	839493.89
CHE_XXSS1	831227.72	839489.39
CHE_XXSS1	831209.76	839471.19
CHE_XXSS1	831190.93	839458.00
CHE_XXSS1	831193.66	839450.31
CHE_XXSS1	831185.68	839446.73
CHE_XXSS1	831180.23	839460.26
CHE_XXSS1	831190.93	839466.39
CHE_XXSS1	831205.04	839476.90
CHE_XXSS1	831223.39	839494.26
CHE_XXSS1	831226.70	839498.08
CHE_XXSS1	831261.68	839548.62
CHE_XXSS1	831289.90	839591.44
CHE_XXSS1	831296.05	839607.89
CHE_XXSS1	831303.30	839616.22
CHE_XXSS1	831322.08	839606.29
CHE_XXSS1	831357.83	839590.20
CHE_XXSS1	831405.57	839577.65
CHE_XXSS1	831414.87	839579.09
CHE_XXSS1	831418.57	839584.64
CHE_XXSS1	831421.30	839596.70
CHE_XXSS1	831431.32	839621.81
CHE_XXSS1	831444.75	839644.49
CHE_XXSS2	831468.93	839671.16
CHE_XXSS2	831480.66	839669.18
CHE_XXSS2	831461.88	839648.37
CHE_XXSS2	831450.56	839650.75
CHE_XXSS3	831493.71	839698.95
CHE_XXSS3	831504.90	839696.03
CHE_XXSS3	831480.66	839669.18
CHE_XXSS3	831468.93	839671.16
CHE_XXSS3	831473.17	839675.82
CHE_XXSS4	831507.82	839714.70
CHE_XXSS4	831518.46	839711.58
CHE_XXSS4	831514.28	839706.43
CHE_XXSS4	831504.90	839696.03
CHE_XXSS4	831493.71	839698.95
CHE_XXSS4	831505.86	839712.61

Sheung Shui Bus Terminus

Model_ID	X	Y
SSB_XXSS	831308.11	840328.12
SSB_XXSS	831316.41	840337.57
SSB_XXSS	831325.23	840341.67
SSB_XXSE	831331.27	840335.68
SSB_XXSE	831318.05	840322.05
SSB_XXSE	831307.46	840307.19
SSB_XXSE	831300.89	840290.60
SSB_XXSE	831293.07	840240.61
SSB_XXSE	831280.43	840220.90
SSB_XXSE	831266.80	840213.84
SSB_XXSE	831257.11	840212.20
SSB_XXSE	831242.66	840214.49
SSB_XXSE	831208.50	840244.88
SSB_XXSE	831197.17	840251.12
SSB_XXSE	831128.31	840316.67
SSB_XXSE	831109.04	840339.88
SSB_XXSE	831107.84	840363.97
SSB_XXSE	831113.75	840376.67
SSB_XXSE	831124.04	840383.89
SSB_XXSE	831139.31	840390.60
SSB_XXSE	831150.73	840387.15
SSB_XXSE	831164.27	840385.18
SSB_XXSE	831194.33	840386.08
SSB_XXSE	831310.44	840374.03
SSB_XXSE	831318.14	840372.64
SSB_XXSE	831317.73	840363.77
SSB_XXSE	831310.83	840362.22
SSB_XXSE	831192.40	840375.12
SSB_XXSE	831167.11	840374.96
SSB_XXSE	831128.64	840379.84
SSB_XXSE	831119.99	840374.70
SSB_XXSE	831114.84	840366.70
SSB_XXSE	831113.86	840360.79
SSB_XXSE	831125.90	840341.08
SSB_XXSE	831137.29	840327.29
SSB_XXSE	831246.78	840225.42
SSB_XXSE	831254.58	840222.95
SSB_XXSE	831264.52	840223.65
SSB_XXSE	831271.79	840226.77
SSB_XXSE	831278.31	840234.32
SSB_XXSE	831281.49	840243.84
SSB_XXSE	831287.50	840292.41
SSB_XXSE	831301.84	840319.35
SSB_XXSE	831322.00	840344.56
SSB_XXSE	831331.27	840335.68

Sheung Shui Station Minibus Terminus

Model_ID	X	Y
SSM_XXSW	830990.85	840694.29
SSM_XXSW	830999.39	840687.56
SSM_XXSW	831038.32	840661.28
SSM_XXSW	831070.50	840645.51
SSM_XXSW	831110.74	840637.14
SSM_XXSW	831118.46	840636.07
SSM_XXSW	831125.48	840635.33
SSM_XXSW	831124.70	840626.30
SSM_XXSW	831124.00	840619.24
SSM_XXSW	831120.10	840583.85
SSM_XXSW	831119.93	840580.69
SSM_XXSW	831120.37	840563.40
SSM_XXSW	831119.46	840555.75
SSM_XXSW	831115.07	840516.78
SSM_XXSW	831114.08	840509.72
SSM_XXSW	831102.71	840416.44
SSM_XXSW	831101.64	840406.59
SSM_XXSW	831098.81	840389.88
SSM_XXSW	831103.16	840379.70
SSM_XXSW	831107.03	840363.26
SSM_XXSW	831125.90	840341.08
SSM_XXSW	831137.29	840327.29
SSM_XXSW	831170.57	840295.43
SSM_XXSW	831184.50	840282.57
SSM_XXSE	831184.50	840282.57
SSM_XXSE	831174.84	840272.88
SSM_XXSE	831148.78	840296.96
SSM_XXSE	831128.31	840316.67
SSM_XXSE	831109.04	840339.88
SSM_XXSE	831107.84	840363.97
SSM_XXSE	831113.75	840376.67
SSM_XXSE	831124.04	840383.89
SSM_XXSE	831139.31	840390.60
SSM_XXSE	831150.73	840387.15
SSM_XXSE	831164.27	840385.18
SSM_XXSE	831194.33	840386.08
SSM_XXSE	831320.37	840372.62
SSM_XXSE	831341.06	840373.27
SSM_XXSE	831360.44	840381.98
SSM_XXSE	831408.15	840424.51
SSM_XXSE	831412.99	840434.45
SSM_XXSE	831438.28	840457.85
SSM_XXSE	831451.58	840464.09
SSM_XXSE	831463.08	840476.08
SSM_XXSE	831489.93	840502.52
SSM_XXSE	831508.57	840522.55
SSM_XXSE	831526.59	840503.87
SSM_XXSE	831525.71	840505.14
SSM_XXSE	831518.87	840501.57
SSM_XXSE	831518.87	840501.57
SSM_XXSE	831498.51	840499.77
SSM_XXSE	831399.48	840406.98
SSM_XXSE	831367.13	840378.90
SSM_XXSE	831356.29	840370.19
SSM_XXSE	831340.53	840365.43
SSM_XXSE	831318.85	840364.12
SSM_XXSE	831286.99	840365.27
SSM_XXSE	831192.40	840375.12
SSM_XXSE	831167.11	840374.96
SSM_XXSE	831128.64	840379.84
SSM_XXSE	831119.99	840374.70
SSM_XXSE	831114.84	840366.70
SSM_XXSE	831113.86	840360.79
SSM_XXSE	831125.90	840341.08
SSM_XXSE	831137.29	840327.29
SSM_XXSE	831170.57	840295.43
SSM_XXSS	831184.50	840282.57
SSM_XXSS	831174.84	840272.88
SSM_XXSS	831148.78	840296.96
SSM_XXSS	831128.31	840316.67
SSM_XXSS	831109.04	840339.88
SSM_XXSS	831107.84	840363.97

Tin Ping Estate Bus Terminus

Model_ID	X	Y
TIN_XXSW	831634.20	840657.46
TIN_XXSW	831622.54	840647.84
TIN_XXSW	831612.03	840635.73
TIN_XXSW	831607.00	840628.36
TIN_XXSW	831604.73	840621.93
TIN_XXSW	831604.66	840616.53
TIN_XXSW	831598.38	840604.63
TIN_XXSW	831592.76	840601.50
TIN_XXSW	831585.83	840589.09
TIN_XXSW	831571.09	840566.68
TIN_XXSW	831556.78	840546.32
TIN_XXSW	831530.65	840519.93
TIN_XXSW	831525.18	840514.31
TIN_XXSW	831508.21	840496.65
TIN_XXSW	831490.36	840515.86
TIN_XXSW	831479.30	840527.68
TIN_XXSW	831469.67	840534.47
TIN_XXSW	831440.44	840564.91
TIN_XXSW	831436.93	840573.89
TIN_XXSW	831423.69	840587.79
TIN_XXSW	831416.13	840593.59
TIN_XXSW	831406.94	840603.83
TIN_XXSW	831412.57	840608.55
TIN_XXSW	831431.79	840589.21
TIN_XXSW	831498.57	840519.36
TIN_XXSW	831518.97	840518.25
TIN_XXSW	831525.54	840524.82
TIN_XXSW	831552.55	840552.70
TIN_XXSW	831577.84	840587.15
TIN_XXSW	831588.93	840606.57
TIN_XXSW	831601.63	840630.22
TIN_XXSW	831613.38	840647.26
TIN_XXSW	831625.24	840660.07
TIN_XXSW	831636.63	840665.94
TIN_XXSW	831642.21	840668.97
TIN_XXSW	831650.92	840666.80
TIN_XXSW	831658.05	840661.75
TIN_XXSW	831659.58	840654.92
TIN_XXSW	831666.81	840623.76
TIN_XXSW	831672.72	840606.90
TIN_XXSW	831691.77	840580.11
TIN_XXSW	831723.67	840555.95
TIN_XXSW	831756.88	840536.32
TIN_XXSW	831775.27	840524.09
TIN_XXSW	831796.47	840510.30
TIN_XXSW	831808.54	840500.53
TIN_XXSW	831824.19	840486.05
TIN_XXSW	831844.11	840468.25
TIN_XXSS	831840.22	840464.36
TIN_XXSS	831824.30	840479.59
TIN_XXSS	831804.67	840496.88
TIN_XXSS	831791.73	840507.68
TIN_XXSS	831767.11	840523.64
TIN_XXSS	831744.73	840537.44
TIN_XXSS	831724.68	840549.89
TIN_XXSS	831706.48	840561.33
TIN_XXSS	831697.19	840568.38
TIN_XXSS	831688.04	840576.70
TIN_XXSS	831680.11	840585.51
TIN_XXSS	831672.90	840595.58
TIN_XXSS	831665.22	840609.11
TIN_XXSS	831661.28	840619.18
TIN_XXSS	831656.90	840636.80
TIN_XXSS	831653.14	840652.57
TIN_XXSS	831650.62	840657.09
TIN_XXSS	831646.65	840660.09
TIN_XXSS	831640.86	840660.69
TIN_XXSS	831636.43	840659.14
TIN_XXSS	831634.20	840657.46
TIN_XXSS	831622.54	840647.84
TIN_XXSS	831612.03	840635.73
TIN_XXSS	831607.00	840628.36
TIN_XXSS	831604.73	840621.93

Ma Sik Road Carpark

Model_ID	X	Y
MSR_XXSS	832288.60	840417.62
MSR_XXSS	832267.47	840429.28
MSR_XXSS	832239.56	840438.25
MSR_XXSS	832212.80	840441.39
MSR_XXSS	832198.20	840439.35
MSR_XXSS	832182.87	840435.12
MSR_XXSS	832162.73	840424.46
MSR_XXSS	832140.69	840407.82
MSR_XXSS	832089.78	840353.68
MSR_XXSS	832084.42	840359.26

Appendix 3.4 - Emission Inventory on Bus, Minibus and Taxi Termini, Heavy Goods Vehicle and Coach Parking Sites

Legend:

BD = FBDD	PD = PLB Diesel	TL = TAXI LPG	B6 = NFB6	H7 = HGV7
XX = Vehicle Type	BS = FBSD	PL = PLB LPG	TP = TAXI Petrol	B7 = NFB7	H8 = HGV8

AERMOD Input Parameters - XY Coordinate of Spread Distances

Choi Yuen Bus Terminus

Model_ID	X	Y

Tai Ping Estate PTI

Model_ID	X	Y

Ching Ho Estate PTI

Model_ID	X	Y
CHE_XXSS5	831518.46	839711.58
CHE_XXSS5	831507.82	839714.70
CHE_XXSS5	831519.29	839727.01
CHE_XXSS5	831520.75	839738.20
CHE_XXSS5	831519.49	839759.71
CHE_XXSS5	831523.19	839777.32
CHE_XXSS5	831528.93	839788.81
CHE_XXSS5	831538.66	839801.75
CHE_XXSS5	831548.74	839810.79
CHE_XXSS5	831559.08	839816.24
CHE_XXSS5	831562.13	839808.20
CHE_XXSS5	831553.17	839803.77
CHE_XXSS5	831546.45	839796.89
CHE_XXSS5	831537.88	839786.38
CHE_XXSS5	831531.07	839772.56
CHE_XXSS5	831528.54	839760.98
CHE_XXSS5	831529.32	839729.35
CHE_XXSS5	831521.24	839715.14
CHE_WB_L	831175.80	839449.65
CHE_WB_L	831179.06	839443.03
CHE_WB_L	831168.93	839439.41
CHE_WB_L	831146.25	839433.28
CHE_WB_L	831108.54	839429.19
CHE_WB_L	831107.48	839435.08
CHE_WB_L	831114.54	839435.37
CHE_WB_L	831144.95	839438.21
CHE_EB_L	831185.68	839446.73
CHE_EB_L	831180.23	839460.26
CHE_EB_L	831190.93	839466.39
CHE_EB_L	831205.04	839476.90
CHE_EB_L	831223.39	839494.26
CHE_EB_L	831226.70	839498.08
CHE_EB_L	831231.61	839493.89
CHE_EB_L	831227.72	839489.39
CHE_EB_L	831209.76	839471.19
CHE_EB_L	831190.93	839458.00
CHE_EB_L	831193.66	839450.31

Sheung Shui Bus Terminus

Model_ID	X	Y

Sheung Shui Station Minibus Terminus

Model_ID	X	Y
SSM_XXSS	831113.75	840376.67
SSM_XXSS	831124.04	840383.89
SSM_XXSS	831139.31	840390.60
SSM_XXSS	831150.73	840387.15
SSM_XXSS	831164.27	840385.18
SSM_XXSS	831194.33	840386.08
SSM_XXSS	831310.44	840374.03
SSM_XXSS	831319.34	840362.70
SSM_XXSS	831323.90	840356.38
SSM_XXSS	831325.31	840348.69
SSM_XXSS	831325.23	840341.67
SSM_XXSS	831324.57	840328.76
SSM_XXSS	831318.05	840322.05
SSM_XXSS	831307.46	840307.19
SSM_XXSS	831300.89	840290.60
SSM_XXSS	831296.95	840274.42
SSM_XXSS	831293.83	840249.30
SSM_XXSS	831291.12	840224.01
SSM_XXSS	831289.15	840205.29
SSM_XXSS	831289.47	840196.75
SSM_XXSS	831293.01	840190.92
SSM_XXSS	831315.96	840169.20
SSM_XXSS	831383.67	840107.02
SSM_XXSS	831378.42	840102.39
SSM_XXSS	831284.45	840188.66
SSM_XXSS	831279.93	840195.80
SSM_XXSS	831279.19	840204.42
SSM_XXSS	831281.44	840219.71
SSM_XXSS	831281.49	840243.84
SSM_XXSS	831287.50	840292.41
SSM_XXSS	831301.84	840319.35
SSM_XXSS	831316.41	840337.57
SSM_XXSS	831318.47	840346.33
SSM_XXSS	831310.83	840362.22
SSM_XXSS	831286.99	840365.27
SSM_XXSS	831192.40	840375.12
SSM_XXSS	831167.11	840374.96
SSM_XXSS	831128.64	840379.84
SSM_XXSS	831119.99	840374.70
SSM_XXSS	831114.84	840366.70
SSM_XXSS	831113.86	840360.79
SSM_XXSS	831125.90	840341.08
SSM_XXSS	831137.29	840327.29
SSM_XXSS	831170.57	840295.43
SSM_XXSA	831184.50	840282.57
SSM_XXSA	831174.84	840272.88
SSM_XXSA	831128.31	840316.67
SSM_XXSA	831109.04	840339.88
SSM_XXSA	831100.31	840359.19
SSM_XXSA	831113.86	840360.79
SSM_XXSA	831125.90	840341.08
SSM_XXSA	831137.29	840327.29
SSM_XXSA	831170.57	840295.43

Tin Ping Estate Bus Terminus

Model_ID	X	Y
TIN_XXSS	831604.66	840616.53
TIN_XXSS	831598.38	840604.63
TIN_XXSS	831592.76	840601.50
TIN_XXSS	831585.83	840589.09
TIN_XXSS	831571.09	840566.68
TIN_XXSS	831556.78	840546.32
TIN_XXSS	831530.65	840519.93
TIN_XXSS	831525.18	840514.31
TIN_XXSS	831502.55	840491.10
TIN_XXSS	831446.42	840438.55
TIN_XXSS	831405.43	840400.63
TIN_XXSS	831400.55	840405.90
TIN_XXSS	831423.76	840427.25
TIN_XXSS	831435.18	840438.04
TIN_XXSS	831470.07	840470.66
TIN_XXSS	831495.84	840491.98
TIN_XXSS	831500.73	840496.94
TIN_XXSS	831518.97	840518.25
TIN_XXSS	831525.54	840524.82
TIN_XXSS	831552.55	840552.70
TIN_XXSS	831577.84	840587.15
TIN_XXSS	831588.93	840606.57
TIN_XXSS	831601.63	840630.22
TIN_XXSS	831613.38	840647.26
TIN_XXSS	831625.24	840660.07
TIN_XXSS	831636.63	840665.94
TIN_XXSS	831642.21	840668.97
TIN_XXSS	831650.92	840666.80
TIN_XXSS	831658.05	840661.75
TIN_XXSS	831659.58	840654.92
TIN_XXSS	831666.81	840623.76
TIN_XXSS	831672.72	840606.90
TIN_XXSS	831691.77	840580.11
TIN_XXSS	831723.67	840555.95
TIN_XXSS	831756.88	840536.32
TIN_XXSS	831775.27	840524.09
TIN_XXSS	831796.47	840510.30
TIN_XXSS	831808.54	840500.53
TIN_XXSS	831844.11	840468.25

Ma Sik Road Carpark

Model_ID	X	Y

Appendix 3.4 - Emission Inventory on Bus, Minibus and Taxi Termini, Heavy Goods Vehicle and Coach Parking Sites

EMFAC-HK Model Parameters

EMFAC-HK Model	v4.3	
Model Year	2030	
Temperature	6	°C
Relative Humidity	16	%
Speed	10	km/h

Running and Start Emission Extracted from EMFAC-HK Model

Running Emissions (g/km)

Pollutant	TAXI-PETROL	TAXI-LPG	PLB-DIESEL	PLB-LPG	HGV7	HGV8	NFB6	NFB7	FBSD	FBDD
NO	0.0596	1.0081	0.7831	1.9716	1.8387	3.7029	1.2828	1.7057	2.9636	10.62
NO2	0.0031	0.0282	0.3046	0.0099	0.8327	1.2746	0.4988	0.8401	0.5374	0.7139
RSP	0.0096	0	0.0657	0	0.0766	0.1502	0.0768	0.0526	0.0834	0.3809
FSP	0.0089	0	0.0604	0	0.0705	0.1382	0.0706	0.0484	0.0768	0.3504

NO Start Emissions (g/trips)

Vehicle Type (minute)	TAXI-PETROL	TAXI-LPG	PLB-DIESEL	PLB-LPG	HGV7	HGV8	NFB6	NFB7	FBSD	FBDD
5	0.0754	1.0087	0.0425	1.7882	0.0724	0.1220	0.0428	0.0776	0.1693	0.6686
10	0.0767	1.0253	0.0765	2.6944	0.1304	0.2196	0.0770	0.1397	0.3048	1.2035
20	0.0791	1.0579	0.1020	4.2857	0.1738	0.2929	0.1027	0.1863	0.4064	1.6047
30	0.0814	1.0895	0.1443	5.5824	0.2462	0.4148	0.1456	0.2639	0.5757	2.2733
40	0.0837	1.1200	0.1783	6.5845	0.3041	0.5125	0.1799	0.3259	0.7112	2.8082
50	0.0860	1.1495	0.2378	7.2919	0.4055	0.6833	0.2398	0.4346	0.9482	3.7444
60	0.0881	1.1779	0.3483	7.7047	0.5938	1.0006	0.3511	0.6364	1.3885	5.4828
120	0.0980	1.3109	0.4331	7.9231	0.7385	1.2446	0.4368	0.7917	1.7272	6.8200
180	0.1086	1.4527	0.6370	7.8940	1.0861	1.8303	0.6422	1.1642	2.5400	10.0295
240	0.1077	1.4407	0.8324	7.8496	1.4191	2.3917	0.8392	1.5212	3.3189	13.1053
300	0.1062	1.4206	0.9343	7.7897	1.5929	2.6846	0.9419	1.7075	3.7253	14.7100
360	0.1040	1.3922	1.1041	7.7145	1.8826	3.1727	1.1132	2.0180	4.4026	17.3846
420	0.1014	1.3555	1.2146	7.6239	2.0708	3.4899	1.2245	2.2198	4.8429	19.1230
480	0.0979	1.3106	1.2740	7.5179	2.1722	3.6608	1.2845	2.3285	5.0800	20.0591
540	0.0941	1.2576	1.3080	7.3966	2.2301	3.7584	1.3187	2.3905	5.2154	20.5940
600	0.0894	1.1963	1.3419	7.2598	2.2880	3.8560	1.3529	2.4526	5.3510	21.1289
660	0.0843	1.1268	1.3589	7.1077	2.3171	3.9048	1.3701	2.4836	5.4186	21.3964
720	0.0785	1.0491	1.3589	6.9403	2.3171	3.9048	1.3701	2.4836	5.4186	21.3964
MAX	**0.1086**	**1.4527**	**1.3589**	**7.9231**	**2.3171**	**3.9048**	**1.3701**	**2.4836**	**5.4186**	**21.3964**

NO2 Start Emissions (g/trips)

Vehicle Type (minute)	TAXI-PETROL	TAXI-LPG	PLB-DIESEL	PLB-LPG	HGV7	HGV8	NFB6	NFB7	FBSD	FBDD
5	0.0040	0.0283	0.0165	0.0090	0.0340	0.0347	0.0167	0.0382	0.0316	0.0503
10	0.0040	0.0288	0.0297	0.0136	0.0611	0.0625	0.0300	0.0688	0.0569	0.0905
20	0.0042	0.0297	0.0396	0.0216	0.0815	0.0833	0.0400	0.0917	0.0758	0.1206
30	0.0043	0.0306	0.0562	0.0282	0.1155	0.1181	0.0566	0.1300	0.1074	0.1709
40	0.0044	0.0314	0.0694	0.0332	0.1427	0.1458	0.0699	0.1606	0.1327	0.2111
50	0.0045	0.0322	0.0925	0.0368	0.1902	0.1945	0.0932	0.2141	0.1769	0.2814
60	0.0046	0.0330	0.1354	0.0389	0.2785	0.2847	0.1365	0.3135	0.2590	0.4121
120	0.0052	0.0368	0.1685	0.0400	0.3465	0.3542	0.1698	0.3899	0.3222	0.5126
180	0.0057	0.0407	0.2477	0.0399	0.5095	0.5209	0.2498	0.5734	0.4738	0.7538
240	0.0057	0.0404	0.3237	0.0396	0.6658	0.6806	0.3263	0.7493	0.6191	0.9849
300	0.0056	0.0398	0.3633	0.0393	0.7473	0.7639	0.3663	0.8410	0.6949	1.1055
360	0.0055	0.0390	0.4294	0.0389	0.8831	0.9028	0.4329	0.9939	0.8213	1.3065
420	0.0053	0.0380	0.4723	0.0385	0.9715	0.9931	0.4762	1.0933	0.9034	1.4372
480	0.0052	0.0368	0.4955	0.0380	1.0190	1.0417	0.4995	1.1468	0.9476	1.5075
540	0.0049	0.0353	0.5087	0.0373	1.0462	1.0695	0.5128	1.1774	0.9729	1.5477
600	0.0047	0.0336	0.5219	0.0367	1.0734	1.0973	0.5262	1.2080	0.9981	1.5879
660	0.0044	0.0316	0.5285	0.0359	1.0869	1.1112	0.5328	1.2233	1.0108	1.6080
720	0.0041	0.0294	0.5285	0.0350	1.0869	1.1112	0.5328	1.2233	1.0108	1.6080
MAX	**0.0057**	**0.0407**	**0.5285**	**0.0400**	**1.0869**	**1.1112**	**0.5328**	**1.2233**	**1.0108**	**1.6080**

Appendix 3.4 - Emission Inventory on Bus, Minibus and Taxi Termini, Heavy Goods Vehicle and Coach Parking Sites

RSP Start Emissions (g/trips)

Vehicle Type (minute)	TAXI-PETROL	TAXI-LPG	PLB-DIESEL	PLB-LPG	HGV7	HGV8	NFB6	NFB7	FBSD	FBDD
5	0.0004	0	0	0	0	0	0	0	0	0
10	0.0008	0	0	0	0	0	0	0	0	0
20	0.0015	0	0	0	0	0	0	0	0	0
30	0.0023	0	0	0	0	0	0	0	0	0
40	0.0030	0	0	0	0	0	0	0	0	0
50	0.0036	0	0	0	0	0	0	0	0	0
60	0.0042	0	0	0	0	0	0	0	0	0
120	0.0070	0	0	0	0	0	0	0	0	0
180	0.0079	0	0	0	0	0	0	0	0	0
240	0.0087	0	0	0	0	0	0	0	0	0
300	0.0093	0	0	0	0	0	0	0	0	0
360	0.0099	0	0	0	0	0	0	0	0	0
420	0.0104	0	0	0	0	0	0	0	0	0
480	0.0107	0	0	0	0	0	0	0	0	0
540	0.0110	0	0	0	0	0	0	0	0	0
600	0.0112	0	0	0	0	0	0	0	0	0
660	0.0113	0	0	0	0	0	0	0	0	0
720	0.0113	0	0	0	0	0	0	0	0	0
MAX	**0.0113**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

FSP Start Emissions (g/trips)

Vehicle Type (minute)	TAXI-PETROL	TAXI-LPG	PLB-DIESEL	PLB-LPG	HGV7	HGV8	NFB6	NFB7	FBSD	FBDD
5	0.0004	0	0	0	0	0	0	0	0	0
10	0.0007	0	0	0	0	0	0	0	0	0
20	0.0014	0	0	0	0	0	0	0	0	0
30	0.0021	0	0	0	0	0	0	0	0	0
40	0.0027	0	0	0	0	0	0	0	0	0
50	0.0034	0	0	0	0	0	0	0	0	0
60	0.0039	0	0	0	0	0	0	0	0	0
120	0.0065	0	0	0	0	0	0	0	0	0
180	0.0073	0	0	0	0	0	0	0	0	0
240	0.0080	0	0	0	0	0	0	0	0	0
300	0.0087	0	0	0	0	0	0	0	0	0
360	0.0092	0	0	0	0	0	0	0	0	0
420	0.0096	0	0	0	0	0	0	0	0	0
480	0.0100	0	0	0	0	0	0	0	0	0
540	0.0102	0	0	0	0	0	0	0	0	0
600	0.0104	0	0	0	0	0	0	0	0	0
660	0.0105	0	0	0	0	0	0	0	0	0
720	0.0105	0	0	0	0	0	0	0	0	0
MAX	**0.0105**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Model Year Population Extracted from EMFAC-HK

Type	Petrol	Diesel	LPG
PC	705259.5	11447	0
TAXI	1.368577	0	18302.62
LGV3	20.90451	582.1287	0
LGV4	1459.074	56277.08	0
LGV6	0	20732.44	0
HGV7	0	13339.98	0
HGV8	0	26224.5	0
PLB	0	3291.027	1031.973
PV4	71.99245	441.0075	0
PV5	3.543596	3584.49	416.9673
NFB6	0	2547	0
NFB7	0	1767	0
NFB8	0	3879	0
FBSD	0	275	0
FBDD	0	5843.001	0
MC	72695.09	0	0
HGV9	0	6851.006	0
NFB9	0	2	0

TAXI Fuel Ratio	
LPG %	**Petrol %**
99.99%	0.01%

PLB Fuel Ratio	
Diesel %	**LPG %**
76.13%	23.87%

Appendix 3.4 - Emission Inventory on Bus, Minibus and Taxi Termini, Heavy Goods Vehicle and Coach Parking Sites

Iding Emission Factor

FBDD	Population	Emission Factor				Mass Factor [11]	Air-Con Factor [12]	Average Emission Factor (g/min)							
		Cold Idling		Hot Idling (PIARC: HGV Diesel)				Cold Idling				Hot Idling			
Euro Emission Standard	%	NOx (g/s) [2]	PM (g/hr) [3]	NOx (g/hr) [5]	PM (g/hr) [5]			NOx	NO	NO2	PM	NOx	NO	NO2	PM
Euro IV	0.00%	0.1535	0.20	7.51	0.20	1.0	1.3	6.412E+00	6.008E+00	4.039E-01	1.473E-03	1.769E-01	1.658E-01	1.114E-02	1.473E-03
Euro V	64.40%	0.1535	0.10	11.71	0.10	*FBDD Max. 24t, 1.0 is used.			NO Ratio [1]=	0.937					
Euro VI	35.60%	0.0225	0.01	1.75	0.01				NO2 Ratio [1]=	0.063					

FBSD	Population	Emission Factor				Mass Factor [11]	Air-Con Factor [12]	Average Emission Factor (g/min)							
		Cold Idling		Hot Idling (PIARC: HGV Diesel)				Cold Idling				Hot Idling			
Euro Emission Standard	%	NOx (g/s) [2]	PM (g/hr) [3]	NOx (g/hr) [5]	PM (g/hr) [5]			NOx	NO	NO2	PM	NOx	NO	NO2	PM
Euro IV	0.00%	0.0573	0.20	7.51	0.20	0.9	1.3	9.211E-01	7.797E-01	1.414E-01	5.333E-04	7.156E-02	6.058E-02	1.098E-02	5.333E-04
Euro V	19.27%	0.0474	0.10	11.71	0.10	*FBSD Max. 16t, 0.9 is used.			NO Ratio [1]=	0.847					
Euro VI	80.73%	0.0077	0.01	1.75	0.01				NO2 Ratio [1]=	0.153					

PLB DIESEL	Population	Emission Factor				Mass Factor [11]	Air-Con Factor [12]	Average Emission Factor (g/min)							
		Cold Idling		Hot Idling (PIARC: LCV Diesel)				Cold Idling				Hot Idling			
Euro Emission Standard	%	NOx (g/s) [2][4]	PM (g/hr) [3]	NOx (g/hr) [6]	PM (g/hr) [6]			NOx	NO	NO2	PM	NOx	NO	NO2	PM
Euro III	0.00%	0.0011	0.10	4.12	0.10	n/a	1.3	6.000E-02	4.320E-02	1.680E-02	4.333E-04	3.472E-02	2.500E-02	9.723E-03	4.333E-04
Euro IV	0.00%	0.0010	0.16	3.62	0.16				NO Ratio [1]=	0.720					
Euro V	13.90%	0.0010	0.02	3.60	0.02				NO2 Ratio [1]=	0.280					
Euro VI	86.10%	0.0010	0.02	1.28	0.02										

PLB LPG	Population	Emission Factor				Mass Factor [11]	Air-Con Factor [12]	Average Emission Factor (g/min)							
		Cold Idling		Hot Idling (PIARC: LCV Diesel)				Cold Idling				Hot Idling			
Euro Emission Standard	%	NOx (g/s) [2]	PM (g/hr) [3]	NOx (g/hr) [7]	PM (g/hr) [6]			NOx	NO	NO2	PM	NOx	NO	NO2	PM
Euro III	3.05%	0.0092	0.10	33.12	0.10	n/a	1.3	2.437E-01	2.425E-01	1.217E-03	5.680E-04	3.168E-01	3.152E-01	1.583E-03	5.680E-04
Euro IV	2.70%	0.0039	0.16	14.04	0.16				NO Ratio [1]=	0.995					
Euro V	94.25%	0.0039	0.02	14.04	0.02				NO2 Ratio [1]=	0.005					
Euro VI	0.00%	0.0039	0.02	14.04	0.02										

TAXI LPG	Population	Emission Factor				Mass Factor [11]	Air-Con Factor [12]	Average Emission Factor (g/min)							
		Cold Idling		Hot Idling (PIARC: PC Diesel)				Cold Idling				Hot Idling			
Euro Emission Standard	%	NOx (g/s) [2]	PM (g/hr) [3]	NOx (g/hr) [7]	PM (g/hr) [8]			NOx	NO	NO2	PM	NOx	NO	NO2	PM
Euro 2/3	0.08%	0.0057	0.09	20.52	0.09	n/a	1.3	1.682E-01	1.636E-01	4.577E-03	9.812E-04	2.187E-01	2.127E-01	5.950E-03	9.812E-04
Euro 4	0.16%	0.0035	0.16	12.60	0.16				NO Ratio [1]=	0.973					
Euro 5	16.39%	0.0028	0.02	10.08	0.02				NO2 Ratio [1]=	0.027					
Euro 6	83.38%	0.0028	0.05	10.08	0.05										

TAXI PETROL	Population	Emission Factor				Mass Factor [11]	Air-Con Factor [12]	Average Emission Factor (g/min)							
		Cold Idling		Hot Idling (PIARC: PC Petrol)				Cold Idling				Hot Idling			
Euro Emission Standard	%	NOx (g/s) [4]	PM (g/hr) [3]	NOx (g/hr) [9]	PM (g/hr) [9]			NOx	NO	NO2	PM	NOx	NO	NO2	PM
Euro 3	0.00%	0.0001	0.00	0.30	0.00	n/a	1.3	1.333E-03	1.267E-03	6.592E-05	2.167E-04	1.733E-03	1.648E-03	8.570E-05	2.167E-04
Euro 4	0.00%	0.0001	0.00	0.23	0.00				NO Ratio [1]=	0.951					
Euro 5	100.00%	0.0000	0.01	0.08	0.01				NO2 Ratio [1]=	0.049					
Euro 6	0.00%	0.0000	0.00	0.06	0.00										

NFB6	Population	Emission Factor				Mass Factor [11]	Air-Con Factor [12]	Average Emission Factor (g/min)							
		Cold Idling		Hot Idling (PIARC: HGV Diesel)				Cold Idling				Hot Idling			
Euro Emission Standard	%	NOx (g/s) [2][4]	PM (g/hr) [3]	NOx (g/hr) [5]	PM (g/hr) [5]			NOx	NO	NO2	PM	NOx	NO	NO2	PM
Euro IV	0.00%	0.0021	0.20	7.51	0.20	0.9	1.3	7.783E-02	5.604E-02	2.179E-02	4.265E-04	5.974E-02	4.302E-02	1.673E-02	4.265E-04
Euro V	13.19%	0.0033	0.10	11.71	0.10	*NFB6 Max. 6.4t, 0.9 is used. [13]			NO Ratio [1]=	0.720					
Euro VI	86.81%	0.0010	0.01	1.75	0.01				NO2 Ratio [1]=	0.280					

NFB7	Population	Emission Factor				Mass Factor [11]	Air-Con Factor [12]	Average Emission Factor (g/min)							
		Cold Idling		Hot Idling (PIARC: HGV Diesel)				Cold Idling				Hot Idling			
Euro Emission Standard	%	NOx (g/s) [2][10]	PM (g/hr) [3]	NOx (g/hr) [5]	PM (g/hr) [5]			NOx	NO	NO2	PM	NOx	NO	NO2	PM
Euro IV	0.00%	0.0573	0.20	7.51	0.20	0.9	1.3	7.925E-01	5.310E-01	2.615E-01	3.899E-04	5.569E-02	3.731E-02	1.838E-02	3.899E-04
Euro V	11.10%	0.0573	0.10	11.71	0.10	*NFB7 Max. 16t, 0.9 is used. [13]			NO Ratio [1]=	0.670					
Euro VI	88.90%	0.0077	0.01	1.75	0.01				NO2 Ratio [1]=	0.330					

Appendix 3.4 - Emission Inventory on Bus, Minibus and Taxi Termini, Heavy Goods Vehicle and Coach Parking Sites

Iding Emission Factor

HGV7	Population	Emission Factor				Mass Factor [11]	Air-Con Factor [12]	Average Emission Factor (g/min)							
		Cold Idling		Hot Idling (PIARC: HGV Diesel)				Cold Idling				Hot Idling			
Euro Emission Standard	%	NOx (g/s) [2]	PM (g/hr) [3]	NOx (g/hr) [5]	PM (g/hr) [5]			NOx	NO	NO2	PM	NOx	NO	NO2	PM
Euro IV	0.00%	0.0059	0.20	7.51	0.20	0.9	1.3	3.540E-01	2.437E-01	1.103E-01	6.177E-04	8.091E-02	5.569E-02	2.522E-02	6.177E-04
Euro V	24.09%	0.0059	0.10	11.71	0.10	*HGV7 Max. 16t, 0.9 is used. [13]			NO Ratio [1]=	0.688					
Euro VI	75.91%	0.0059	0.01	1.75	0.01				NO2 Ratio [1]=	0.312					

HGV8	Population	Emission Factor				Mass Factor [11]	Air-Con Factor [12]	Average Emission Factor (g/min)							
		Cold Idling		Hot Idling (PIARC: HGV Diesel)				Cold Idling				Hot Idling			
Euro Emission Standard	%	NOx (g/s) [2]	PM (g/hr) [3]	NOx (g/hr) [5]	PM (g/hr) [5]			NOx	NO	NO2	PM	NOx	NO	NO2	PM
Euro IV	0.00%	0.0144	0.20	7.51	0.20	1.0	1.3	4.425E-01	3.292E-01	1.133E-01	5.880E-04	7.901E-02	5.878E-02	2.023E-02	5.880E-04
Euro V	19.04%	0.0230	0.10	11.71	0.10	*HGV8 Max. 24t, 1.0 is used. [13]			NO Ratio [1]=	0.744					
Euro VI	80.96%	0.0037	0.01	1.75	0.01				NO2 Ratio [1]=	0.256					

Remarks:

In this section, *Road Tunnels: Vehicle Emissions and Air Demand for Ventilation (2019R02EN)* published by World Road Association is used as reference on hot idling (hereinafter PIARC-VEADV); and with Gradient 0%, v=0kph.

[1] NO and NO2 ratio was calculated based on Running Emisison Factors extracted from latest EMFAC-HK (i.e. EMFAC-HK v4.3).

[2] For NOx cold idling, referenced from *Calculation of Start Emissions in Air Quality Impact Assessment (2021)* published by EPD.

[3] For PM cold idling, referenced to hot idling emission factors from PIARC-VEADV to its respective fuels (i.e. FBDD = HGV Diesel; FBSD = HGV Diesel; PLB Diesel = LCV Diesel; PLB LPG = LCV Diesel; TAXI LPG = PC Diesel; TAXI Petrol = PC Petrol; NFB7/8 = HGV Diesel; HGV7/8 = HGV Diesel).

[4] For cold idling which not in listed in *Calculation of Start Emissions in Air Quality Impact Assessment (2021)* published by EPD, hot idling of its respective Euro Emission Standard, Fuel Type and Vehicle Type is used.

[5] For hot idling on FBDD, FBSD, NFB6/7 and HGV7/8, reference made to Tables 45 and 46 of PIARC-VEADV.

[6] For hot idling on PLB Diesel and PLB LPG, reference made to Tables 42 and 43 of PIARC-VEADV. Idling emission factors of diesel vehicles were assumed for LPG vehicles as a conservative approach.

[7] For NOx hot idling on LPG vehicles, assume the same as cold idling emission factors.

[8] For PM hot idling on Taxi LPG, reference made to Table 37 of PIARC-VEADV. Idling emission factors of diesel vehicles were assumed for LPG vehicles as a conservative approach.

[9] For hot idling on Taxi Petrol, reference made to Tables 33 amd 34 of PIARC-VEADV. Idling emission factors of diesel vehicles were assumed for LPG vehicles as a conservative approach.

[10] For NOx cold idling in NFB7, Euro IV cold idling emission factor were assumed for Euro V cold idling emission factor as a conservative approach.

[11] For mass factor, reference made to Table 27 of PIARC-VEADV. Only applicable to vehicles adopting HGV factors.

[12] A factor of 1.3 has been applied to account for the additional A/C loading, reference from Appendix 3.10b and 3.10c of approved EIA Report of "Liantang/Heung Yuen Wai Cross-boundary Control Point" (EIA-190/2010).

[13] With reference to Part II Maximum Weights for Rigid Vehicles of Cap.374A Road Traffic (Construction and Maintenance of Vehicles) Regulation, maximum of 2-axle, 3-axle and 4-axle vehicles should have maximum gross vehicle weight of 16, 24 and 30 tonnes respectively.

Choi Yuen Bus Terminus PTI Type: Semi-confined Assessment Vehicle: FBDD

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	250	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	140	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.390	km	(1km=1000m)
Travelling Speed =	10	km/h	

Calculations *Total Flow estimated from frequency table

Start Hour	End Hour	Total Flow	Running Emission Factor (g/km·vehicle)				Within PTI (Section 1)+(Section 2) Running Emission Within PTI (g)				A Running Emission Within PTI (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	5	10.62	0.7139	0.3809	0.3504	2.071E+01	1.392E+00	7.428E-01	6.833E-01	5.753E-03	3.867E-04	2.063E-04	1.898E-04
100	200	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	7	10.62	0.7139	0.3809	0.3504	2.899E+01	1.949E+00	1.040E+00	9.566E-01	8.054E-03	5.414E-04	2.888E-04	2.657E-04
600	700	14	10.62	0.7139	0.3809	0.3504	5.799E+01	3.898E+00	2.080E+00	1.913E+00	1.611E-02	1.083E-03	5.777E-04	5.314E-04
700	800	19	10.62	0.7139	0.3809	0.3504	7.869E+01	5.290E+00	2.822E+00	2.596E+00	2.186E-02	1.469E-03	7.840E-04	7.212E-04
800	900	16	10.62	0.7139	0.3809	0.3504	6.627E+01	4.455E+00	2.377E+00	2.186E+00	1.841E-02	1.237E-03	6.602E-04	6.074E-04
900	1000	13	10.62	0.7139	0.3809	0.3504	5.384E+01	3.619E+00	1.931E+00	1.777E+00	1.496E-02	1.005E-03	5.364E-04	4.935E-04
1000	1100	13	10.62	0.7139	0.3809	0.3504	5.384E+01	3.619E+00	1.931E+00	1.777E+00	1.496E-02	1.005E-03	5.364E-04	4.935E-04
1100	1200	13	10.62	0.7139	0.3809	0.3504	5.384E+01	3.619E+00	1.931E+00	1.777E+00	1.496E-02	1.005E-03	5.364E-04	4.935E-04
1200	1300	13	10.62	0.7139	0.3809	0.3504	5.384E+01	3.619E+00	1.931E+00	1.777E+00	1.496E-02	1.005E-03	5.364E-04	4.935E-04
1300	1400	13	10.62	0.7139	0.3809	0.3504	5.384E+01	3.619E+00	1.931E+00	1.777E+00	1.496E-02	1.005E-03	5.364E-04	4.935E-04
1400	1500	13	10.62	0.7139	0.3809	0.3504	5.384E+01	3.619E+00	1.931E+00	1.777E+00	1.496E-02	1.005E-03	5.364E-04	4.935E-04
1500	1600	13	10.62	0.7139	0.3809	0.3504	5.384E+01	3.619E+00	1.931E+00	1.777E+00	1.496E-02	1.005E-03	5.364E-04	4.935E-04
1600	1700	13	10.62	0.7139	0.3809	0.3504	5.384E+01	3.619E+00	1.931E+00	1.777E+00	1.496E-02	1.005E-03	5.364E-04	4.935E-04
1700	1800	14	10.62	0.7139	0.3809	0.3504	5.799E+01	3.898E+00	2.080E+00	1.913E+00	1.611E-02	1.083E-03	5.777E-04	5.314E-04
1800	1900	14	10.62	0.7139	0.3809	0.3504	5.799E+01	3.898E+00	2.080E+00	1.913E+00	1.611E-02	1.083E-03	5.777E-04	5.314E-04
1900	2000	14	10.62	0.7139	0.3809	0.3504	5.799E+01	3.898E+00	2.080E+00	1.913E+00	1.611E-02	1.083E-03	5.777E-04	5.314E-04
2000	2100	14	10.62	0.7139	0.3809	0.3504	5.799E+01	3.898E+00	2.080E+00	1.913E+00	1.611E-02	1.083E-03	5.777E-04	5.314E-04
2100	2200	14	10.62	0.7139	0.3809	0.3504	5.799E+01	3.898E+00	2.080E+00	1.913E+00	1.611E-02	1.083E-03	5.777E-04	5.314E-04
2200	2300	14	10.62	0.7139	0.3809	0.3504	5.799E+01	3.898E+00	2.080E+00	1.913E+00	1.611E-02	1.083E-03	5.777E-04	5.314E-04
2300	2400	11	10.62	0.7139	0.3809	0.3504	4.556E+01	3.063E+00	1.634E+00	1.503E+00	1.266E-02	8.507E-04	4.539E-04	4.176E-04

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.6686	1.2035	1.6047	2.2733	2.8082	3.7444	5.4828	6.8200	10.0295	13.1053	14.7100	17.3846	19.1230	20.0591	20.5940	21.1289	21.3964	21.3964	
NO2	0.0503	0.0905	0.1206	0.1709	0.2111	0.2814	0.4121	0.5126	0.7538	0.9849	1.1055	1.3065	1.4372	1.5075	1.5477	1.5879	1.6080	1.6080	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Total #	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (g) NO	NO_2	RSP	FSP
2400	100	5			5																8.024E+00	6.030E-01	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	7			2								5								7.676E+01	5.769E+00	0	0
600	700	14		10	4																1.845E+01	1.387E+00	0	0
700	800	19	15		4																1.645E+01	1.237E+00	0	0
800	900	16	12		4																1.444E+01	1.086E+00	0	0
900	1000	13		9	4																1.725E+01	1.297E+00	0	0
1000	1100	13		9	4																1.725E+01	1.297E+00	0	0
1100	1200	13		9	4																1.725E+01	1.297E+00	0	0
1200	1300	13		9	4																1.725E+01	1.297E+00	0	0
1300	1400	13		9	4																1.725E+01	1.297E+00	0	0
1400	1500	13		9	4																1.725E+01	1.297E+00	0	0
1500	1600	13		9	4																1.725E+01	1.297E+00	0	0
1600	1700	13		9	4																1.725E+01	1.297E+00	0	0
1700	1800	14		10	4																1.845E+01	1.387E+00	0	0
1800	1900	14		10	4																1.845E+01	1.387E+00	0	0
1900	2000	14		10	4																1.845E+01	1.387E+00	0	0
2000	2100	14		10	4																1.845E+01	1.387E+00	0	0
2100	2200	14		10	4																1.845E+01	1.387E+00	0	0
2200	2300	14		10	4																1.845E+01	1.387E+00	0	0
2300	2400	11			11																1.765E+01	1.327E+00	0	0

Remark: Number of trips were derived based on on-site observations at the PTIs and/or operators' published schedules.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 2 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min. *Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Trips (60-720min)	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (5-50min)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.658E+00	1.114E-01	1.473E-02	1.473E-02	1.658E+00	1.114E-01	1.473E-02	1.473E-02	4.604E-04	3.095E-05	4.090E-06	4.090E-06
100	200	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	5	6.008E+00	4.039E-01	1.473E-03	1.473E-03	6.008E+01	4.039E+00	1.473E-02	1.473E-02	2	1.658E-01	1.114E-02	1.473E-03	1.473E-03	6.630E-01	4.457E-02	5.890E-03	5.890E-03	6.074E+01	4.083E+00	2.062E-02	2.062E-02	1.687E-02	1.134E-03	5.726E-06	5.726E-06
600	700	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	14	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.641E+00	3.120E-01	4.123E-02	4.123E-02	4.641E+00	3.120E-01	4.123E-02	4.123E-02	1.289E-03	8.666E-05	1.145E-05	1.145E-05
700	800	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	19	1.658E-01	1.114E-02	1.473E-03	1.473E-03	6.299E+00	4.234E-01	5.598E-02	5.598E-02	6.299E+00	4.234E-01	5.598E-02	5.598E-02	1.750E-03	1.176E-04	1.554E-05	1.554E-05
800	900	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	16	1.658E-01	1.114E-02	1.473E-03	1.473E-03	5.304E+00	3.566E-01	4.712E-02	4.712E-02	5.304E+00	3.566E-01	4.712E-02	4.712E-02	1.473E-03	9.904E-05	1.309E-05	1.309E-05
900	1000	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	13	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.310E+00	2.897E-01	3.829E-02	3.829E-02	4.310E+00	2.897E-01	3.829E-02	3.829E-02	1.197E-03	8.047E-05	1.063E-05	1.063E-05
1000	1100	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	13	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.310E+00	2.897E-01	3.829E-02	3.829E-02	4.310E+00	2.897E-01	3.829E-02	3.829E-02	1.197E-03	8.047E-05	1.063E-05	1.063E-05
1100	1200	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	13	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.310E+00	2.897E-01	3.829E-02	3.829E-02	4.310E+00	2.897E-01	3.829E-02	3.829E-02	1.197E-03	8.047E-05	1.063E-05	1.063E-05
1200	1300	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	13	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.310E+00	2.897E-01	3.829E-02	3.829E-02	4.310E+00	2.897E-01	3.829E-02	3.829E-02	1.197E-03	8.047E-05	1.063E-05	1.063E-05
1300	1400	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	13	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.310E+00	2.897E-01	3.829E-02	3.829E-02	4.310E+00	2.897E-01	3.829E-02	3.829E-02	1.197E-03	8.047E-05	1.063E-05	1.063E-05
1400	1500	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	13	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.310E+00	2.897E-01	3.829E-02	3.829E-02	4.310E+00	2.897E-01	3.829E-02	3.829E-02	1.197E-03	8.047E-05	1.063E-05	1.063E-05
1500	1600	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	13	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.310E+00	2.897E-01	3.829E-02	3.829E-02	4.310E+00	2.897E-01	3.829E-02	3.829E-02	1.197E-03	8.047E-05	1.063E-05	1.063E-05
1600	1700	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	13	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.310E+00	2.897E-01	3.829E-02	3.829E-02	4.310E+00	2.897E-01	3.829E-02	3.829E-02	1.197E-03	8.047E-05	1.063E-05	1.063E-05
1700	1800	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	14	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.641E+00	3.120E-01	4.123E-02	4.123E-02	4.641E+00	3.120E-01	4.123E-02	4.123E-02	1.289E-03	8.666E-05	1.145E-05	1.145E-05
1800	1900	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	14	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.641E+00	3.120E-01	4.123E-02	4.123E-02	4.641E+00	3.120E-01	4.123E-02	4.123E-02	1.289E-03	8.666E-05	1.145E-05	1.145E-05
1900	2000	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	14	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.641E+00	3.120E-01	4.123E-02	4.123E-02	4.641E+00	3.120E-01	4.123E-02	4.123E-02	1.289E-03	8.666E-05	1.145E-05	1.145E-05
2000	2100	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	14	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.641E+00	3.120E-01	4.123E-02	4.123E-02	4.641E+00	3.120E-01	4.123E-02	4.123E-02	1.289E-03	8.666E-05	1.145E-05	1.145E-05
2100	2200	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	14	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.641E+00	3.120E-01	4.123E-02	4.123E-02	4.641E+00	3.120E-01	4.123E-02	4.123E-02	1.289E-03	8.666E-05	1.145E-05	1.145E-05
2200	2300	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	14	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.641E+00	3.120E-01	4.123E-02	4.123E-02	4.641E+00	3.120E-01	4.123E-02	4.123E-02	1.289E-03	8.666E-05	1.145E-05	1.145E-05
2300	2400	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	11	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.647E+00	2.451E-01	3.240E-02	3.240E-02	3.647E+00	2.451E-01	3.240E-02	3.240E-02	1.013E-03	6.809E-05	8.999E-06	8.999E-06

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	140	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	560	m	(Section 3)

* (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	8.288E-01	5.571E-02	7.363E-03	7.363E-03	1.439E+00	1.095E-01	0	0	3.997E-04	3.040E-05	0	0	5.756E+00	4.378E-01	0	0	1.599E-03	1.216E-04	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	3.037E+01	2.042E+00	1.031E-02	1.031E-02	9.277E+00	7.454E-01	0	0	2.577E-03	2.071E-04	0	0	3.711E+01	2.982E+00	0	0	1.031E-02	8.282E-04	0	0
600	700	2.321E+00	1.560E-01	2.062E-02	2.062E-02	3.227E+00	2.463E-01	0	0	8.963E-04	6.841E-05	0	0	1.291E+01	9.851E-01	0	0	3.585E-03	2.736E-04	0	0
700	800	3.149E+00	2.117E-01	2.798E-02	2.798E-02	2.660E+00	2.050E-01	0	0	7.388E-04	5.696E-05	0	0	1.064E+01	8.202E-01	0	0	2.955E-03	2.278E-04	0	0
800	900	2.662E+00	1.783E-01	2.356E-02	2.356E-02	2.358E+00	1.815E-01	0	0	6.550E-04	5.043E-05	0	0	9.432E+00	7.262E-01	0	0	2.620E-03	2.017E-04	0	0
900	1000	2.155E+00	1.449E-01	1.914E-02	1.914E-02	3.019E+00	2.304E-01	0	0	8.386E-04	6.400E-05	0	0	1.208E+01	9.216E-01	0	0	3.355E-03	2.560E-04	0	0
1000	1100	2.155E+00	1.449E-01	1.914E-02	1.914E-02	3.019E+00	2.304E-01	0	0	8.386E-04	6.400E-05	0	0	1.208E+01	9.216E-01	0	0	3.355E-03	2.560E-04	0	0
1100	1200	2.155E+00	1.449E-01	1.914E-02	1.914E-02	3.019E+00	2.304E-01	0	0	8.386E-04	6.400E-05	0	0	1.208E+01	9.216E-01	0	0	3.355E-03	2.560E-04	0	0
1200	1300	2.155E+00	1.449E-01	1.914E-02	1.914E-02	3.019E+00	2.304E-01	0	0	8.386E-04	6.400E-05	0	0	1.208E+01	9.216E-01	0	0	3.355E-03	2.560E-04	0	0
1300	1400	2.155E+00	1.449E-01	1.914E-02	1.914E-02	3.019E+00	2.304E-01	0	0	8.386E-04	6.400E-05	0	0	1.208E+01	9.216E-01	0	0	3.355E-03	2.560E-04	0	0
1400	1500	2.155E+00	1.449E-01	1.914E-02	1.914E-02	3.019E+00	2.304E-01	0	0	8.386E-04	6.400E-05	0	0	1.208E+01	9.216E-01	0	0	3.355E-03	2.560E-04	0	0
1500	1600	2.155E+00	1.449E-01	1.914E-02	1.914E-02	3.019E+00	2.304E-01	0	0	8.386E-04	6.400E-05	0	0	1.208E+01	9.216E-01	0	0	3.355E-03	2.560E-04	0	0
1600	1700	2.155E+00	1.449E-01	1.914E-02	1.914E-02	3.019E+00	2.304E-01	0	0	8.386E-04	6.400E-05	0	0	1.208E+01	9.216E-01	0	0	3.355E-03	2.560E-04	0	0
1700	1800	2.321E+00	1.560E-01	2.062E-02	2.062E-02	3.227E+00	2.463E-01	0	0	8.963E-04	6.841E-05	0	0	1.291E+01	9.851E-01	0	0	3.585E-03	2.736E-04	0	0
1800	1900	2.321E+00	1.560E-01	2.062E-02	2.062E-02	3.227E+00	2.463E-01	0	0	8.963E-04	6.841E-05	0	0	1.291E+01	9.851E-01	0	0	3.585E-03	2.736E-04	0	0
1900	2000	2.321E+00	1.560E-01	2.062E-02	2.062E-02	3.227E+00	2.463E-01	0	0	8.963E-04	6.841E-05	0	0	1.291E+01	9.851E-01	0	0	3.585E-03	2.736E-04	0	0
2000	2100	2.321E+00	1.560E-01	2.062E-02	2.062E-02	3.227E+00	2.463E-01	0	0	8.963E-04	6.841E-05	0	0	1.291E+01	9.851E-01	0	0	3.585E-03	2.736E-04	0	0
2100	2200	2.321E+00	1.560E-01	2.062E-02	2.062E-02	3.227E+00	2.463E-01	0	0	8.963E-04	6.841E-05	0	0	1.291E+01	9.851E-01	0	0	3.585E-03	2.736E-04	0	0
2200	2300	2.321E+00	1.560E-01	2.062E-02	2.062E-02	3.227E+00	2.463E-01	0	0	8.963E-04	6.841E-05	0	0	1.291E+01	9.851E-01	0	0	3.585E-03	2.736E-04	0	0
2300	2400	1.823E+00	1.226E-01	1.620E-02	1.620E-02	3.166E+00	2.408E-01	0	0	8.794E-04	6.689E-05	0	0	1.266E+01	9.632E-01	0	0	3.517E-03	2.676E-04	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 0 min(s) — ***No Bypass Vehicles**

*As On-Site observations

Calculations (only applicable for Bypass Vehicles)

*Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D: Hot Idling Emission within PT1 (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
100	200	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
200	300	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
300	400	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
400	500	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
500	600	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
600	700	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
700	800	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
800	900	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
900	1000	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
1000	1100	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
1100	1200	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
1200	1300	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
1300	1400	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
1400	1500	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
1500	1600	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
1600	1700	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
1700	1800	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
1800	1900	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
1900	2000	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
2000	2100	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
2100	2200	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
2200	2300	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0
2300	2400	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0	0	0	0	0	0	0	0

PART 5 - Sum up all above parts

Calculations		Model ID: CYE_BD101-104, CYE_BDA1-2 — Emissions Within PT1 = A+B+C+D: Within PT1 (Section 1 + Section 2) Total Emission (g/s)				Model ID: CYE_BDSW — Spread distance = E to Choi Yuen Road WB (Section 3) Total Emission (g/s)				Model ID: CYE_BDSE — Spread distance = E to Choi Yuen Road EB (Section 3) Total Emission (g/s)				Spilt Ratio	
Start Hour	End Hour	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	to CYR WB	to CYR EB
2400	100	6.613E-03	4.481E-04	2.104E-04	1.939E-04	0.000E+00	0.000E+00	0	0	1.599E-03	1.216E-04	0	0	0.00%	100.00%
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%
500	600	2.750E-02	1.883E-03	2.946E-04	2.714E-04	5.890E-03	4.733E-04	0	0	4.418E-03	3.550E-04	0	0	57.14%	42.86%
600	700	1.829E-02	1.238E-03	5.892E-04	5.429E-04	1.024E-03	7.818E-05	0	0	2.561E-03	1.955E-04	0	0	28.57%	71.43%
700	800	2.435E-02	1.644E-03	7.996E-04	7.368E-04	6.222E-04	4.796E-05	0	0	2.333E-03	1.799E-04	0	0	21.05%	78.95%
800	**900**	**2.054E-02**	**1.387E-03**	**6.733E-04**	**6.204E-04**	**6.550E-04**	**5.043E-05**	**0**	**0**	**1.965E-03**	**1.513E-04**	**0**	**0**	**25.00%**	**75.00%**
900	1000	1.699E-02	1.150E-03	5.471E-04	5.041E-04	1.032E-03	7.877E-05	0	0	2.322E-03	1.772E-04	0	0	30.77%	69.23%
1000	1100	1.699E-02	1.150E-03	5.471E-04	5.041E-04	1.032E-03	7.877E-05	0	0	2.322E-03	1.772E-04	0	0	30.77%	69.23%
1100	1200	1.699E-02	1.150E-03	5.471E-04	5.041E-04	1.032E-03	7.877E-05	0	0	2.322E-03	1.772E-04	0	0	30.77%	69.23%
1200	1300	1.699E-02	1.150E-03	5.471E-04	5.041E-04	1.032E-03	7.877E-05	0	0	2.322E-03	1.772E-04	0	0	30.77%	69.23%
1300	1400	1.699E-02	1.150E-03	5.471E-04	5.041E-04	1.032E-03	7.877E-05	0	0	2.322E-03	1.772E-04	0	0	30.77%	69.23%
1400	1500	1.699E-02	1.150E-03	5.471E-04	5.041E-04	1.032E-03	7.877E-05	0	0	2.322E-03	1.772E-04	0	0	30.77%	69.23%
1500	1600	1.699E-02	1.150E-03	5.471E-04	5.041E-04	1.032E-03	7.877E-05	0	0	2.322E-03	1.772E-04	0	0	30.77%	69.23%
1600	1700	1.699E-02	1.150E-03	5.471E-04	5.041E-04	1.032E-03	7.877E-05	0	0	2.322E-03	1.772E-04	0	0	30.77%	69.23%
1700	1800	1.829E-02	1.238E-03	5.892E-04	5.429E-04	1.024E-03	7.818E-05	0	0	2.561E-03	1.955E-04	0	0	28.57%	71.43%
1800	1900	1.829E-02	1.238E-03	5.892E-04	5.429E-04	1.024E-03	7.818E-05	0	0	2.561E-03	1.955E-04	0	0	28.57%	71.43%
1900	2000	1.829E-02	1.238E-03	5.892E-04	5.429E-04	1.024E-03	7.818E-05	0	0	2.561E-03	1.955E-04	0	0	28.57%	71.43%
2000	2100	1.829E-02	1.238E-03	5.892E-04	5.429E-04	1.024E-03	7.818E-05	0	0	2.561E-03	1.955E-04	0	0	28.57%	71.43%
2100	2200	1.829E-02	1.238E-03	5.892E-04	5.429E-04	1.024E-03	7.818E-05	0	0	2.561E-03	1.955E-04	0	0	28.57%	71.43%
2200	2300	1.829E-02	1.238E-03	5.892E-04	5.429E-04	1.024E-03	7.818E-05	0	0	2.561E-03	1.955E-04	0	0	28.57%	71.43%
2300	2400	1.455E-02	9.857E-04	4.629E-04	4.266E-04	1.279E-03	9.730E-05	0	0	2.238E-03	1.703E-04	0	0	36.36%	63.64%

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.3220	0.3231	0.3125	0.3125	0.0000	0.0000	0	0	0.8137	0.8039	0	0
100	200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0
500	600	1.3393	1.3575	0.4375	0.4375	8.9931	9.3849	0	0	2.2483	2.3462	0	0
600	700	0.8907	0.8925	0.8750	0.8750	1.5639	1.5504	0	0	1.3032	1.2920	0	0
700	800	1.1856	1.1854	1.1875	1.1875	0.9499	0.9511	0	0	1.1873	1.1889	0	0
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**0**	**0**	**1.0000**	**1.0000**	**0**	**0**
900	1000	0.8274	0.8291	0.8125	0.8125	1.5758	1.5620	0	0	1.1819	1.1715	0	0
1000	1100	0.8274	0.8291	0.8125	0.8125	1.5758	1.5620	0	0	1.1819	1.1715	0	0
1100	1200	0.8274	0.8291	0.8125	0.8125	1.5758	1.5620	0	0	1.1819	1.1715	0	0
1200	1300	0.8274	0.8291	0.8125	0.8125	1.5758	1.5620	0	0	1.1819	1.1715	0	0
1300	1400	0.8274	0.8291	0.8125	0.8125	1.5758	1.5620	0	0	1.1819	1.1715	0	0
1400	1500	0.8274	0.8291	0.8125	0.8125	1.5758	1.5620	0	0	1.1819	1.1715	0	0
1500	1600	0.8274	0.8291	0.8125	0.8125	1.5758	1.5620	0	0	1.1819	1.1715	0	0
1600	1700	0.8274	0.8291	0.8125	0.8125	1.5758	1.5620	0	0	1.1819	1.1715	0	0
1700	1800	0.8907	0.8925	0.8750	0.8750	1.5639	1.5504	0	0	1.3032	1.2920	0	0
1800	1900	0.8907	0.8925	0.8750	0.8750	1.5639	1.5504	0	0	1.3032	1.2920	0	0
1900	2000	0.8907	0.8925	0.8750	0.8750	1.5639	1.5504	0	0	1.3032	1.2920	0	0
2000	2100	0.8907	0.8925	0.8750	0.8750	1.5639	1.5504	0	0	1.3032	1.2920	0	0
2100	2200	0.8907	0.8925	0.8750	0.8750	1.5639	1.5504	0	0	1.3032	1.2920	0	0
2200	2300	0.8907	0.8925	0.8750	0.8750	1.5639	1.5504	0	0	1.3032	1.2920	0	0
2300	2400	0.7084	0.7107	0.6875	0.6875	1.9528	1.9294	0	0	1.1391	1.1255	0	0

Tai Ping Estate PTI | **PTI Type:** Open-area | **Assessment Vehicle:** FBDD

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	100	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	80	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.180	km	(1km=1000m)
Travelling Speed =	10	km/h	

Calculations *Total Flow estimated from frequency table

Start Hour	End Hour	Total Flow	Running Emission Factor (g/km·vehicle)				Within PTI (Section 1)+(Section 2) Running Emission Within PTI (g)				A Running Emission Within PTI (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	13	10.62	0.7139	0.3809	0.3504	2.485E+01	1.671E+00	8.913E-01	8.199E-01	6.903E-03	4.640E-04	2.476E-04	2.278E-04
100	200	1	10.62	0.7139	0.3809	0.3504	1.912E+00	1.285E-01	6.856E-02	6.307E-02	5.310E-04	3.570E-05	1.905E-05	1.752E-05
200	300	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	11	10.62	0.7139	0.3809	0.3504	2.103E+01	1.414E+00	7.542E-01	6.938E-01	5.841E-03	3.926E-04	2.095E-04	1.927E-04
600	700	26	10.62	0.7139	0.3809	0.3504	4.970E+01	3.341E+00	1.783E+00	1.640E+00	1.381E-02	9.281E-04	4.952E-04	4.555E-04
700	800	45	10.62	0.7139	0.3809	0.3504	8.602E+01	5.783E+00	3.085E+00	2.838E+00	2.390E-02	1.606E-03	8.570E-04	7.884E-04
800	900	36	10.62	0.7139	0.3809	0.3504	6.882E+01	4.626E+00	2.468E+00	2.271E+00	1.912E-02	1.285E-03	6.856E-04	6.307E-04
900	1000	34	10.62	0.7139	0.3809	0.3504	6.499E+01	4.369E+00	2.331E+00	2.144E+00	1.805E-02	1.214E-03	6.475E-04	5.957E-04
1000	1100	34	10.62	0.7139	0.3809	0.3504	6.499E+01	4.369E+00	2.331E+00	2.144E+00	1.805E-02	1.214E-03	6.475E-04	5.957E-04
1100	1200	34	10.62	0.7139	0.3809	0.3504	6.499E+01	4.369E+00	2.331E+00	2.144E+00	1.805E-02	1.214E-03	6.475E-04	5.957E-04
1200	1300	34	10.62	0.7139	0.3809	0.3504	6.499E+01	4.369E+00	2.331E+00	2.144E+00	1.805E-02	1.214E-03	6.475E-04	5.957E-04
1300	1400	34	10.62	0.7139	0.3809	0.3504	6.499E+01	4.369E+00	2.331E+00	2.144E+00	1.805E-02	1.214E-03	6.475E-04	5.957E-04
1400	1500	34	10.62	0.7139	0.3809	0.3504	6.499E+01	4.369E+00	2.331E+00	2.144E+00	1.805E-02	1.214E-03	6.475E-04	5.957E-04
1500	1600	34	10.62	0.7139	0.3809	0.3504	6.499E+01	4.369E+00	2.331E+00	2.144E+00	1.805E-02	1.214E-03	6.475E-04	5.957E-04
1600	1700	35	10.62	0.7139	0.3809	0.3504	6.691E+01	4.498E+00	2.400E+00	2.208E+00	1.859E-02	1.249E-03	6.666E-04	6.132E-04
1700	1800	32	10.62	0.7139	0.3809	0.3504	6.117E+01	4.112E+00	2.194E+00	2.018E+00	1.699E-02	1.142E-03	6.094E-04	5.606E-04
1800	1900	32	10.62	0.7139	0.3809	0.3504	6.117E+01	4.112E+00	2.194E+00	2.018E+00	1.699E-02	1.142E-03	6.094E-04	5.606E-04
1900	2000	32	10.62	0.7139	0.3809	0.3504	6.117E+01	4.112E+00	2.194E+00	2.018E+00	1.699E-02	1.142E-03	6.094E-04	5.606E-04
2000	2100	32	10.62	0.7139	0.3809	0.3504	6.117E+01	4.112E+00	2.194E+00	2.018E+00	1.699E-02	1.142E-03	6.094E-04	5.606E-04
2100	2200	32	10.62	0.7139	0.3809	0.3504	6.117E+01	4.112E+00	2.194E+00	2.018E+00	1.699E-02	1.142E-03	6.094E-04	5.606E-04
2200	2300	32	10.62	0.7139	0.3809	0.3504	6.117E+01	4.112E+00	2.194E+00	2.018E+00	1.699E-02	1.142E-03	6.094E-04	5.606E-04
2300	2400	19	10.62	0.7139	0.3809	0.3504	3.632E+01	2.442E+00	1.303E+00	1.198E+00	1.009E-02	6.782E-04	3.619E-04	3.329E-04

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.6686	1.2035	1.6047	2.2733	2.8082	3.7444	5.4828	6.8200	10.0295	13.1053	14.7100	17.3846	19.1230	20.0591	20.5940	21.1289	21.3964	21.3964	
NO2	0.0503	0.0905	0.1206	0.1709	0.2111	0.2814	0.4121	0.5126	0.7538	0.9849	1.1055	1.3065	1.4372	1.5075	1.5477	1.5879	1.6080	1.6080	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Total #	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (g) NO	NO_2	RSP	FSP
2400	100	3			3																4.814E+00	3.618E-01	0	0
100	200	1			1																1.605E+00	1.206E-01	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	3											3								4.413E+01	3.317E+00	0	0
600	700	6							1					5							9.241E+01	6.945E+00	0	0
700	800	15	12		2				1												1.672E+01	1.257E+00	0	0
800	900	12	12																		8.023E+00	6.036E-01	0	0
900	1000	16	12		4																1.444E+01	1.086E+00	0	0
1000	1100	16	12		4																1.444E+01	1.086E+00	0	0
1100	1200	16	12		4																1.444E+01	1.086E+00	0	0
1200	1300	16	12		4																1.444E+01	1.086E+00	0	0
1300	1400	16	12		4																1.444E+01	1.086E+00	0	0
1400	1500	16	12		4																1.444E+01	1.086E+00	0	0
1500	1600	16	12		4																1.444E+01	1.086E+00	0	0
1600	1700	17	12		5																1.605E+01	1.207E+00	0	0
1700	1800	12	12																		8.023E+00	6.036E-01	0	0
1800	1900	12	12																		8.023E+00	6.036E-01	0	0
1900	2000	12	12																		8.023E+00	6.036E-01	0	0
2000	2100	12	12																		8.023E+00	6.036E-01	0	0
2100	2200	12	12																		8.023E+00	6.036E-01	0	0
2200	2300	12	12																		8.023E+00	6.036E-01	0	0
2300	2400	5			5																8.024E+00	6.030E-01	0	0

Remark: Number of trips were derived based on on-site observations at the PTIs and/or operators' published schedules.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 2 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min. *Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Trips (60-720min)	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (5-50min)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3	1.658E-01	1.114E-02	1.473E-03	1.473E-03	9.945E-01	6.685E-02	8.835E-03	8.835E-03	9.945E-01	6.685E-02	8.835E-03	8.835E-03	2.763E-04	1.857E-05	2.454E-06	2.454E-06
100	200	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.315E-01	2.228E-02	2.945E-03	2.945E-03	3.315E-01	2.228E-02	2.945E-03	2.945E-03	9.209E-05	6.190E-06	8.181E-07	8.181E-07
200	300	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	3	6.008E+00	4.039E-01	1.473E-03	1.473E-03	3.605E+01	2.423E+00	8.835E-03	8.835E-03	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.605E+01	2.423E+00	8.835E-03	8.835E-03	1.001E-02	6.731E-04	2.454E-06	2.454E-06
600	700	6	6.008E+00	4.039E-01	1.473E-03	1.473E-03	7.210E+01	4.847E+00	1.767E-02	1.767E-02	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.210E+01	4.847E+00	1.767E-02	1.767E-02	2.003E-02	1.346E-03	4.908E-06	4.908E-06
700	800	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.202E+01	8.078E-01	2.945E-03	2.945E-03	14	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.641E+00	3.120E-01	4.123E-02	4.123E-02	1.666E+01	1.120E+00	4.418E-02	4.418E-02	4.627E-03	3.110E-04	1.227E-05	1.227E-05
800	900	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.978E+00	2.674E-01	3.534E-02	3.534E-02	3.978E+00	2.674E-01	3.534E-02	3.534E-02	1.105E-03	7.428E-05	9.817E-06	9.817E-06
900	1000	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	16	1.658E-01	1.114E-02	1.473E-03	1.473E-03	5.304E+00	3.566E-01	4.712E-02	4.712E-02	5.304E+00	3.566E-01	4.712E-02	4.712E-02	1.473E-03	9.904E-05	1.309E-05	1.309E-05
1000	1100	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	16	1.658E-01	1.114E-02	1.473E-03	1.473E-03	5.304E+00	3.566E-01	4.712E-02	4.712E-02	5.304E+00	3.566E-01	4.712E-02	4.712E-02	1.473E-03	9.904E-05	1.309E-05	1.309E-05
1100	1200	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	16	1.658E-01	1.114E-02	1.473E-03	1.473E-03	5.304E+00	3.566E-01	4.712E-02	4.712E-02	5.304E+00	3.566E-01	4.712E-02	4.712E-02	1.473E-03	9.904E-05	1.309E-05	1.309E-05
1200	1300	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	16	1.658E-01	1.114E-02	1.473E-03	1.473E-03	5.304E+00	3.566E-01	4.712E-02	4.712E-02	5.304E+00	3.566E-01	4.712E-02	4.712E-02	1.473E-03	9.904E-05	1.309E-05	1.309E-05
1300	1400	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	16	1.658E-01	1.114E-02	1.473E-03	1.473E-03	5.304E+00	3.566E-01	4.712E-02	4.712E-02	5.304E+00	3.566E-01	4.712E-02	4.712E-02	1.473E-03	9.904E-05	1.309E-05	1.309E-05
1400	1500	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	16	1.658E-01	1.114E-02	1.473E-03	1.473E-03	5.304E+00	3.566E-01	4.712E-02	4.712E-02	5.304E+00	3.566E-01	4.712E-02	4.712E-02	1.473E-03	9.904E-05	1.309E-05	1.309E-05
1500	1600	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	16	1.658E-01	1.114E-02	1.473E-03	1.473E-03	5.304E+00	3.566E-01	4.712E-02	4.712E-02	5.304E+00	3.566E-01	4.712E-02	4.712E-02	1.473E-03	9.904E-05	1.309E-05	1.309E-05
1600	1700	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	17	1.658E-01	1.114E-02	1.473E-03	1.473E-03	5.636E+00	3.788E-01	5.007E-02	5.007E-02	5.636E+00	3.788E-01	5.007E-02	5.007E-02	1.565E-03	1.052E-04	1.391E-05	1.391E-05
1700	1800	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.978E+00	2.674E-01	3.534E-02	3.534E-02	3.978E+00	2.674E-01	3.534E-02	3.534E-02	1.105E-03	7.428E-05	9.817E-06	9.817E-06
1800	1900	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.978E+00	2.674E-01	3.534E-02	3.534E-02	3.978E+00	2.674E-01	3.534E-02	3.534E-02	1.105E-03	7.428E-05	9.817E-06	9.817E-06
1900	2000	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.978E+00	2.674E-01	3.534E-02	3.534E-02	3.978E+00	2.674E-01	3.534E-02	3.534E-02	1.105E-03	7.428E-05	9.817E-06	9.817E-06
2000	2100	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.978E+00	2.674E-01	3.534E-02	3.534E-02	3.978E+00	2.674E-01	3.534E-02	3.534E-02	1.105E-03	7.428E-05	9.817E-06	9.817E-06
2100	2200	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.978E+00	2.674E-01	3.534E-02	3.534E-02	3.978E+00	2.674E-01	3.534E-02	3.534E-02	1.105E-03	7.428E-05	9.817E-06	9.817E-06
2200	2300	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.978E+00	2.674E-01	3.534E-02	3.534E-02	3.978E+00	2.674E-01	3.534E-02	3.534E-02	1.105E-03	7.428E-05	9.817E-06	9.817E-06
2300	2400	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.658E+00	1.114E-01	1.473E-02	1.473E-02	1.658E+00	1.114E-01	1.473E-02	1.473E-02	4.604E-04	3.095E-05	4.090E-06	4.090E-06

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	80	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	620	m	(Section 3) * (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	4.973E-01	3.343E-02	4.418E-03	4.418E-03	4.934E-01	3.753E-02	0	0	1.370E-04	1.042E-05	0	0	3.823E+00	2.908E-01	0	0	1.062E-03	8.079E-05	0	0
100	200	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.645E-01	1.251E-02	0	0	4.568E-05	3.475E-06	0	0	1.274E+00	9.695E-02	0	0	3.540E-04	2.693E-05	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	1.802E+01	1.212E+00	4.418E-03	4.418E-03	2.983E+00	2.406E-01	0	0	8.287E-04	6.682E-05	0	0	2.312E+01	1.864E+00	0	0	6.423E-03	5.179E-04	0	0
600	700	3.605E+01	2.423E+00	8.835E-03	8.835E-03	6.441E+00	5.167E-01	0	0	1.789E-03	1.435E-04	0	0	4.992E+01	4.005E+00	0	0	1.387E-02	1.112E-03	0	0
700	800	8.329E+00	5.599E-01	2.209E-02	2.209E-02	9.585E-01	7.966E-02	0	0	2.662E-04	2.213E-05	0	0	7.428E+00	6.174E-01	0	0	2.063E-03	1.715E-04	0	0
800	900	1.989E+00	1.337E-01	1.767E-02	1.767E-02	6.896E-01	5.370E-02	0	0	1.916E-04	1.492E-05	0	0	5.345E+00	4.162E-01	0	0	1.485E-03	1.156E-04	0	0
900	1000	2.652E+00	1.783E-01	2.356E-02	2.356E-02	1.347E+00	1.037E-01	0	0	3.743E-04	2.882E-05	0	0	1.044E+01	8.040E-01	0	0	2.901E-03	2.233E-04	0	0
1000	1100	2.652E+00	1.783E-01	2.356E-02	2.356E-02	1.347E+00	1.037E-01	0	0	3.743E-04	2.882E-05	0	0	1.044E+01	8.040E-01	0	0	2.901E-03	2.233E-04	0	0
1100	1200	2.652E+00	1.783E-01	2.356E-02	2.356E-02	1.347E+00	1.037E-01	0	0	3.743E-04	2.882E-05	0	0	1.044E+01	8.040E-01	0	0	2.901E-03	2.233E-04	0	0
1200	1300	2.652E+00	1.783E-01	2.356E-02	2.356E-02	1.347E+00	1.037E-01	0	0	3.743E-04	2.882E-05	0	0	1.044E+01	8.040E-01	0	0	2.901E-03	2.233E-04	0	0
1300	1400	2.652E+00	1.783E-01	2.356E-02	2.356E-02	1.347E+00	1.037E-01	0	0	3.743E-04	2.882E-05	0	0	1.044E+01	8.040E-01	0	0	2.901E-03	2.233E-04	0	0
1400	1500	2.652E+00	1.783E-01	2.356E-02	2.356E-02	1.347E+00	1.037E-01	0	0	3.743E-04	2.882E-05	0	0	1.044E+01	8.040E-01	0	0	2.901E-03	2.233E-04	0	0
1500	1600	2.652E+00	1.783E-01	2.356E-02	2.356E-02	1.347E+00	1.037E-01	0	0	3.743E-04	2.882E-05	0	0	1.044E+01	8.040E-01	0	0	2.901E-03	2.233E-04	0	0
1600	1700	2.818E+00	1.894E-01	2.503E-02	2.503E-02	1.512E+00	1.162E-01	0	0	4.200E-04	3.229E-05	0	0	1.172E+01	9.009E-01	0	0	3.255E-03	2.503E-04	0	0
1700	1800	1.989E+00	1.337E-01	1.767E-02	1.767E-02	6.896E-01	5.370E-02	0	0	1.916E-04	1.492E-05	0	0	5.345E+00	4.162E-01	0	0	1.485E-03	1.156E-04	0	0
1800	1900	1.989E+00	1.337E-01	1.767E-02	1.767E-02	6.896E-01	5.370E-02	0	0	1.916E-04	1.492E-05	0	0	5.345E+00	4.162E-01	0	0	1.485E-03	1.156E-04	0	0
1900	2000	1.989E+00	1.337E-01	1.767E-02	1.767E-02	6.896E-01	5.370E-02	0	0	1.916E-04	1.492E-05	0	0	5.345E+00	4.162E-01	0	0	1.485E-03	1.156E-04	0	0
2000	2100	1.989E+00	1.337E-01	1.767E-02	1.767E-02	6.896E-01	5.370E-02	0	0	1.916E-04	1.492E-05	0	0	5.345E+00	4.162E-01	0	0	1.485E-03	1.156E-04	0	0
2100	2200	1.989E+00	1.337E-01	1.767E-02	1.767E-02	6.896E-01	5.370E-02	0	0	1.916E-04	1.492E-05	0	0	5.345E+00	4.162E-01	0	0	1.485E-03	1.156E-04	0	0
2200	2300	1.989E+00	1.337E-01	1.767E-02	1.767E-02	6.896E-01	5.370E-02	0	0	1.916E-04	1.492E-05	0	0	5.345E+00	4.162E-01	0	0	1.485E-03	1.156E-04	0	0
2300	2400	8.288E-01	5.571E-02	7.363E-03	7.363E-03	8.223E-01	6.255E-02	0	0	2.284E-04	1.737E-05	0	0	6.372E+00	4.847E-01	0	0	1.770E-03	1.347E-04	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 0.5 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	10	1.658E-01	1.114E-02	1.473E-03	1.473E-03	8.288E-01	5.571E-02	7.363E-03	7.363E-03	2.302E-04	1.548E-05	2.045E-06	2.045E-06
100	200	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	8	1.658E-01	1.114E-02	1.473E-03	1.473E-03	6.630E-01	4.457E-02	5.890E-03	5.890E-03	1.842E-04	1.238E-05	1.636E-06	1.636E-06
600	700	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.658E+00	1.114E-01	1.473E-02	1.473E-02	4.604E-04	3.095E-05	4.090E-06	4.090E-06
700	800	30	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.486E+00	1.671E-01	2.209E-02	2.209E-02	6.906E-04	4.643E-05	6.135E-06	6.135E-06
800	900	24	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.989E+00	1.337E-01	1.767E-02	1.767E-02	5.525E-04	3.714E-05	4.908E-06	4.908E-06
900	1000	18	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
1000	1100	18	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
1100	1200	18	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
1200	1300	18	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
1300	1400	18	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
1400	1500	18	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
1500	1600	18	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
1600	1700	18	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
1700	1800	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.658E+00	1.114E-01	1.473E-02	1.473E-02	4.604E-04	3.095E-05	4.090E-06	4.090E-06
1800	1900	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.658E+00	1.114E-01	1.473E-02	1.473E-02	4.604E-04	3.095E-05	4.090E-06	4.090E-06
1900	2000	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.658E+00	1.114E-01	1.473E-02	1.473E-02	4.604E-04	3.095E-05	4.090E-06	4.090E-06
2000	2100	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.658E+00	1.114E-01	1.473E-02	1.473E-02	4.604E-04	3.095E-05	4.090E-06	4.090E-06
2100	2200	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.658E+00	1.114E-01	1.473E-02	1.473E-02	4.604E-04	3.095E-05	4.090E-06	4.090E-06
2200	2300	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.658E+00	1.114E-01	1.473E-02	1.473E-02	4.604E-04	3.095E-05	4.090E-06	4.090E-06
2300	2400	14	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.160E+00	7.800E-02	1.031E-02	1.031E-02	3.223E-04	2.167E-05	2.863E-06	2.863E-06

PART 5 - Sum up all above parts

Calculations

Start Hour	End Hour	Model ID: TAI_BDA1 Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)				Model ID: TAI_BDSW Spread distance = E to PKRWB (Section 3) Total Emission (g/s)				Model ID: TAI_BDSN1-2 Spread distance = E to PKREB,PWRNB (Section 3) Total Emission (g/s)				Model ID: TAI_BDSS Spread distance = E to PKREB,PWRSB (Section 3) Total Emission (g/s)				Spill Ratio		
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	to PKRWB (%)	to PKREB,PWRNB (%)	to PKREB,PWRSB (%)
2400	100	7.547E-03	5.085E-04	2.521E-04	2.323E-04	0.000E+00	0.000E+00	0	0	1.062E-03	8.079E-05	0	0	0.000E+00	0.000E+00	0	0	0.00%	100.00%	0.00%
100	200	6.688E-04	4.536E-05	1.986E-05	1.834E-05	0.000E+00	0.000E+00	0	0	3.540E-04	2.693E-05	0	0	0.000E+00	0.000E+00	0	0	0.00%	100.00%	0.00%
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%
500	600	1.687E-02	1.145E-03	2.136E-04	1.968E-04	0.000E+00	0.000E+00	0	0	6.423E-03	5.179E-04	0	0	0.000E+00	0.000E+00	0	0	0.00%	100.00%	0.00%
600	**700**	3.608E-02	2.449E-03	5.042E-04	4.645E-04	**2.311E-03**	**1.854E-04**	**0**	**0**	1.155E-02	9.270E-04	0	0	0.000E+00	0.000E+00	0	0	**16.67%**	**83.33%**	**0.00%**
700	800	2.948E-02	1.986E-03	8.754E-04	8.068E-04	4.127E-04	3.430E-05	0	0	1.651E-03	1.372E-04	0	0	0.000E+00	0.000E+00	0	0	20.00%	80.00%	0.00%
800	**900**	**2.097E-02**	**1.411E-03**	**7.003E-04**	**6.454E-04**	0.000E+00	0.000E+00	0	0	**1.485E-03**	**1.156E-04**	**0**	**0**	0.000E+00	0.000E+00	0	0	**0.00%**	**100.00%**	**0.00%**
900	**1000**	2.032E-02	1.369E-03	6.643E-04	6.125E-04	0.000E+00	0.000E+00	0	0	2.176E-03	1.675E-04	0	0	**7.252E-04**	**5.583E-05**	**0**	**0**	**0.00%**	**75.00%**	**25.00%**
1000	1100	2.032E-02	1.369E-03	6.643E-04	6.125E-04	0.000E+00	0.000E+00	0	0	2.176E-03	1.675E-04	0	0	7.252E-04	5.583E-05	0	0	0.00%	75.00%	25.00%
1100	1200	2.032E-02	1.369E-03	6.643E-04	6.125E-04	0.000E+00	0.000E+00	0	0	2.176E-03	1.675E-04	0	0	7.252E-04	5.583E-05	0	0	0.00%	75.00%	25.00%
1200	1300	2.032E-02	1.369E-03	6.643E-04	6.125E-04	0.000E+00	0.000E+00	0	0	2.176E-03	1.675E-04	0	0	7.252E-04	5.583E-05	0	0	0.00%	75.00%	25.00%
1300	1400	2.032E-02	1.369E-03	6.643E-04	6.125E-04	0.000E+00	0.000E+00	0	0	2.176E-03	1.675E-04	0	0	7.252E-04	5.583E-05	0	0	0.00%	75.00%	25.00%
1400	1500	2.032E-02	1.369E-03	6.643E-04	6.125E-04	0.000E+00	0.000E+00	0	0	2.176E-03	1.675E-04	0	0	7.252E-04	5.583E-05	0	0	0.00%	75.00%	25.00%
1500	1600	2.032E-02	1.369E-03	6.643E-04	6.125E-04	0.000E+00	0.000E+00	0	0	2.176E-03	1.675E-04	0	0	7.252E-04	5.583E-05	0	0	0.00%	75.00%	25.00%
1600	1700	2.098E-02	1.415E-03	6.842E-04	6.308E-04	0.000E+00	0.000E+00	0	0	2.297E-03	1.767E-04	0	0	9.573E-04	7.361E-05	0	0	0.00%	70.59%	29.41%
1700	1800	1.875E-02	1.262E-03	6.233E-04	5.745E-04	0.000E+00	0.000E+00	0	0	1.485E-03	1.156E-04	0	0	0.000E+00	0.000E+00	0	0	0.00%	100.00%	0.00%
1800	1900	1.875E-02	1.262E-03	6.233E-04	5.745E-04	0.000E+00	0.000E+00	0	0	1.485E-03	1.156E-04	0	0	0.000E+00	0.000E+00	0	0	0.00%	100.00%	0.00%
1900	2000	1.875E-02	1.262E-03	6.233E-04	5.745E-04	0.000E+00	0.000E+00	0	0	1.485E-03	1.156E-04	0	0	0.000E+00	0.000E+00	0	0	0.00%	100.00%	0.00%
2000	2100	1.875E-02	1.262E-03	6.233E-04	5.745E-04	0.000E+00	0.000E+00	0	0	1.485E-03	1.156E-04	0	0	0.000E+00	0.000E+00	0	0	0.00%	100.00%	0.00%
2100	2200	1.875E-02	1.262E-03	6.233E-04	5.745E-04	0.000E+00	0.000E+00	0	0	1.485E-03	1.156E-04	0	0	0.000E+00	0.000E+00	0	0	0.00%	100.00%	0.00%
2200	2300	1.875E-02	1.262E-03	6.233E-04	5.745E-04	0.000E+00	0.000E+00	0	0	1.485E-03	1.156E-04	0	0	0.000E+00	0.000E+00	0	0	0.00%	100.00%	0.00%
2300	2400	1.110E-02	7.482E-04	3.688E-04	3.398E-04	0.000E+00	0.000E+00	0	0	1.770E-03	1.347E-04	0	0	0.000E+00	0.000E+00	0	0	0.00%	100.00%	0.00%

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0600-0700 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.3600	0.3603	0.3599	0.3598	0.0000	0.0000	0	0	0.7154	0.6988	0	0	0.0000	0.0000	0	0
100	200	0.0319	0.0321	0.0284	0.0284	0.0000	0.0000	0	0	0.2385	0.2329	0	0	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
500	600	0.8045	0.8113	0.3050	0.3049	0.0000	0.0000	0	0	4.3263	4.4795	0	0	0.0000	0.0000	0	0
600	**700**	1.7211	1.7351	0.7199	0.7197	**1.0000**	**1.0000**	**0**	**0**	7.7831	8.0184	0	0	0.0000	0.0000	0	0
700	800	1.4061	1.4071	1.2500	1.2500	0.1786	0.1850	0	0	1.1119	1.1867	0	0	0.0000	0.0000	0	0
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	0.0000	0.0000	0	0	**1.0000**	**1.0000**	**0**	**0**	0.0000	0.0000	0	0
900	**1000**	0.9690	0.9702	0.9485	0.9489	0.0000	0.0000	0	0	1.4654	1.4488	0	0	**1.0000**	**1.0000**	**0**	**0**
1000	1100	0.9690	0.9702	0.9485	0.9489	0.0000	0.0000	0	0	1.4654	1.4488	0	0	1.0000	1.0000	0	0
1100	1200	0.9690	0.9702	0.9485	0.9489	0.0000	0.0000	0	0	1.4654	1.4488	0	0	1.0000	1.0000	0	0
1200	1300	0.9690	0.9702	0.9485	0.9489	0.0000	0.0000	0	0	1.4654	1.4488	0	0	1.0000	1.0000	0	0
1300	1400	0.9690	0.9702	0.9485	0.9489	0.0000	0.0000	0	0	1.4654	1.4488	0	0	1.0000	1.0000	0	0
1400	1500	0.9690	0.9702	0.9485	0.9489	0.0000	0.0000	0	0	1.4654	1.4488	0	0	1.0000	1.0000	0	0
1500	1600	0.9690	0.9702	0.9485	0.9489	0.0000	0.0000	0	0	1.4654	1.4488	0	0	1.0000	1.0000	0	0
1600	1700	1.0009	1.0024	0.9769	0.9773	0.0000	0.0000	0	0	1.5475	1.5280	0	0	1.3201	1.3183	0	0
1700	1800	0.8943	0.8944	0.8901	0.8902	0.0000	0.0000	0	0	1.0000	1.0000	0	0	0.0000	0.0000	0	0
1800	1900	0.8943	0.8944	0.8901	0.8902	0.0000	0.0000	0	0	1.0000	1.0000	0	0	0.0000	0.0000	0	0
1900	2000	0.8943	0.8944	0.8901	0.8902	0.0000	0.0000	0	0	1.0000	1.0000	0	0	0.0000	0.0000	0	0
2000	2100	0.8943	0.8944	0.8901	0.8902	0.0000	0.0000	0	0	1.0000	1.0000	0	0	0.0000	0.0000	0	0
2100	2200	0.8943	0.8944	0.8901	0.8902	0.0000	0.0000	0	0	1.0000	1.0000	0	0	0.0000	0.0000	0	0
2200	2300	0.8943	0.8944	0.8901	0.8902	0.0000	0.0000	0	0	1.0000	1.0000	0	0	0.0000	0.0000	0	0
2300	2400	0.5295	0.5301	0.5266	0.5265	0.0000	0.0000	0	0	1.1923	1.1647	0	0	0.0000	0.0000	0	0

Ching Ho Estate PTI PTI Type: Open-area Assessment Vehicle: FBDD

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	80	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	90	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.170	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Running Emission Factor (g/km·vehicle) NO	NO_2	RSP	FSP	Within PTI (Section 1)+(Section 2) Running Emission Within PTI (g) NO	NO_2	RSP	FSP	A Running Emission Within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	15	10.62	0.7139	0.3809	0.3504	2.708E+01	1.820E+00	9.713E-01	8.935E-01	7.523E-03	5.057E-04	2.698E-04	2.482E-04
700	800	39	10.62	0.7139	0.3809	0.3504	7.041E+01	4.733E+00	2.525E+00	2.323E+00	1.956E-02	1.315E-03	7.015E-04	6.453E-04
800	900	33	10.62	0.7139	0.3809	0.3504	5.958E+01	4.005E+00	2.137E+00	1.966E+00	1.655E-02	1.112E-03	5.936E-04	5.460E-04
900	1000	20	10.62	0.7139	0.3809	0.3504	3.611E+01	2.427E+00	1.295E+00	1.191E+00	1.003E-02	6.742E-04	3.597E-04	3.309E-04
1000	1100	18	10.62	0.7139	0.3809	0.3504	3.250E+01	2.185E+00	1.166E+00	1.072E+00	9.027E-03	6.068E-04	3.238E-04	2.978E-04
1100	1200	16	10.62	0.7139	0.3809	0.3504	2.889E+01	1.942E+00	1.036E+00	9.531E-01	8.024E-03	5.394E-04	2.878E-04	2.647E-04
1200	1300	23	10.62	0.7139	0.3809	0.3504	4.152E+01	2.791E+00	1.489E+00	1.370E+00	1.153E-02	7.754E-04	4.137E-04	3.806E-04
1300	1400	21	10.62	0.7139	0.3809	0.3504	3.791E+01	2.549E+00	1.360E+00	1.251E+00	1.053E-02	7.080E-04	3.777E-04	3.475E-04
1400	1500	26	10.62	0.7139	0.3809	0.3504	4.694E+01	3.155E+00	1.684E+00	1.549E+00	1.304E-02	8.765E-04	4.677E-04	4.302E-04
1500	1600	21	10.62	0.7139	0.3809	0.3504	3.791E+01	2.549E+00	1.360E+00	1.251E+00	1.053E-02	7.080E-04	3.777E-04	3.475E-04
1600	1700	35	10.62	0.7139	0.3809	0.3504	6.319E+01	4.248E+00	2.266E+00	2.085E+00	1.755E-02	1.180E-03	6.295E-04	5.791E-04
1700	1800	22	10.62	0.7139	0.3809	0.3504	3.972E+01	2.670E+00	1.425E+00	1.310E+00	1.103E-02	7.417E-04	3.957E-04	3.640E-04
1800	1900	25	10.62	0.7139	0.3809	0.3504	4.514E+01	3.034E+00	1.619E+00	1.489E+00	1.254E-02	8.428E-04	4.497E-04	4.137E-04
1900	2000	22	10.62	0.7139	0.3809	0.3504	3.972E+01	2.670E+00	1.425E+00	1.310E+00	1.103E-02	7.417E-04	3.957E-04	3.640E-04
2000	2100	19	10.62	0.7139	0.3809	0.3504	3.430E+01	2.306E+00	1.230E+00	1.132E+00	9.529E-03	6.405E-04	3.418E-04	3.144E-04
2100	2200	25	10.62	0.7139	0.3809	0.3504	4.514E+01	3.034E+00	1.619E+00	1.489E+00	1.254E-02	8.428E-04	4.497E-04	4.137E-04
2200	2300	24	10.62	0.7139	0.3809	0.3504	4.333E+01	2.913E+00	1.554E+00	1.430E+00	1.204E-02	8.091E-04	4.317E-04	3.971E-04
2300	2400	18	10.62	0.7139	0.3809	0.3504	3.250E+01	2.185E+00	1.166E+00	1.072E+00	9.027E-03	6.068E-04	3.238E-04	2.978E-04

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.6686	1.2035	1.6047	2.2733	2.8082	3.7444	5.4828	6.8200	10.0295	13.1053	14.7100	17.3846	19.1230	20.0591	20.5940	21.1289	21.3964	21.3964	
NO2	0.0503	0.0905	0.1206	0.1709	0.2111	0.2814	0.4121	0.5126	0.7538	0.9849	1.1055	1.3065	1.4372	1.5075	1.5477	1.5879	1.6080	1.6080	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Total #	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (g) NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	0																			0.000E+00	0.000E+00	0	0
600	700	8	1		3	2		1						1							3.116E+01	2.342E+00	0	0
700	800	19	10	6	1	2		1													2.220E+01	1.669E+00	0	0
800	900	12	9	2	1																1.003E+01	7.543E-01	0	0
900	1000	10		3	7																1.484E+01	1.116E+00	0	0
1000	1100	8	1	2	3	1				1											1.698E+01	1.277E+00	0	0
1100	1200	8		2	4					2											2.247E+01	1.689E+00	0	0
1200	1300	11	1	4	3	1	1			1											2.220E+01	1.669E+00	0	0
1300	1400	12	1	5	6																1.631E+01	1.226E+00	0	0
1400	1500	13	4	4	2	1	1				1										2.581E+01	1.940E+00	0	0
1500	1600	9	1	6	1				1												1.498E+01	1.126E+00	0	0
1600	1700	16	5	4	5		1			1											2.581E+01	1.940E+00	0	0
1700	1800	13	1	7	3	1	1														1.899E+01	1.428E+00	0	0
1800	1900	13	4	8	1																1.391E+01	1.046E+00	0	0
1900	2000	9		3	5	1															1.391E+01	1.045E+00	0	0
2000	2100	7		3	3				1												1.391E+01	1.045E+00	0	0
2100	2200	11		3	7					1											2.166E+01	1.628E+00	0	0
2200	2300	12	1	9	2																1.471E+01	1.106E+00	0	0
2300	2400	9	2	5	2																1.056E+01	7.943E-01	0	0

Remark: Number of trips were derived based on on-site observations at the PTI.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 2 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min. *Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Trips (60-720min)	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (5-50min)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.202E+01	8.078E-01	2.945E-03	2.945E-03	7	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.321E+00	1.560E-01	2.062E-02	2.062E-02	1.434E+01	9.638E-01	2.356E-02	2.356E-02	3.982E-03	2.677E-04	6.544E-06	6.544E-06
700	800	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	19	1.658E-01	1.114E-02	1.473E-03	1.473E-03	6.299E+00	4.234E-01	5.598E-02	5.598E-02	6.299E+00	4.234E-01	5.598E-02	5.598E-02	1.750E-03	1.176E-04	1.554E-05	1.554E-05
800	900	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.978E+00	2.674E-01	3.534E-02	3.534E-02	3.978E+00	2.674E-01	3.534E-02	3.534E-02	1.105E-03	7.428E-05	9.817E-06	9.817E-06
900	1000	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	10	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.315E+00	2.228E-01	2.945E-02	2.945E-02	3.315E+00	2.228E-01	2.945E-02	2.945E-02	9.209E-04	6.190E-05	8.181E-06	8.181E-06
1000	1100	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.202E+01	8.078E-01	2.945E-03	2.945E-03	7	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.321E+00	1.560E-01	2.062E-02	2.062E-02	1.434E+01	9.638E-01	2.356E-02	2.356E-02	3.982E-03	2.677E-04	6.544E-06	6.544E-06
1100	1200	2	6.008E+00	4.039E-01	1.473E-03	1.473E-03	2.403E+01	1.616E+00	5.890E-03	5.890E-03	6	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.989E+00	1.337E-01	1.767E-02	1.767E-02	2.602E+01	1.749E+00	2.356E-02	2.356E-02	7.228E-03	4.858E-04	6.544E-06	6.544E-06
1200	1300	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.202E+01	8.078E-01	2.945E-03	2.945E-03	10	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.315E+00	2.228E-01	2.945E-02	2.945E-02	1.533E+01	1.031E+00	3.240E-02	3.240E-02	4.259E-03	2.863E-04	8.999E-06	8.999E-06
1300	1400	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.978E+00	2.674E-01	3.534E-02	3.534E-02	3.978E+00	2.674E-01	3.534E-02	3.534E-02	1.105E-03	7.428E-05	9.817E-06	9.817E-06
1400	1500	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.202E+01	8.078E-01	2.945E-03	2.945E-03	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.978E+00	2.674E-01	3.534E-02	3.534E-02	1.599E+01	1.075E+00	3.829E-02	3.829E-02	4.443E-03	2.987E-04	1.063E-05	1.063E-05
1500	1600	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.202E+01	8.078E-01	2.945E-03	2.945E-03	8	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.652E+00	1.783E-01	2.356E-02	2.356E-02	1.467E+01	9.860E-01	2.651E-02	2.651E-02	4.075E-03	2.739E-04	7.363E-06	7.363E-06
1600	1700	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.202E+01	8.078E-01	2.945E-03	2.945E-03	15	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.973E+00	3.343E-01	4.418E-02	4.418E-02	1.699E+01	1.142E+00	4.712E-02	4.712E-02	4.719E-03	3.172E-04	1.309E-05	1.309E-05
1700	1800	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	13	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.310E+00	2.897E-01	3.829E-02	3.829E-02	4.310E+00	2.897E-01	3.829E-02	3.829E-02	1.197E-03	8.047E-05	1.063E-05	1.063E-05
1800	1900	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	13	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.310E+00	2.897E-01	3.829E-02	3.829E-02	4.310E+00	2.897E-01	3.829E-02	3.829E-02	1.197E-03	8.047E-05	1.063E-05	1.063E-05
1900	2000	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.984E+00	2.006E-01	2.651E-02	2.651E-02	2.984E+00	2.006E-01	2.651E-02	2.651E-02	8.288E-04	5.571E-05	7.363E-06	7.363E-06
2000	2100	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.202E+01	8.078E-01	2.945E-03	2.945E-03	6	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.989E+00	1.337E-01	1.767E-02	1.767E-02	1.401E+01	9.415E-01	2.062E-02	2.062E-02	3.890E-03	2.615E-04	5.726E-06	5.726E-06
2100	2200	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.202E+01	8.078E-01	2.945E-03	2.945E-03	10	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.315E+00	2.228E-01	2.945E-02	2.945E-02	1.533E+01	1.031E+00	3.240E-02	3.240E-02	4.259E-03	2.863E-04	8.999E-06	8.999E-06
2200	2300	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.978E+00	2.674E-01	3.534E-02	3.534E-02	3.978E+00	2.674E-01	3.534E-02	3.534E-02	1.105E-03	7.428E-05	9.817E-06	9.817E-06
2300	2400	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.984E+00	2.006E-01	2.651E-02	2.651E-02	2.984E+00	2.006E-01	2.651E-02	2.651E-02	8.288E-04	5.571E-05	7.363E-06	7.363E-06

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	90	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	610	m	(Section 3)

* (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	7.168E+00	4.819E-01	1.178E-02	1.178E-02	3.084E+00	2.391E-01	0	0	8.568E-04	6.643E-05	0	0	2.091E+01	1.621E+00	0	0	5.807E-03	4.502E-04	0	0
700	800	3.149E+00	2.117E-01	2.798E-02	2.798E-02	2.449E+00	1.874E-01	0	0	6.803E-04	5.205E-05	0	0	1.660E+01	1.270E+00	0	0	4.611E-03	3.528E-04	0	0
800	900	1.989E+00	1.337E-01	1.767E-02	1.767E-02	1.034E+00	7.979E-02	0	0	2.871E-04	2.216E-05	0	0	7.006E+00	5.408E-01	0	0	1.946E-03	1.502E-04	0	0
900	1000	1.658E+00	1.114E-01	1.473E-02	1.473E-02	1.695E+00	1.291E-01	0	0	4.709E-04	3.587E-05	0	0	1.149E+01	8.752E-01	0	0	3.192E-03	2.431E-04	0	0
1000	1100	7.168E+00	4.819E-01	1.178E-02	1.178E-02	1.262E+00	1.022E-01	0	0	3.505E-04	2.838E-05	0	0	8.553E+00	6.925E-01	0	0	2.376E-03	1.924E-04	0	0
1100	1200	1.301E+01	8.746E-01	1.178E-02	1.178E-02	1.216E+00	1.047E-01	0	0	3.377E-04	2.907E-05	0	0	8.239E+00	7.093E-01	0	0	2.289E-03	1.970E-04	0	0
1200	1300	7.666E+00	5.153E-01	1.620E-02	1.620E-02	1.868E+00	1.483E-01	0	0	5.190E-04	4.119E-05	0	0	1.266E+01	1.005E+00	0	0	3.518E-03	2.792E-04	0	0
1300	1400	1.989E+00	1.337E-01	1.767E-02	1.767E-02	1.842E+00	1.405E-01	0	0	5.116E-04	3.902E-05	0	0	1.248E+01	9.522E-01	0	0	3.468E-03	2.645E-04	0	0
1400	1500	7.997E+00	5.376E-01	1.914E-02	1.914E-02	2.250E+00	1.803E-01	0	0	6.361E-04	5.009E-05	0	0	1.552E+01	1.222E+00	0	0	4.312E-03	3.395E-04	0	0
1500	1600	7.334E+00	4.930E-01	1.325E-02	1.325E-02	9.827E-01	8.138E-02	0	0	2.730E-04	2.261E-05	0	0	6.660E+00	5.516E-01	0	0	1.850E-03	1.532E-04	0	0
1600	1700	8.494E+00	5.710E-01	2.356E-02	2.356E-02	2.226E+00	1.760E-01	0	0	6.184E-04	4.890E-05	0	0	1.509E+01	1.193E+00	0	0	4.191E-03	3.314E-04	0	0
1700	1800	2.155E+00	1.449E-01	1.914E-02	1.914E-02	2.164E+00	1.649E-01	0	0	6.012E-04	4.581E-05	0	0	1.467E+01	1.118E+00	0	0	4.075E-03	3.105E-04	0	0
1800	1900	2.155E+00	1.449E-01	1.914E-02	1.914E-02	1.511E+00	1.158E-01	0	0	4.197E-04	3.218E-05	0	0	1.024E+01	7.851E-01	0	0	2.845E-03	2.181E-04	0	0
1900	2000	1.492E+00	1.003E-01	1.325E-02	1.325E-02	1.596E+00	1.215E-01	0	0	4.434E-04	3.375E-05	0	0	1.082E+01	8.236E-01	0	0	3.005E-03	2.288E-04	0	0
2000	2100	7.003E+00	4.707E-01	1.031E-02	1.031E-02	8.878E-01	7.389E-02	0	0	2.466E-04	2.052E-05	0	0	6.017E+00	5.008E-01	0	0	1.671E-03	1.391E-04	0	0
2100	2200	7.666E+00	5.153E-01	1.620E-02	1.620E-02	1.800E+00	1.431E-01	0	0	4.999E-04	3.975E-05	0	0	1.220E+01	9.699E-01	0	0	3.388E-03	2.694E-04	0	0
2200	2300	1.989E+00	1.337E-01	1.767E-02	1.767E-02	1.635E+00	1.250E-01	0	0	4.543E-04	3.472E-05	0	0	1.108E+01	8.473E-01	0	0	3.079E-03	2.354E-04	0	0
2300	2400	1.492E+00	1.003E-01	1.325E-02	1.325E-02	1.166E+00	8.923E-02	0	0	3.240E-04	2.479E-05	0	0	7.906E+00	6.048E-01	0	0	2.196E-03	1.680E-04	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 1 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	7	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.160E+00	7.800E-02	1.031E-02	1.031E-02	3.223E-04	2.167E-05	2.863E-06	2.863E-06
700	800	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.315E+00	2.228E-01	2.945E-02	2.945E-02	9.209E-04	6.190E-05	8.181E-06	8.181E-06
800	900	21	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.481E+00	2.340E-01	3.092E-02	3.092E-02	9.669E-04	6.500E-05	8.590E-06	8.590E-06
900	1000	10	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.658E+00	1.114E-01	1.473E-02	1.473E-02	4.604E-04	3.095E-05	4.090E-06	4.090E-06
1000	1100	10	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.658E+00	1.114E-01	1.473E-02	1.473E-02	4.604E-04	3.095E-05	4.090E-06	4.090E-06
1100	1200	8	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.326E+00	8.914E-02	1.178E-02	1.178E-02	3.683E-04	2.476E-05	3.272E-06	3.272E-06
1200	1300	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.989E+00	1.337E-01	1.767E-02	1.767E-02	5.525E-04	3.714E-05	4.908E-06	4.908E-06
1300	1400	9	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
1400	1500	13	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.155E+00	1.449E-01	1.914E-02	1.914E-02	5.986E-04	4.024E-05	5.317E-06	5.317E-06
1500	1600	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.989E+00	1.337E-01	1.767E-02	1.767E-02	5.525E-04	3.714E-05	4.908E-06	4.908E-06
1600	1700	19	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.149E+00	2.117E-01	2.798E-02	2.798E-02	8.748E-04	5.881E-05	7.772E-06	7.772E-06
1700	1800	9	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
1800	1900	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.989E+00	1.337E-01	1.767E-02	1.767E-02	5.525E-04	3.714E-05	4.908E-06	4.908E-06
1900	2000	13	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.155E+00	1.449E-01	1.914E-02	1.914E-02	5.986E-04	4.024E-05	5.317E-06	5.317E-06
2000	2100	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.989E+00	1.337E-01	1.767E-02	1.767E-02	5.525E-04	3.714E-05	4.908E-06	4.908E-06
2100	2200	14	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.321E+00	1.560E-01	2.062E-02	2.062E-02	6.446E-04	4.333E-05	5.726E-06	5.726E-06
2200	2300	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.989E+00	1.337E-01	1.767E-02	1.767E-02	5.525E-04	3.714E-05	4.908E-06	4.908E-06
2300	2400	9	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06

PART 5 - Sum up all above parts

Calculations

Model ID: CHE_BDA1

Start Hour	End Hour	Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	1.288E-02	8.615E-04	2.792E-04	2.576E-04
700	**800**	**2.291E-02**	**1.546E-03**	**7.252E-04**	**6.690E-04**
800	900	1.891E-02	1.274E-03	6.120E-04	5.644E-04
900	1000	1.188E-02	8.030E-04	3.720E-04	3.432E-04
1000	1100	1.382E-02	9.339E-04	3.344E-04	3.085E-04
1100	1200	1.596E-02	1.079E-03	2.976E-04	2.746E-04
1200	1300	1.686E-02	1.140E-03	4.276E-04	3.945E-04
1300	1400	1.256E-02	8.491E-04	3.912E-04	3.610E-04
1400	1500	1.872E-02	1.266E-03	4.836E-04	4.462E-04
1500	1600	1.543E-02	1.042E-03	3.900E-04	3.598E-04
1600	1700	2.376E-02	1.605E-03	6.504E-04	6.000E-04
1700	1800	1.325E-02	8.958E-04	4.100E-04	3.783E-04
1800	1900	1.471E-02	9.926E-04	4.652E-04	4.292E-04
1900	2000	1.290E-02	8.714E-04	4.084E-04	3.767E-04
2000	2100	1.422E-02	9.597E-04	3.524E-04	3.250E-04
2100	2200	1.794E-02	1.212E-03	4.644E-04	4.284E-04
2200	2300	1.415E-02	9.552E-04	4.464E-04	4.118E-04
2300	2400	1.059E-02	7.152E-04	3.348E-04	3.089E-04

Model ID: CHE_BDSW

Start Hour	End Hour	Spread distance = E to CHRWB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0	0
700	**800**	**2.882E-04**	**2.205E-05**	**0**	**0**
800	900	0.000E+00	0.000E+00	0	0
900	1000	0.000E+00	0.000E+00	0	0
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	0.000E+00	0.000E+00	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0	0

Model ID: CHE_BDSN1-2

Start Hour	End Hour	Spread distance = E to PKREB,PWRNB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0	0
600	700	8.296E-04	6.432E-05	0	0
700	**800**	**8.646E-04**	**6.615E-05**	**0**	**0**
800	900	3.892E-04	3.004E-05	0	0
900	1000	4.560E-04	3.473E-05	0	0
1000	1100	3.394E-04	2.748E-05	0	0
1100	1200	3.270E-04	2.815E-05	0	0
1200	1300	5.025E-04	3.989E-05	0	0
1300	1400	4.954E-04	3.779E-05	0	0
1400	1500	6.159E-04	4.850E-05	0	0
1500	1600	2.643E-04	2.189E-05	0	0
1600	1700	5.987E-04	4.735E-05	0	0
1700	1800	5.821E-04	4.436E-05	0	0
1800	1900	4.064E-04	3.116E-05	0	0
1900	2000	4.293E-04	3.268E-05	0	0
2000	2100	2.388E-04	1.987E-05	0	0
2100	2200	4.840E-04	3.849E-05	0	0
2200	2300	4.399E-04	3.362E-05	0	0
2300	2400	1.996E-04	1.527E-05	0	0

Model ID: CHE_BDSS1-5

Start Hour	End Hour	Spread distance = E to CHREB,PWRSB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0	0
600	700	4.977E-03	3.859E-04	0	0
700	**800**	**3.458E-03**	**2.646E-04**	**0**	**0**
800	900	1.557E-03	1.202E-04	0	0
900	1000	2.736E-03	2.084E-04	0	0
1000	1100	2.036E-03	1.649E-04	0	0
1100	1200	1.962E-03	1.689E-04	0	0
1200	1300	3.015E-03	2.393E-04	0	0
1300	1400	2.972E-03	2.267E-04	0	0
1400	1500	3.696E-03	2.910E-04	0	0
1500	1600	1.586E-03	1.313E-04	0	0
1600	1700	3.592E-03	2.841E-04	0	0
1700	1800	3.493E-03	2.661E-04	0	0
1800	1900	2.438E-03	1.869E-04	0	0
1900	2000	2.576E-03	1.961E-04	0	0
2000	2100	1.433E-03	1.192E-04	0	0
2100	2200	2.904E-03	2.309E-04	0	0
2200	2300	2.639E-03	2.017E-04	0	0
2300	2400	1.996E-03	1.527E-04	0	0

Start Hour	End Hour	Spill Ratio to CHRWB (%)	to PKREB,PWRNB (%)	to CHREB,PWRSB (%)
2400	100	0.00%	0.00%	100.00%
100	200	0.00%	0.00%	0.00%
200	300	0.00%	0.00%	0.00%
300	400	0.00%	0.00%	0.00%
400	500	0.00%	0.00%	0.00%
500	600	14.29%	0.00%	85.71%
600	700	0.00%	14.29%	85.71%
700	**800**	**6.25%**	**18.75%**	**75.00%**
800	900	0.00%	20.00%	80.00%
900	1000	0.00%	14.29%	85.71%
1000	1100	0.00%	14.29%	85.71%
1100	1200	0.00%	14.29%	85.71%
1200	1300	0.00%	14.29%	85.71%
1300	1400	0.00%	14.29%	85.71%
1400	1500	0.00%	14.29%	85.71%
1500	1600	0.00%	14.29%	85.71%
1600	1700	0.00%	14.29%	85.71%
1700	1800	0.00%	14.29%	85.71%
1800	1900	0.00%	14.29%	85.71%
1900	2000	0.00%	14.29%	85.71%
2000	2100	0.00%	14.29%	85.71%
2100	2200	0.00%	14.29%	85.71%
2200	2300	0.00%	14.29%	85.71%
2300	2400	0.00%	9.09%	90.91%

Start Hour	End Hour	Hourly Profile Ratio (0700-0800 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000
100	200	0.0000	0.0000	0.0000	0.0000
200	300	0.0000	0.0000	0.0000	0.0000
300	400	0.0000	0.0000	0.0000	0.0000
400	500	0.0000	0.0000	0.0000	0.0000
500	600	0.0000	0.0000	0.0000	0.0000
600	700	0.5537	0.5571	0.3850	0.3850
700	**800**	**1.0000**	**1.0000**	**1.0000**	**1.0000**
800	900	0.8254	0.8238	0.8439	0.8437
900	1000	0.5187	0.5193	0.5130	0.5130
1000	1100	0.6033	0.6039	0.4611	0.4611
1100	1200	0.6966	0.6979	0.4104	0.4104
1200	1300	0.7362	0.7372	0.5896	0.5896
1300	1400	0.5484	0.5491	0.5395	0.5395
1400	1500	0.8170	0.8184	0.6669	0.6669
1500	1600	0.6736	0.6736	0.5378	0.5377
1600	1700	1.0373	1.0378	0.8968	0.8968
1700	1800	0.5782	0.5793	0.5654	0.5655
1800	1900	0.6420	0.6419	0.6415	0.6415
1900	2000	0.5633	0.5635	0.5631	0.5631
2000	2100	0.6206	0.6206	0.4859	0.4858
2100	2200	0.7831	0.7839	0.6404	0.6403
2200	2300	0.6176	0.6177	0.6156	0.6156
2300	2400	0.4624	0.4625	0.4617	0.4617

Start Hour	End Hour	Hourly Profile Ratio (0700-0800 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0	0
600	700	0.0000	0.0000	0	0
700	**800**	**1.0000**	**1.0000**	**0**	**0**
800	900	0.0000	0.0000	0	0
900	1000	0.0000	0.0000	0	0
1000	1100	0.0000	0.0000	0	0
1100	1200	0.0000	0.0000	0	0
1200	1300	0.0000	0.0000	0	0
1300	1400	0.0000	0.0000	0	0
1400	1500	0.0000	0.0000	0	0
1500	1600	0.0000	0.0000	0	0
1600	1700	0.0000	0.0000	0	0
1700	1800	0.0000	0.0000	0	0
1800	1900	0.0000	0.0000	0	0
1900	2000	0.0000	0.0000	0	0
2000	2100	0.0000	0.0000	0	0
2100	2200	0.0000	0.0000	0	0
2200	2300	0.0000	0.0000	0	0
2300	2400	0.0000	0.0000	0	0

Start Hour	End Hour	Hourly Profile Ratio (0700-0800 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0	0
600	700	0.9595	0.9723	0	0
700	**800**	**1.0000**	**1.0000**	**0**	**0**
800	900	0.4502	0.4542	0	0
900	1000	0.5274	0.5250	0	0
1000	1100	0.3926	0.4154	0	0
1100	1200	0.3782	0.4255	0	0
1200	1300	0.5813	0.6029	0	0
1300	1400	0.5730	0.5712	0	0
1400	1500	0.7124	0.7332	0	0
1500	1600	0.3057	0.3309	0	0
1600	1700	0.6925	0.7157	0	0
1700	1800	0.6733	0.6706	0	0
1800	1900	0.4701	0.4710	0	0
1900	2000	0.4966	0.4941	0	0
2000	2100	0.2762	0.3004	0	0
2100	2200	0.5599	0.5818	0	0
2200	2300	0.5088	0.5083	0	0
2300	2400	0.2309	0.2309	0	0

Start Hour	End Hour	Hourly Profile Ratio (0700-0800 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0	0
600	700	1.4393	1.4584	0	0
700	**800**	**1.0000**	**1.0000**	**0**	**0**
800	900	0.4502	0.4542	0	0
900	1000	0.7911	0.7875	0	0
1000	1100	0.5888	0.6232	0	0
1100	1200	0.5673	0.6383	0	0
1200	1300	0.8719	0.9044	0	0
1300	1400	0.8595	0.8568	0	0
1400	1500	1.0686	1.0998	0	0
1500	1600	0.4586	0.4963	0	0
1600	1700	1.0388	1.0736	0	0
1700	1800	1.0100	1.0058	0	0
1800	1900	0.7051	0.7065	0	0
1900	2000	0.7449	0.7411	0	0
2000	2100	0.4143	0.4506	0	0
2100	2200	0.8398	0.8727	0	0
2200	2300	0.7632	0.7624	0	0
2300	2400	0.5773	0.5772	0	0

Ching Ho Estate PTI — **PTI Type:** Open-area — **Assessment Vehicle:** FBSD

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	80	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	90	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.170	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Calculations — *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Running Emission Factor (g/km·vehicle)				Within PTI (Section 1)+(Section 2) Running Emission Within PTI (g)				A Running Emission Within PTI (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	1000	2	2.9636	0.5374	0.0834	0.0768	1.008E+00	1.827E-01	2.836E-02	2.611E-02	2.799E-04	5.075E-05	7.877E-06	7.253E-06
1000	1100	4	2.9636	0.5374	0.0834	0.0768	2.015E+00	3.654E-01	5.671E-02	5.222E-02	5.598E-04	1.015E-04	1.575E-05	1.451E-05
1100	1200	3	2.9636	0.5374	0.0834	0.0768	1.511E+00	2.741E-01	4.253E-02	3.917E-02	4.198E-04	7.613E-05	1.182E-05	1.088E-05
1200	1300	1	2.9636	0.5374	0.0834	0.0768	5.038E-01	9.136E-02	1.418E-02	1.306E-02	1.399E-04	2.538E-05	3.938E-06	3.627E-06
1300	1400	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	1	2.9636	0.5374	0.0834	0.0768	5.038E-01	9.136E-02	1.418E-02	1.306E-02	1.399E-04	2.538E-05	3.938E-06	3.627E-06
1500	1600	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	3	2.9636	0.5374	0.0834	0.0768	1.511E+00	2.741E-01	4.253E-02	3.917E-02	4.198E-04	7.613E-05	1.182E-05	1.088E-05
1900	2000	3	2.9636	0.5374	0.0834	0.0768	1.511E+00	2.741E-01	4.253E-02	3.917E-02	4.198E-04	7.613E-05	1.182E-05	1.088E-05
2000	2100	1	2.9636	0.5374	0.0834	0.0768	5.038E-01	9.136E-02	1.418E-02	1.306E-02	1.399E-04	2.538E-05	3.938E-06	3.627E-06
2100	2200	2	2.9636	0.5374	0.0834	0.0768	1.008E+00	1.827E-01	2.836E-02	2.611E-02	2.799E-04	5.075E-05	7.877E-06	7.253E-06
2200	2300	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	1	2.9636	0.5374	0.0834	0.0768	5.038E-01	9.136E-02	1.418E-02	1.306E-02	1.399E-04	2.538E-05	3.938E-06	3.627E-06

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.1693	0.3048	0.4064	0.5757	0.7112	0.9482	1.3885	1.7272	2.5400	3.3189	3.7253	4.4026	4.8429	5.0800	5.2154	5.3510	5.4186	5.4186	
NO2	0.0316	0.0569	0.0758	0.1074	0.1327	0.1769	0.2590	0.3222	0.4738	0.6191	0.6949	0.8213	0.9034	0.9476	0.9729	0.9981	1.0108	1.0108	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Total #	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (g) NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	0																			0.000E+00	0.000E+00	0	0
600	700	0																			0.000E+00	0.000E+00	0	0
700	800	0																			0.000E+00	0.000E+00	0	0
800	900	0																			0.000E+00	0.000E+00	0	0
900	1000	1			1																4.064E-01	7.580E-02	0	0
1000	1100	3			3																1.219E+00	2.274E-01	0	0
1100	1200	1			1																4.064E-01	7.580E-02	0	0
1200	1300	0																			0.000E+00	0.000E+00	0	0
1300	1400	0																			0.000E+00	0.000E+00	0	0
1400	1500	0																			0.000E+00	0.000E+00	0	0
1500	1600	0																			0.000E+00	0.000E+00	0	0
1600	1700	0																			0.000E+00	0.000E+00	0	0
1700	1800	0																			0.000E+00	0.000E+00	0	0
1800	1900	2		2																	6.099E-01	1.138E-01	0	0
1900	2000	2		1	1																7.112E-01	1.327E-01	0	0
2000	2100	0																			0.000E+00	0.000E+00	0	0
2100	2200	1								1											1.727E+00	3.222E-01	0	0
2200	2300	0																			0.000E+00	0.000E+00	0	0
2300	2400	0																			0.000E+00	0.000E+00	0	0

Remark: Number of trips were derived based on on-site observations at the PTIs and operators' published schedules.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 2 min(s) — *As On-Site observations

*Cold Idling = 60-720min; Hot idling = 5-50min.

*Total Idling Emission = Cold Idling + Hot Idling

Start Hour	End Hour	Trips (60-720min)	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (5-50min)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	1000	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.212E-01	2.197E-02	1.067E-03	1.067E-03	1.212E-01	2.197E-02	1.067E-03	1.067E-03	3.365E-05	6.102E-06	2.963E-07	2.963E-07
1000	1100	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3	6.058E-02	1.098E-02	5.333E-04	5.333E-04	3.635E-01	6.591E-02	3.200E-03	3.200E-03	3.635E-01	6.591E-02	3.200E-03	3.200E-03	1.010E-04	1.831E-05	8.888E-07	8.888E-07
1100	1200	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.212E-01	2.197E-02	1.067E-03	1.067E-03	1.212E-01	2.197E-02	1.067E-03	1.067E-03	3.365E-05	6.102E-06	2.963E-07	2.963E-07
1200	1300	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	2	7.797E-01	1.414E-01	5.333E-04	5.333E-04	1.559E+00	2.828E-01	1.067E-03	1.067E-03	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.559E+00	2.828E-01	1.067E-03	1.067E-03	4.332E-04	7.855E-05	2.963E-07	2.963E-07
1900	2000	2	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	1	7.797E-01	1.414E-01	5.333E-04	5.333E-04	1.218E-01	2.325E-02	0	0	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	90	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	610	m	(Section 3)

* (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
800	900	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
900	1000	6.058E-02	1.098E-02	5.333E-04	5.333E-04	4.446E-02	8.333E-03	0	0	1.235E-05	2.315E-06	0	0	3.014E-01	5.648E-02	0	0	8.371E-05	1.569E-05	0	0
1000	1100	1.817E-01	3.295E-02	1.600E-03	1.600E-03	1.334E-01	2.500E-02	0	0	3.705E-05	6.945E-06	0	0	9.041E-01	1.694E-01	0	0	2.511E-04	4.707E-05	0	0
1100	1200	6.058E-02	1.098E-02	5.333E-04	5.333E-04	4.446E-02	8.333E-03	0	0	1.235E-05	2.315E-06	0	0	3.014E-01	5.648E-02	0	0	8.371E-05	1.569E-05	0	0
1200	1300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1700	1800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1800	1900	1.212E-01	2.197E-02	1.067E-03	1.067E-03	6.280E-02	1.181E-02	0	0	1.744E-05	3.280E-06	0	0	4.256E-01	8.002E-02	0	0	1.182E-04	2.223E-05	0	0
1900	2000	1.212E-01	2.197E-02	1.067E-03	1.067E-03	7.586E-02	1.424E-02	0	0	2.107E-05	3.955E-06	0	0	5.142E-01	9.649E-02	0	0	1.428E-04	2.680E-05	0	0
2000	2100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2100	2200	7.797E-01	1.414E-01	5.333E-04	5.333E-04	1.218E-01	2.325E-02	0	0	3.384E-05	6.457E-06	0	0	8.257E-01	1.576E-01	0	0	2.293E-04	4.377E-05	0	0
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 1.5 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	1000	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07
1000	1100	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07
1100	1200	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.817E-01	3.295E-02	1.600E-03	1.600E-03	5.048E-05	9.154E-06	4.444E-07	4.444E-07
1200	1300	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07
1300	1400	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07
1500	1600	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07
1900	2000	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07
2000	2100	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07
2100	2200	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07
2200	2300	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07

PART 5 - Sum up all above parts

Model ID: CHE_BSA1

Start Hour	End Hour	Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	**1000**	**3.511E-04**	**6.375E-05**	**8.395E-06**	**7.772E-06**
1000	1100	7.230E-04	1.313E-04	1.686E-05	1.562E-05
1100	1200	5.163E-04	9.370E-05	1.256E-05	1.162E-05
1200	1300	1.652E-04	2.995E-05	4.161E-06	3.849E-06
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	1.652E-04	2.995E-05	4.161E-06	3.849E-06
1500	1600	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	5.298E-04	9.619E-05	1.263E-05	1.169E-05
1900	2000	5.335E-04	9.687E-05	1.263E-05	1.169E-05
2000	2100	1.652E-04	2.995E-05	4.161E-06	3.849E-06
2100	2200	7.722E-04	1.403E-04	8.395E-06	7.772E-06
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	1.652E-04	2.995E-05	4.161E-06	3.849E-06

*No model in this section as no spread emission will be emitted.

Start Hour	End Hour	Spread distance = E to CHRWB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0	0	0	0
100	200	0	0	0	0
200	300	0	0	0	0
300	400	0	0	0	0
400	500	0	0	0	0
500	600	0	0	0	0
600	700	0	0	0	0
700	800	0	0	0	0
800	900	0	0	0	0
900	**1000**	**0**	**0**	**0**	**0**
1000	1100	0	0	0	0
1100	1200	0	0	0	0
1200	1300	0	0	0	0
1300	1400	0	0	0	0
1400	1500	0	0	0	0
1500	1600	0	0	0	0
1600	1700	0	0	0	0
1700	1800	0	0	0	0
1800	1900	0	0	0	0
1900	2000	0	0	0	0
2000	2100	0	0	0	0
2100	2200	0	0	0	0
2200	2300	0	0	0	0
2300	2400	0	0	0	0

Model ID: CHE_BSSN1-2

Start Hour	End Hour	Spread distance = E to PKREB,PWRNB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0	0
700	800	0.000E+00	0.000E+00	0	0
800	900	0.000E+00	0.000E+00	0	0
900	**1000**	**1.196E-05**	**2.241E-06**	**0**	**0**
1000	1100	3.588E-05	6.724E-06	0	0
1100	1200	1.196E-05	2.241E-06	0	0
1200	1300	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	1.689E-05	3.176E-06	0	0
1900	2000	2.040E-05	3.829E-06	0	0
2000	2100	0.000E+00	0.000E+00	0	0
2100	2200	3.276E-05	6.252E-06	0	0
2200	2300	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0	0

Model ID: CHE_BSSS1-5

Start Hour	End Hour	Spread distance = E to CHREB,PWRSB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0	0
700	800	0.000E+00	0.000E+00	0	0
800	900	0.000E+00	0.000E+00	0	0
900	**1000**	**7.175E-05**	**1.345E-05**	**0**	**0**
1000	1100	2.153E-04	4.034E-05	0	0
1100	1200	7.175E-05	1.345E-05	0	0
1200	1300	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	1.013E-04	1.905E-05	0	0
1900	2000	1.224E-04	2.297E-05	0	0
2000	2100	0.000E+00	0.000E+00	0	0
2100	2200	1.966E-04	3.751E-05	0	0
2200	2300	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0	0

Start Hour	End Hour	Spill Ratio to CHRWB (%)	to PKREB,PWRNB (%)	to CHREB,PWRSB (%)
2400	100	0.00%	0.00%	0.00%
100	200	0.00%	0.00%	0.00%
200	300	0.00%	0.00%	0.00%
300	400	0.00%	0.00%	0.00%
400	500	0.00%	0.00%	0.00%
500	600	0.00%	0.00%	0.00%
600	700	0.00%	0.00%	0.00%
700	800	0.00%	0.00%	0.00%
800	900	0.00%	0.00%	0.00%
900	**1000**	**0.00%**	**14.29%**	**85.71%**
1000	1100	0.00%	14.29%	85.71%
1100	1200	0.00%	14.29%	85.71%
1200	1300	0.00%	14.29%	85.71%
1300	1400	0.00%	0.00%	0.00%
1400	1500	0.00%	14.29%	85.71%
1500	1600	0.00%	0.00%	0.00%
1600	1700	0.00%	0.00%	0.00%
1700	1800	0.00%	0.00%	0.00%
1800	1900	0.00%	14.29%	85.71%
1900	2000	0.00%	14.29%	85.71%
2000	2100	0.00%	14.29%	85.71%
2100	2200	0.00%	14.29%	85.71%
2200	2300	0.00%	0.00%	0.00%
2300	2400	0.00%	9.09%	90.91%

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000
100	200	0.0000	0.0000	0.0000	0.0000
200	300	0.0000	0.0000	0.0000	0.0000
300	400	0.0000	0.0000	0.0000	0.0000
400	500	0.0000	0.0000	0.0000	0.0000
500	600	0.0000	0.0000	0.0000	0.0000
600	700	0.0000	0.0000	0.0000	0.0000
700	800	0.0000	0.0000	0.0000	0.0000
800	900	0.0000	0.0000	0.0000	0.0000
900	**1000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**
1000	1100	2.0591	2.0602	2.0088	2.0095
1100	1200	1.4704	1.4699	1.4956	1.4952
1200	1300	0.4704	0.4699	0.4956	0.4952
1300	1400	0.0000	0.0000	0.0000	0.0000
1400	1500	0.4704	0.4699	0.4956	0.4952
1500	1600	0.0000	0.0000	0.0000	0.0000
1600	1700	0.0000	0.0000	0.0000	0.0000
1700	1800	0.0000	0.0000	0.0000	0.0000
1800	1900	1.5089	1.5089	1.5044	1.5048
1900	2000	1.5192	1.5195	1.5044	1.5048
2000	2100	0.4704	0.4699	0.4956	0.4952
2100	2200	2.1990	2.2015	1.0000	1.0000
2200	2300	0.0000	0.0000	0.0000	0.0000
2300	2400	0.4704	0.4699	0.4956	0.4952

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0	0	0	0
100	200	0	0	0	0
200	300	0	0	0	0
300	400	0	0	0	0
400	500	0	0	0	0
500	600	0	0	0	0
600	700	0	0	0	0
700	800	0	0	0	0
800	900	0	0	0	0
900	**1000**	**0**	**0**	**0**	**0**
1000	1100	0	0	0	0
1100	1200	0	0	0	0
1200	1300	0	0	0	0
1300	1400	0	0	0	0
1400	1500	0	0	0	0
1500	1600	0	0	0	0
1600	1700	0	0	0	0
1700	1800	0	0	0	0
1800	1900	0	0	0	0
1900	2000	0	0	0	0
2000	2100	0	0	0	0
2100	2200	0	0	0	0
2200	2300	0	0	0	0
2300	2400	0	0	0	0

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0	0
600	700	0.0000	0.0000	0	0
700	800	0.0000	0.0000	0	0
800	900	0.0000	0.0000	0	0
900	**1000**	**1.0000**	**1.0000**	**0**	**0**
1000	1100	3.0000	3.0000	0	0
1100	1200	1.0000	1.0000	0	0
1200	1300	0.0000	0.0000	0	0
1300	1400	0.0000	0.0000	0	0
1400	1500	0.0000	0.0000	0	0
1500	1600	0.0000	0.0000	0	0
1600	1700	0.0000	0.0000	0	0
1700	1800	0.0000	0.0000	0	0
1800	1900	1.4124	1.4168	0	0
1900	2000	1.7062	1.7084	0	0
2000	2100	0.0000	0.0000	0	0
2100	2200	2.7397	2.7896	0	0
2200	2300	0.0000	0.0000	0	0
2300	2400	0.0000	0.0000	0	0

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0	0
600	700	0.0000	0.0000	0	0
700	800	0.0000	0.0000	0	0
800	900	0.0000	0.0000	0	0
900	**1000**	**1.0000**	**1.0000**	**0**	**0**
1000	1100	3.0000	3.0000	0	0
1100	1200	1.0000	1.0000	0	0
1200	1300	0.0000	0.0000	0	0
1300	1400	0.0000	0.0000	0	0
1400	1500	0.0000	0.0000	0	0
1500	1600	0.0000	0.0000	0	0
1600	1700	0.0000	0.0000	0	0
1700	1800	0.0000	0.0000	0	0
1800	1900	1.4124	1.4168	0	0
1900	2000	1.7062	1.7084	0	0
2000	2100	0.0000	0.0000	0	0
2100	2200	2.7397	2.7896	0	0
2200	2300	0.0000	0.0000	0	0
2300	2400	0.0000	0.0000	0	0

Ching Ho Estate PTI

PTI Type: Open-area

Assessment Vehicle: PLB
Fuel: DIESEL

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point = 80 m (Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress = 90 m (Section 2 - Egress)
Total Travelling Distance in PTI 0.170 km (1km = 1000m)
Travelling Speed = 10 km/h

Population Ratio Extracted from EMFAC

Diesel %	LPG %
76.13%	23.87%

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Total (adjusted with fuel %)	Running Emission Factor (g/km·vehicle)				Within PTI (Section 1)+(Section 2) Running Emission Within PTI (g)				A Running Emission Within PTI (g/s)			
				NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	0.00	0.7831	0.3046	0.0657	0.0604	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	0.00	0.7831	0.3046	0.0657	0.0604	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	0.00	0.7831	0.3046	0.0657	0.0604	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	0.00	0.7831	0.3046	0.0657	0.0604	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	0.00	0.7831	0.3046	0.0657	0.0604	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	0.00	0.7831	0.3046	0.0657	0.0604	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0	0.00	0.7831	0.3046	0.0657	0.0604	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	9	6.85	0.7831	0.3046	0.0657	0.0604	9.121E-01	3.548E-01	7.652E-02	7.035E-02	2.534E-04	9.855E-05	2.126E-05	1.954E-05
800	900	11	8.37	0.7831	0.3046	0.0657	0.0604	1.115E+00	4.336E-01	9.353E-02	8.599E-02	3.097E-04	1.205E-04	2.598E-05	2.388E-05
900	1000	10	7.61	0.7831	0.3046	0.0657	0.0604	1.013E+00	3.942E-01	8.503E-02	7.817E-02	2.815E-04	1.095E-04	2.362E-05	2.171E-05
1000	1100	12	9.14	0.7831	0.3046	0.0657	0.0604	1.216E+00	4.730E-01	1.020E-01	9.380E-02	3.378E-04	1.314E-04	2.834E-05	2.606E-05
1100	1200	12	9.14	0.7831	0.3046	0.0657	0.0604	1.216E+00	4.730E-01	1.020E-01	9.380E-02	3.378E-04	1.314E-04	2.834E-05	2.606E-05
1200	1300	14	10.66	0.7831	0.3046	0.0657	0.0604	1.419E+00	5.519E-01	1.190E-01	1.094E-01	3.941E-04	1.533E-04	3.307E-05	3.040E-05
1300	1400	10	7.61	0.7831	0.3046	0.0657	0.0604	1.013E+00	3.942E-01	8.503E-02	7.817E-02	2.815E-04	1.095E-04	2.362E-05	2.171E-05
1400	1500	8	6.09	0.7831	0.3046	0.0657	0.0604	8.108E-01	3.154E-01	6.802E-02	6.253E-02	2.252E-04	8.760E-05	1.890E-05	1.737E-05
1500	1600	8	6.09	0.7831	0.3046	0.0657	0.0604	8.108E-01	3.154E-01	6.802E-02	6.253E-02	2.252E-04	8.760E-05	1.890E-05	1.737E-05
1600	1700	7	5.33	0.7831	0.3046	0.0657	0.0604	7.094E-01	2.759E-01	5.952E-02	5.472E-02	1.971E-04	7.665E-05	1.653E-05	1.520E-05
1700	1800	8	6.09	0.7831	0.3046	0.0657	0.0604	8.108E-01	3.154E-01	6.802E-02	6.253E-02	2.252E-04	8.760E-05	1.890E-05	1.737E-05
1800	1900	8	6.09	0.7831	0.3046	0.0657	0.0604	8.108E-01	3.154E-01	6.802E-02	6.253E-02	2.252E-04	8.760E-05	1.890E-05	1.737E-05
1900	2000	7	5.33	0.7831	0.3046	0.0657	0.0604	7.094E-01	2.759E-01	5.952E-02	5.472E-02	1.971E-04	7.665E-05	1.653E-05	1.520E-05
2000	2100	5	3.81	0.7831	0.3046	0.0657	0.0604	5.067E-01	1.971E-01	4.251E-02	3.908E-02	1.408E-04	5.475E-05	1.181E-05	1.086E-05
2100	2200	12	9.14	0.7831	0.3046	0.0657	0.0604	1.216E+00	4.730E-01	1.020E-01	9.380E-02	3.378E-04	1.314E-04	2.834E-05	2.606E-05
2200	2300	5	3.81	0.7831	0.3046	0.0657	0.0604	5.067E-01	1.971E-01	4.251E-02	3.908E-02	1.408E-04	5.475E-05	1.181E-05	1.086E-05
2300	2400	0	0.00	0.7831	0.3046	0.0657	0.0604	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.0425	0.0765	0.1020	0.1443	0.1783	0.2378	0.3483	0.4331	0.6370	0.8324	0.9343	1.1041	1.2146	1.2740	1.3080	1.3419	1.3589	1.3589	
NO2	0.0165	0.0297	0.0396	0.0562	0.0694	0.0925	0.1354	0.1685	0.2477	0.3237	0.3633	0.4294	0.4723	0.4955	0.5087	0.5219	0.5285	0.5285	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Terminating Vehicles	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (adjusted with fuel %) (g) NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	0																			0.000E+00	0.000E+00	0	0
600	700	0																			0.000E+00	0.000E+00	0	0
700	800	0																			0.000E+00	0.000E+00	0	0
800	900	5	3	1	1																2.330E-01	9.044E-02	0	0
900	1000	8	6	1	1																3.300E-01	1.281E-01	0	0
1000	1100	6	5		1																2.394E-01	9.295E-02	0	0
1100	1200	2		2																	1.165E-01	4.522E-02	0	0
1200	1300	1		1																	5.824E-02	2.261E-02	0	0
1300	1400	1		1																	5.824E-02	2.261E-02	0	0
1400	1500	7	1	1	3	1							1								1.145E+00	4.450E-01	0	0
1500	1600	6	5	1																	2.200E-01	8.542E-02	0	0
1600	1700	1	1																		3.235E-02	1.256E-02	0	0
1700	1800	3	2	1																	1.229E-01	4.773E-02	0	0
1800	1900	1	1																		3.235E-02	1.256E-02	0	0
1900	2000	7		2	4	1															5.369E-01	2.086E-01	0	0
2000	2100	4				3	1														4.653E-01	1.812E-01	0	0
2100	2200	4		1	1		2														4.074E-01	1.584E-01	0	0
2200	2300	2	1	1																	9.059E-02	3.517E-02	0	0
2300	2400	0																			0.000E+00	0.000E+00	0	0

Remark: Number of trips were derived based on on-site observations at the PTI.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 1.5 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min.

Start Hour	End Hour	Trips (adjusted with fuel %) (60-	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP
2400	100	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	1000	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1000	1100	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0.76	4.320E-02	1.680E-02	4.333E-04	4.333E-04	4.933E-02	1.919E-02	4.948E-04	4.948E-04
1500	1600	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Start Hour	End Hour	Trips (adjusted with fuel %)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP
2400	100	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	3.81	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.427E-01	5.551E-02	2.474E-03	2.474E-03
900	1000	6.09	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.283E-01	8.882E-02	3.959E-03	3.959E-03
1000	1100	4.57	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.713E-01	6.662E-02	2.969E-03	2.969E-03
1100	1200	1.52	2.500E-02	9.723E-03	4.333E-04	4.333E-04	5.709E-02	2.221E-02	9.897E-04	9.897E-04
1200	1300	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.854E-02	1.110E-02	4.948E-04	4.948E-04
1300	1400	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.854E-02	1.110E-02	4.948E-04	4.948E-04
1400	1500	4.57	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.713E-01	6.662E-02	2.969E-03	2.969E-03
1500	1600	4.57	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.713E-01	6.662E-02	2.969E-03	2.969E-03
1600	1700	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.854E-02	1.110E-02	4.948E-04	4.948E-04
1700	1800	2.28	2.500E-02	9.723E-03	4.333E-04	4.333E-04	8.563E-02	3.331E-02	1.485E-03	1.485E-03
1800	1900	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.854E-02	1.110E-02	4.948E-04	4.948E-04
1900	2000	5.33	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.998E-01	7.772E-02	3.464E-03	3.464E-03
2000	2100	3.05	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.142E-01	4.441E-02	1.979E-03	1.979E-03
2100	2200	3.05	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.142E-01	4.441E-02	1.979E-03	1.979E-03
2200	2300	1.52	2.500E-02	9.723E-03	4.333E-04	4.333E-04	5.709E-02	2.221E-02	9.897E-04	9.897E-04
2300	2400	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

*Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	1.427E-01	5.551E-02	2.474E-03	2.474E-03	3.964E-05	1.542E-05	6.873E-07	6.873E-07
900	1000	2.283E-01	8.882E-02	3.959E-03	3.959E-03	6.343E-05	2.467E-05	1.100E-06	1.100E-06
1000	1100	1.713E-01	6.662E-02	2.969E-03	2.969E-03	4.757E-05	1.850E-05	8.247E-07	8.247E-07
1100	1200	5.709E-02	2.221E-02	9.897E-04	9.897E-04	1.586E-05	6.168E-06	2.749E-07	2.749E-07
1200	1300	2.854E-02	1.110E-02	4.948E-04	4.948E-04	7.929E-06	3.084E-06	1.375E-07	1.375E-07
1300	1400	2.854E-02	1.110E-02	4.948E-04	4.948E-04	7.929E-06	3.084E-06	1.375E-07	1.375E-07
1400	1500	2.206E-01	8.580E-02	3.464E-03	3.464E-03	6.128E-05	2.383E-05	9.622E-07	9.622E-07
1500	1600	1.713E-01	6.662E-02	2.969E-03	2.969E-03	4.757E-05	1.850E-05	8.247E-07	8.247E-07
1600	1700	2.854E-02	1.110E-02	4.948E-04	4.948E-04	7.929E-06	3.084E-06	1.375E-07	1.375E-07
1700	1800	8.563E-02	3.331E-02	1.485E-03	1.485E-03	2.379E-05	9.252E-06	4.124E-07	4.124E-07
1800	1900	2.854E-02	1.110E-02	4.948E-04	4.948E-04	7.929E-06	3.084E-06	1.375E-07	1.375E-07
1900	2000	1.998E-01	7.772E-02	3.464E-03	3.464E-03	5.550E-05	2.159E-05	9.622E-07	9.622E-07
2000	2100	1.142E-01	4.441E-02	1.979E-03	1.979E-03	3.172E-05	1.234E-05	5.498E-07	5.498E-07
2100	2200	1.142E-01	4.441E-02	1.979E-03	1.979E-03	3.172E-05	1.234E-05	5.498E-07	5.498E-07
2200	2300	5.709E-02	2.221E-02	9.897E-04	9.897E-04	1.586E-05	6.168E-06	2.749E-07	2.749E-07
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Parameters

Maximum Duration for adjusting Start Emission = 1 min(s) *As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress = 90 m (Section 2)
Travelling Distance from PTI Egress to Open Road = 610 m (Section 3) * (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
800	900	9.515E-02	3.701E-02	1.649E-03	1.649E-03	1.772E-02	6.870E-03	0	0	4.922E-06	1.908E-06	0	0	1.201E-01	4.656E-02	0	0	3.336E-05	1.293E-05	0	0
900	1000	1.522E-01	5.921E-02	2.639E-03	2.639E-03	2.286E-02	8.860E-03	0	0	6.349E-06	2.461E-06	0	0	1.549E-01	6.005E-02	0	0	4.303E-05	1.668E-05	0	0
1000	1100	1.142E-01	4.441E-02	1.979E-03	1.979E-03	1.610E-02	6.241E-03	0	0	4.473E-06	1.734E-06	0	0	1.091E-01	4.230E-02	0	0	3.032E-05	1.175E-05	0	0
1100	1200	3.806E-02	1.480E-02	6.598E-04	6.598E-04	1.008E-02	3.911E-03	0	0	2.801E-06	1.086E-06	0	0	6.834E-02	2.651E-02	0	0	1.898E-05	7.363E-06	0	0
1200	1300	1.903E-02	7.402E-03	3.299E-04	3.299E-04	5.041E-03	1.955E-03	0	0	1.400E-06	5.432E-07	0	0	3.417E-02	1.325E-02	0	0	9.491E-06	3.681E-06	0	0
1300	1400	1.903E-02	7.402E-03	3.299E-04	3.299E-04	5.041E-03	1.955E-03	0	0	1.400E-06	5.432E-07	0	0	3.417E-02	1.325E-02	0	0	9.491E-06	3.681E-06	0	0
1400	1500	1.471E-01	5.720E-02	2.309E-03	2.309E-03	1.283E-01	4.986E-02	0	0	3.563E-05	1.385E-05	0	0	8.693E-01	3.379E-01	0	0	2.415E-04	9.386E-05	0	0
1500	1600	1.142E-01	4.441E-02	1.979E-03	1.979E-03	1.361E-02	5.272E-03	0	0	3.780E-06	1.464E-06	0	0	9.223E-02	3.573E-02	0	0	2.562E-05	9.926E-06	0	0
1600	1700	1.903E-02	7.402E-03	3.299E-04	3.299E-04	1.713E-03	6.634E-04	0	0	4.759E-07	1.843E-07	0	0	1.161E-02	4.496E-03	0	0	3.226E-06	1.249E-06	0	0
1700	1800	5.709E-02	2.221E-02	9.897E-04	9.897E-04	8.468E-03	3.282E-03	0	0	2.352E-06	9.117E-07	0	0	5.739E-02	2.225E-02	0	0	1.594E-05	6.179E-06	0	0
1800	1900	1.903E-02	7.402E-03	3.299E-04	3.299E-04	1.713E-03	6.634E-04	0	0	4.759E-07	1.843E-07	0	0	1.161E-02	4.496E-03	0	0	3.226E-06	1.249E-06	0	0
1900	2000	1.332E-01	5.181E-02	2.309E-03	2.309E-03	5.191E-02	2.016E-02	0	0	1.442E-05	5.599E-06	0	0	3.518E-01	1.366E-01	0	0	9.773E-05	3.795E-05	0	0
2000	2100	7.612E-02	2.961E-02	1.320E-03	1.320E-03	5.004E-02	1.949E-02	0	0	1.390E-05	5.414E-06	0	0	3.391E-01	1.321E-01	0	0	9.421E-05	3.669E-05	0	0
2100	2200	7.612E-02	2.961E-02	1.320E-03	1.320E-03	4.259E-02	1.656E-02	0	0	1.183E-05	4.601E-06	0	0	2.887E-01	1.123E-01	0	0	8.018E-05	3.118E-05	0	0
2200	2300	3.806E-02	1.480E-02	6.598E-04	6.598E-04	6.754E-03	2.619E-03	0	0	1.876E-06	7.274E-07	0	0	4.578E-02	1.775E-02	0	0	1.272E-05	4.930E-06	0	0
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 2 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Bypass Vehicle (adjusted with	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
				NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	9	6.85	2.500E-02	9.723E-03	4.333E-04	4.333E-04	3.425E-01	1.332E-01	5.938E-03	5.938E-03	9.515E-05	3.701E-05	1.649E-06	1.649E-06
800	900	6	4.57	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.283E-01	8.882E-02	3.959E-03	3.959E-03	6.343E-05	2.467E-05	1.100E-06	1.100E-06
900	1000	2	1.52	2.500E-02	9.723E-03	4.333E-04	4.333E-04	7.612E-02	2.961E-02	1.320E-03	1.320E-03	2.114E-05	8.224E-06	3.665E-07	3.665E-07
1000	1100	6	4.57	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.283E-01	8.882E-02	3.959E-03	3.959E-03	6.343E-05	2.467E-05	1.100E-06	1.100E-06
1100	1200	10	7.61	2.500E-02	9.723E-03	4.333E-04	4.333E-04	3.806E-01	1.480E-01	6.598E-03	6.598E-03	1.057E-04	4.112E-05	1.833E-06	1.833E-06
1200	1300	13	9.90	2.500E-02	9.723E-03	4.333E-04	4.333E-04	4.948E-01	1.924E-01	8.577E-03	8.577E-03	1.374E-04	5.346E-05	2.383E-06	2.383E-06
1300	1400	9	6.85	2.500E-02	9.723E-03	4.333E-04	4.333E-04	3.425E-01	1.332E-01	5.938E-03	5.938E-03	9.515E-05	3.701E-05	1.649E-06	1.649E-06
1400	1500	1	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	3.806E-02	1.480E-02	6.598E-04	6.598E-04	1.057E-05	4.112E-06	1.833E-07	1.833E-07
1500	1600	2	1.52	2.500E-02	9.723E-03	4.333E-04	4.333E-04	7.612E-02	2.961E-02	1.320E-03	1.320E-03	2.114E-05	8.224E-06	3.665E-07	3.665E-07
1600	1700	6	4.57	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.283E-01	8.882E-02	3.959E-03	3.959E-03	6.343E-05	2.467E-05	1.100E-06	1.100E-06
1700	1800	5	3.81	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.903E-01	7.402E-02	3.299E-03	3.299E-03	5.286E-05	2.056E-05	9.164E-07	9.164E-07
1800	1900	7	5.33	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.664E-01	1.036E-01	4.618E-03	4.618E-03	7.400E-05	2.878E-05	1.283E-06	1.283E-06
1900	2000	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	1	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	3.806E-02	1.480E-02	6.598E-04	6.598E-04	1.057E-05	4.112E-06	1.833E-07	1.833E-07
2100	2200	8	6.09	2.500E-02	9.723E-03	4.333E-04	4.333E-04	3.045E-01	1.184E-01	5.278E-03	5.278E-03	8.457E-05	3.290E-05	1.466E-06	1.466E-06
2200	2300	3	2.28	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.142E-01	4.441E-02	1.979E-03	1.979E-03	3.172E-05	1.234E-05	5.498E-07	5.498E-07
2300	2400	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PART 5 - Sum up all above parts

Model ID: CHE_PDA1

Calculations		Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)			
Start Hour	End Hour	NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	3.485E-04	1.356E-04	2.291E-05	2.119E-05
800	**900**	**4.177E-04**	**1.625E-04**	**2.777E-05**	**2.567E-05**
900	1000	3.724E-04	1.449E-04	2.508E-05	2.318E-05
1000	1100	4.533E-04	1.763E-04	3.027E-05	2.798E-05
1100	1200	4.622E-04	1.798E-04	3.045E-05	2.816E-05
1200	1300	5.409E-04	2.104E-04	3.559E-05	3.292E-05
1300	1400	3.860E-04	1.501E-04	2.541E-05	2.350E-05
1400	1500	3.327E-04	1.294E-04	2.004E-05	1.852E-05
1500	1600	2.977E-04	1.158E-04	2.009E-05	1.856E-05
1600	1700	2.689E-04	1.046E-04	1.777E-05	1.644E-05
1700	1800	3.042E-04	1.183E-04	2.022E-05	1.870E-05
1800	1900	3.076E-04	1.197E-04	2.032E-05	1.879E-05
1900	2000	2.670E-04	1.038E-04	1.750E-05	1.616E-05
2000	2100	1.969E-04	7.661E-05	1.254E-05	1.159E-05
2100	2200	4.659E-04	1.812E-04	3.036E-05	2.807E-05
2200	2300	1.902E-04	7.398E-05	1.263E-05	1.168E-05
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Model ID: CHE_PDSW

Spread distance = E to Ching Hiu Road Westbound Total Emission (g/s)			
NO	NO_2	RSP	FSP
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
3.336E-05	**1.293E-05**	**0**	**0**
4.303E-05	1.668E-05	0	0
3.032E-05	1.175E-05	0	0
1.898E-05	7.363E-06	0	0
9.491E-06	3.681E-06	0	0
9.491E-06	3.681E-06	0	0
2.415E-04	9.386E-05	0	0
2.562E-05	9.926E-06	0	0
3.226E-06	1.249E-06	0	0
1.594E-05	6.179E-06	0	0
3.226E-06	1.249E-06	0	0
9.773E-05	3.795E-05	0	0
9.421E-05	3.669E-05	0	0
8.018E-05	3.118E-05	0	0
1.272E-05	4.930E-06	0	0
0.000E+00	0.000E+00	0	0

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
600	700	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
700	800	0.8344	0.8345	0.8249	0.8255	0.0000	0.0000	0	0
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**0**	**0**
900	1000	0.8917	0.8917	0.9034	0.9029	1.2901	1.2897	0	0
1000	1100	1.0853	1.0853	1.0900	1.0899	0.9089	0.9085	0	0
1100	1200	1.1066	1.1066	1.0966	1.0971	0.5690	0.5693	0	0
1200	1300	1.2950	1.2951	1.2816	1.2823	0.2845	0.2846	0	0
1300	1400	0.9242	0.9242	0.9149	0.9154	0.2845	0.2846	0	0
1400	1500	0.7965	0.7965	0.7217	0.7213	7.2392	7.2572	0	0
1500	1600	0.7128	0.7128	0.7234	0.7231	0.7680	0.7674	0	0
1600	1700	0.6438	0.6438	0.6400	0.6403	0.0967	0.0966	0	0
1700	1800	0.7284	0.7284	0.7283	0.7284	0.4779	0.4778	0	0
1800	1900	0.7365	0.7365	0.7316	0.7320	0.0967	0.0966	0	0
1900	2000	0.6392	0.6392	0.6301	0.6295	2.9297	2.9342	0	0
2000	2100	0.4715	0.4716	0.4517	0.4515	2.8241	2.8369	0	0
2100	2200	1.1156	1.1156	1.0933	1.0935	2.4037	2.4108	0	0
2200	2300	0.4554	0.4554	0.4550	0.4550	0.3812	0.3812	0	0
2300	2400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0

Ching Ho Estate PTI

PTI Type: Open-area

Assessment Vehicle: PLB
Fuel: LPG

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	80	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	90	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.170	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Population Ratio Extracted from EMFAC

Diesel %	LPG %
76.13%	23.87%

Calculations

*Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Total (adjusted with fuel %)	Within PTI (Section 1)+(Section 2)								A			
				Running Emission Factor (g/km·vehicle)				Running Emission Within PTI (g)				Running Emission Within PTI (g/s)			
				NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	0.00	1.9716	0.0099	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0	0.00	1.9716	0.0099	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0	0.00	1.9716	0.0099	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0	0.00	1.9716	0.0099	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0	0.00	1.9716	0.0099	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0	0.00	1.9716	0.0099	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	0	0.00	1.9716	0.0099	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
700	800	9	2.15	1.9716	0.0099	0	0	7.201E-01	3.616E-03	0	0	2.000E-04	1.004E-06	0	0
800	900	11	2.63	1.9716	0.0099	0	0	8.801E-01	4.419E-03	0	0	2.445E-04	1.228E-06	0	0
900	1000	10	2.39	1.9716	0.0099	0	0	8.001E-01	4.018E-03	0	0	2.223E-04	1.116E-06	0	0
1000	1100	12	2.86	1.9716	0.0099	0	0	9.601E-01	4.821E-03	0	0	2.667E-04	1.339E-06	0	0
1100	1200	12	2.86	1.9716	0.0099	0	0	9.601E-01	4.821E-03	0	0	2.667E-04	1.339E-06	0	0
1200	1300	14	3.34	1.9716	0.0099	0	0	1.120E+00	5.625E-03	0	0	3.112E-04	1.562E-06	0	0
1300	1400	10	2.39	1.9716	0.0099	0	0	8.001E-01	4.018E-03	0	0	2.223E-04	1.116E-06	0	0
1400	1500	8	1.91	1.9716	0.0099	0	0	6.401E-01	3.214E-03	0	0	1.778E-04	8.928E-07	0	0
1500	1600	8	1.91	1.9716	0.0099	0	0	6.401E-01	3.214E-03	0	0	1.778E-04	8.928E-07	0	0
1600	1700	7	1.67	1.9716	0.0099	0	0	5.601E-01	2.812E-03	0	0	1.556E-04	7.812E-07	0	0
1700	1800	8	1.91	1.9716	0.0099	0	0	6.401E-01	3.214E-03	0	0	1.778E-04	8.928E-07	0	0
1800	1900	8	1.91	1.9716	0.0099	0	0	6.401E-01	3.214E-03	0	0	1.778E-04	8.928E-07	0	0
1900	2000	7	1.67	1.9716	0.0099	0	0	5.601E-01	2.812E-03	0	0	1.556E-04	7.812E-07	0	0
2000	2100	5	1.19	1.9716	0.0099	0	0	4.001E-01	2.009E-03	0	0	1.111E-04	5.580E-07	0	0
2100	2200	12	2.86	1.9716	0.0099	0	0	9.601E-01	4.821E-03	0	0	2.667E-04	1.339E-06	0	0
2200	2300	5	1.19	1.9716	0.0099	0	0	4.001E-01	2.009E-03	0	0	1.111E-04	5.580E-07	0	0
2300	2400	0	0.00	1.9716	0.0099	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	1.7882	2.6944	4.2857	5.5824	6.5845	7.2919	7.7047	7.9231	7.8940	7.8496	7.7897	7.7145	7.6239	7.5179	7.3966	7.2598	7.1077	6.9403	
NO2	0.0090	0.0136	0.0216	0.0282	0.0332	0.0368	0.0389	0.0400	0.0399	0.0396	0.0393	0.0389	0.0385	0.0380	0.0373	0.0367	0.0359	0.0350	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Terminating Vehicles	Number of Trips																		Start Emission (adjusted with fuel %) (g)			
			5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	0																			0.000E+00	0.000E+00	0	0
600	700	0																			0.000E+00	0.000E+00	0	0
700	800	0																			0.000E+00	0.000E+00	0	0
800	900	5	3	1	1																2.947E+00	1.485E-02	0	0
900	1000	8	6	1	1																4.228E+00	2.129E-02	0	0
1000	1100	6	5		1																3.157E+00	1.590E-02	0	0
1100	1200	2		2																	1.286E+00	6.493E-03	0	0
1200	1300	1		1																	6.432E-01	3.247E-03	0	0
1300	1400	1		1																	6.432E-01	3.247E-03	0	0
1400	1500	7	1	1	3	1							1								7.331E+00	3.698E-02	0	0
1500	1600	6	5	1																	2.778E+00	1.399E-02	0	0
1600	1700	1	1																		4.269E-01	2.148E-03	0	0
1700	1800	3	2	1																	1.497E+00	7.543E-03	0	0
1800	1900	1	1																		4.269E-01	2.148E-03	0	0
1900	2000	7		2	4	1															6.711E+00	3.385E-02	0	0
2000	2100	4				3	1														5.570E+00	2.812E-02	0	0
2100	2200	4		1	1		2														4.810E+00	2.425E-02	0	0
2200	2300	2	1	1																	1.070E+00	5.395E-03	0	0
2300	2400	0																			0.000E+00	0.000E+00	0	0

Remark: Number of trips were derived based on on-site observations at the PTI.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 1.5 min(s) *As On-Site observations

*Cold Idling = 240-720min; Hot idling = 5-180min.

*Total Idling Emission = Cold Idling + Hot idling

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Trips (adjusted with fuel %) (60-	Cold Idling Emission Factor (g/min)				Cold Idling Emission (g)				Trips (adjusted with fuel %)	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				Total Idling Emission within PTI (g)				B Total Idling Emission within PTI (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.19	3.152E-01	1.583E-03	5.680E-04	5.680E-04	5.643E-01	2.834E-03	1.017E-03	1.017E-03	5.643E-01	2.834E-03	1.017E-03	1.017E-03	1.568E-04	7.871E-07	2.825E-07	2.825E-07
900	1000	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.91	3.152E-01	1.583E-03	5.680E-04	5.680E-04	9.029E-01	4.534E-03	1.627E-03	1.627E-03	9.029E-01	4.534E-03	1.627E-03	1.627E-03	2.508E-04	1.259E-06	4.520E-07	4.520E-07
1000	1100	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.43	3.152E-01	1.583E-03	5.680E-04	5.680E-04	6.772E-01	3.400E-03	1.220E-03	1.220E-03	6.772E-01	3.400E-03	1.220E-03	1.220E-03	1.881E-04	9.446E-07	3.390E-07	3.390E-07
1100	1200	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.48	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	6.270E-05	3.149E-07	1.130E-07	1.130E-07
1200	1300	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.24	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.129E-01	5.667E-04	2.034E-04	2.034E-04	1.129E-01	5.667E-04	2.034E-04	2.034E-04	3.135E-05	1.574E-07	5.650E-08	5.650E-08
1300	1400	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.24	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.129E-01	5.667E-04	2.034E-04	2.034E-04	1.129E-01	5.667E-04	2.034E-04	2.034E-04	3.135E-05	1.574E-07	5.650E-08	5.650E-08
1400	1500	0.24	2.425E-01	1.217E-03	5.680E-04	5.680E-04	8.682E-02	4.360E-04	2.034E-04	2.034E-04	1.43	3.152E-01	1.583E-03	5.680E-04	5.680E-04	6.772E-01	3.400E-03	1.220E-03	1.220E-03	7.640E-01	3.836E-03	1.424E-03	1.424E-03	2.122E-04	1.066E-06	3.955E-07	3.955E-07
1500	1600	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.43	3.152E-01	1.583E-03	5.680E-04	5.680E-04	6.772E-01	3.400E-03	1.220E-03	1.220E-03	6.772E-01	3.400E-03	1.220E-03	1.220E-03	1.881E-04	9.446E-07	3.390E-07	3.390E-07
1600	1700	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.24	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.129E-01	5.667E-04	2.034E-04	2.034E-04	1.129E-01	5.667E-04	2.034E-04	2.034E-04	3.135E-05	1.574E-07	5.650E-08	5.650E-08
1700	1800	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.72	3.152E-01	1.583E-03	5.680E-04	5.680E-04	3.386E-01	1.700E-03	6.102E-04	6.102E-04	3.386E-01	1.700E-03	6.102E-04	6.102E-04	9.406E-05	4.723E-07	1.695E-07	1.695E-07
1800	1900	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.24	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.129E-01	5.667E-04	2.034E-04	2.034E-04	1.129E-01	5.667E-04	2.034E-04	2.034E-04	3.135E-05	1.574E-07	5.650E-08	5.650E-08
1900	2000	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.67	3.152E-01	1.583E-03	5.680E-04	5.680E-04	7.901E-01	3.967E-03	1.424E-03	1.424E-03	7.901E-01	3.967E-03	1.424E-03	1.424E-03	2.195E-04	1.102E-06	3.955E-07	3.955E-07
2000	2100	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.95	3.152E-01	1.583E-03	5.680E-04	5.680E-04	4.515E-01	2.267E-03	8.136E-04	8.136E-04	4.515E-01	2.267E-03	8.136E-04	8.136E-04	1.254E-04	6.297E-07	2.260E-07	2.260E-07
2100	2200	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.95	3.152E-01	1.583E-03	5.680E-04	5.680E-04	4.515E-01	2.267E-03	8.136E-04	8.136E-04	4.515E-01	2.267E-03	8.136E-04	8.136E-04	1.254E-04	6.297E-07	2.260E-07	2.260E-07
2200	2300	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.48	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	6.270E-05	3.149E-07	1.130E-07	1.130E-07
2300	2400	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	90	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	60	m	(Section 3)

* (Section 2)+(Section 3) = 150m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g)				C Adjusted Start Emission Within PTI (Section 2) (g)				C Adjusted Start Emission Within PTI (Section 2) (g/s)				Adjusted Start Emission Outside PTI (Section 3) (g)				E Adjusted Start Emission Outside PTI (Section 3) (g/s)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
800	900	3.762E-01	1.888E-03	6.780E-04	6.780E-04	1.542E+00	7.777E-03	0	0	4.284E-04	2.160E-06	0	0	2.203E-01	0	0	6.121E-05	3.085E-07	0	0
900	1000	6.020E-01	3.023E-03	1.085E-03	1.085E-03	2.175E+00	1.096E-02	0	0	6.043E-04	3.045E-06	0	0	3.108E-01	0	0	8.632E-05	4.350E-07	0	0
1000	1100	4.515E-01	2.267E-03	8.136E-04	8.136E-04	1.624E+00	8.179E-03	0	0	4.510E-04	2.272E-06	0	0	2.319E-01	0	0	6.443E-05	3.246E-07	0	0
1100	1200	1.505E-01	7.557E-04	2.712E-04	2.712E-04	6.815E-01	3.442E-03	0	0	1.893E-04	9.562E-07	0	0	9.736E-02	0	0	2.705E-05	1.366E-07	0	0
1200	1300	7.525E-02	3.778E-04	1.356E-04	1.356E-04	3.408E-01	1.721E-03	0	0	9.466E-05	4.781E-07	0	0	4.868E-02	0	0	1.352E-05	6.830E-08	0	0
1300	1400	7.525E-02	3.778E-04	1.356E-04	1.356E-04	3.408E-01	1.721E-03	0	0	9.466E-05	4.781E-07	0	0	4.868E-02	0	0	1.352E-05	6.830E-08	0	0
1400	1500	5.094E-01	2.558E-03	9.492E-04	9.492E-04	4.093E+00	2.065E-02	0	0	1.137E-03	5.737E-06	0	0	5.847E-01	0	0	1.624E-04	8.195E-07	0	0
1500	1600	4.515E-01	2.267E-03	8.136E-04	8.136E-04	1.396E+00	7.033E-03	0	0	3.877E-04	1.954E-06	0	0	1.994E-01	0	0	5.538E-05	2.791E-07	0	0
1600	1700	7.525E-02	3.778E-04	1.356E-04	1.356E-04	2.110E-01	1.062E-03	0	0	5.860E-05	2.951E-07	0	0	3.014E-02	0	0	8.372E-06	4.216E-08	0	0
1700	1800	2.257E-01	1.133E-03	4.068E-04	4.068E-04	7.627E-01	3.846E-03	0	0	2.119E-04	1.068E-06	0	0	1.090E-01	0	0	3.027E-05	1.526E-07	0	0
1800	1900	7.525E-02	3.778E-04	1.356E-04	1.356E-04	2.110E-01	1.062E-03	0	0	5.860E-05	2.951E-07	0	0	3.014E-02	0	0	8.372E-06	4.216E-08	0	0
1900	2000	5.267E-01	2.645E-03	9.492E-04	9.492E-04	3.711E+00	1.872E-02	0	0	1.031E-03	5.201E-06	0	0	5.301E-01	0	0	1.473E-04	7.430E-07	0	0
2000	2100	3.010E-01	1.511E-03	5.424E-04	5.424E-04	3.161E+00	1.597E-02	0	0	8.781E-04	4.435E-06	0	0	4.516E-01	0	0	1.254E-04	6.336E-07	0	0
2100	2200	3.010E-01	1.511E-03	5.424E-04	5.424E-04	2.705E+00	1.365E-02	0	0	7.515E-04	3.790E-06	0	0	3.865E-01	0	0	1.074E-04	5.415E-07	0	0
2200	2300	1.505E-01	7.557E-04	2.712E-04	2.712E-04	5.517E-01	2.784E-03	0	0	1.533E-04	7.732E-07	0	0	7.882E-02	0	0	2.189E-05	1.105E-07	0	0
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0	0	0.000E+00	0.000E+00	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 2 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Bypass Vehicle (adjusted with	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
				NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	9	2.15	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.354E+00	6.801E-03	2.441E-03	2.441E-03	3.762E-04	1.889E-06	6.780E-07	6.780E-07
800	900	6	1.43	3.152E-01	1.583E-03	5.680E-04	5.680E-04	9.029E-01	4.534E-03	1.627E-03	1.627E-03	2.508E-04	1.259E-06	4.520E-07	4.520E-07
900	1000	2	0.48	3.152E-01	1.583E-03	5.680E-04	5.680E-04	3.010E-01	1.511E-03	5.424E-04	5.424E-04	8.361E-05	4.198E-07	1.507E-07	1.507E-07
1000	1100	6	1.43	3.152E-01	1.583E-03	5.680E-04	5.680E-04	9.029E-01	4.534E-03	1.627E-03	1.627E-03	2.508E-04	1.259E-06	4.520E-07	4.520E-07
1100	1200	10	2.39	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.505E+00	7.557E-03	2.712E-03	2.712E-03	4.180E-04	2.099E-06	7.533E-07	7.533E-07
1200	1300	13	3.10	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.956E+00	9.824E-03	3.526E-03	3.526E-03	5.434E-04	2.729E-06	9.793E-07	9.793E-07
1300	1400	9	2.15	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.354E+00	6.801E-03	2.441E-03	2.441E-03	3.762E-04	1.889E-06	6.780E-07	6.780E-07
1400	1500	1	0.24	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.505E-01	7.557E-04	2.712E-04	2.712E-04	4.180E-05	2.099E-07	7.533E-08	7.533E-08
1500	1600	2	0.48	3.152E-01	1.583E-03	5.680E-04	5.680E-04	3.010E-01	1.511E-03	5.424E-04	5.424E-04	8.361E-05	4.198E-07	1.507E-07	1.507E-07
1600	1700	6	1.43	3.152E-01	1.583E-03	5.680E-04	5.680E-04	9.029E-01	4.534E-03	1.627E-03	1.627E-03	2.508E-04	1.259E-06	4.520E-07	4.520E-07
1700	1800	5	1.19	3.152E-01	1.583E-03	5.680E-04	5.680E-04	7.525E-01	3.778E-03	1.356E-03	1.356E-03	2.090E-04	1.050E-06	3.767E-07	3.767E-07
1800	1900	7	1.67	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.053E+00	5.290E-03	1.898E-03	1.898E-03	2.926E-04	1.469E-06	5.273E-07	5.273E-07
1900	2000	0	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	1	0.24	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.505E-01	7.557E-04	2.712E-04	2.712E-04	4.180E-05	2.099E-07	7.533E-08	7.533E-08
2100	2200	8	1.91	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.204E+00	6.045E-03	2.170E-03	2.170E-03	3.344E-04	1.679E-06	6.027E-07	6.027E-07
2200	2300	3	0.72	3.152E-01	1.583E-03	5.680E-04	5.680E-04	4.515E-01	2.267E-03	8.136E-04	8.136E-04	1.254E-04	6.297E-07	2.260E-07	2.260E-07
2300	2400	0	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PART 5 - Sum up all above parts

Model ID: CHE_PLA1

Calculations		Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)			
Start Hour	End Hour	NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	5.763E-04	2.894E-06	6.780E-07	6.780E-07
800	**900**	**1.080E-03**	**5.434E-06**	**7.345E-07**	**7.345E-07**
900	1000	1.161E-03	5.840E-06	6.027E-07	6.027E-07
1000	1100	1.157E-03	5.815E-06	7.910E-07	7.910E-07
1100	1200	9.368E-04	4.709E-06	8.663E-07	8.663E-07
1200	1300	9.806E-04	4.927E-06	1.036E-06	1.036E-06
1300	1400	7.245E-04	3.641E-06	7.345E-07	7.345E-07
1400	1500	1.569E-03	7.905E-06	4.708E-07	4.708E-07
1500	1600	8.372E-04	4.211E-06	4.897E-07	4.897E-07
1600	1700	4.964E-04	2.493E-06	5.085E-07	5.085E-07
1700	1800	6.927E-04	3.483E-06	5.462E-07	5.462E-07
1800	1900	5.604E-04	2.815E-06	5.838E-07	5.838E-07
1900	2000	1.406E-03	7.084E-06	3.955E-07	3.955E-07
2000	2100	1.156E-03	5.833E-06	3.013E-07	3.013E-07
2100	2200	1.478E-03	7.439E-06	8.287E-07	8.287E-07
2200	2300	4.525E-04	2.276E-06	3.390E-07	3.390E-07
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Model ID: CHE_PLSW

Emissions Ouside PTI/Spread distance = E to Ching Hiu Road Westbound Total Emission (g/s)			
NO	NO_2	RSP	FSP
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
0.000E+00	0.000E+00	0	0
6.121E-05	**3.085E-07**	**0**	**0**
8.632E-05	4.350E-07	0	0
6.443E-05	3.246E-07	0	0
2.705E-05	1.366E-07	0	0
1.352E-05	6.830E-08	0	0
1.352E-05	6.830E-08	0	0
1.624E-04	8.195E-07	0	0
5.538E-05	2.791E-07	0	0
8.372E-06	4.216E-08	0	0
3.027E-05	1.526E-07	0	0
8.372E-06	4.216E-08	0	0
1.473E-04	7.430E-07	0	0
1.254E-04	6.336E-07	0	0
1.074E-04	5.415E-07	0	0
2.189E-05	1.105E-07	0	0
0.000E+00	0.000E+00	0	0

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
600	700	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0
700	800	0.5333	0.5325	0.9231	0.9231	0.0000	0.0000	0	0
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**0**	**0**
900	1000	1.0744	1.0748	0.8205	0.8205	1.4104	1.4099	0	0
1000	1100	1.0705	1.0701	1.0769	1.0769	1.0526	1.0519	0	0
1100	1200	0.8670	0.8666	1.1795	1.1795	0.4419	0.4427	0	0
1200	1300	0.9075	0.9066	1.4103	1.4103	0.2209	0.2214	0	0
1300	1400	0.6705	0.6700	1.0000	1.0000	0.2209	0.2214	0	0
1400	1500	1.4520	1.4547	0.6410	0.6410	2.6538	2.6560	0	0
1500	1600	0.7748	0.7749	0.6667	0.6667	0.9049	0.9045	0	0
1600	1700	0.4594	0.4588	0.6923	0.6923	0.1368	0.1366	0	0
1700	1800	0.6411	0.6410	0.7436	0.7436	0.4945	0.4946	0	0
1800	1900	0.5186	0.5180	0.7949	0.7949	0.1368	0.1366	0	0
1900	2000	1.3011	1.3037	0.5385	0.5385	2.4058	2.4080	0	0
2000	2100	1.0703	1.0733	0.4103	0.4103	2.0495	2.0534	0	0
2100	2200	1.3679	1.3689	1.1282	1.1282	1.7540	1.7549	0	0
2200	2300	0.4188	0.4188	0.4615	0.4615	0.3577	0.3580	0	0
2300	2400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0

Ching Ho Estate PTI

PTI Type: Open-area

Assessment Vehicle: TAXI
Fuel: LPG

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	80	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	90	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.170	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Population Ratio Extracted from EMFAC

LPG %	Petrol %
99.99%	0.01%

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Total (adjusted with fuel %)	Within PTI (Section 1)+(Section 2) Running Emission Factor (g/km·vehicle) NO	NO_2	RSP	FSP	Running Emission Within PTI (g) NO	NO_2	RSP	FSP	A Running Emission Within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	*0*	*0.00*	1.0081	0.0282	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	*0*	*0.00*	1.0081	0.0282	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	*0*	*0.00*	1.0081	0.0282	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	*0*	*0.00*	1.0081	0.0282	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	*1*	*1.00*	1.0081	0.0282	0	0	1.714E-01	4.794E-03	0	0	4.760E-05	1.332E-06	0	0
500	600	*5*	*5.00*	1.0081	0.0282	0	0	8.568E-01	2.397E-02	0	0	2.380E-04	6.658E-06	0	0
600	700	*36*	*36.00*	1.0081	0.0282	0	0	6.169E+00	1.726E-01	0	0	1.714E-03	4.794E-05	0	0
700	800	*78*	*77.99*	1.0081	0.0282	0	0	1.337E+01	3.739E-01	0	0	3.713E-03	1.039E-04	0	0
800	900	*91*	*90.99*	1.0081	0.0282	0	0	1.559E+01	4.362E-01	0	0	4.332E-03	1.212E-04	0	0
900	1000	*93*	*92.99*	1.0081	0.0282	0	0	1.594E+01	4.458E-01	0	0	4.427E-03	1.238E-04	0	0
1000	1100	*83*	*82.99*	1.0081	0.0282	0	0	1.422E+01	3.979E-01	0	0	3.951E-03	1.105E-04	0	0
1100	1200	*84*	*83.99*	1.0081	0.0282	0	0	1.439E+01	4.027E-01	0	0	3.998E-03	1.119E-04	0	0
1200	1300	*87*	*86.99*	1.0081	0.0282	0	0	1.491E+01	4.170E-01	0	0	4.141E-03	1.158E-04	0	0
1300	1400	*85*	*84.99*	1.0081	0.0282	0	0	1.457E+01	4.075E-01	0	0	4.046E-03	1.132E-04	0	0
1400	1500	*67*	*66.99*	1.0081	0.0282	0	0	1.148E+01	3.212E-01	0	0	3.189E-03	8.921E-05	0	0
1500	1600	*91*	*90.99*	1.0081	0.0282	0	0	1.559E+01	4.362E-01	0	0	4.332E-03	1.212E-04	0	0
1600	1700	*81*	*80.99*	1.0081	0.0282	0	0	1.388E+01	3.883E-01	0	0	3.856E-03	1.079E-04	0	0
1700	1800	*76*	*75.99*	1.0081	0.0282	0	0	1.302E+01	3.643E-01	0	0	3.618E-03	1.012E-04	0	0
1800	1900	*59*	*59.00*	1.0081	0.0282	0	0	1.011E+01	2.828E-01	0	0	2.808E-03	7.856E-05	0	0
1900	2000	*56*	*56.00*	1.0081	0.0282	0	0	9.596E+00	2.684E-01	0	0	2.666E-03	7.457E-05	0	0
2000	2100	*59*	*59.00*	1.0081	0.0282	0	0	1.011E+01	2.828E-01	0	0	2.808E-03	7.856E-05	0	0
2100	2200	*58*	*58.00*	1.0081	0.0282	0	0	9.939E+00	2.780E-01	0	0	2.761E-03	7.723E-05	0	0
2200	2300	*60*	*60.00*	1.0081	0.0282	0	0	1.028E+01	2.876E-01	0	0	2.856E-03	7.989E-05	0	0
2300	2400	*57*	*57.00*	1.0081	0.0282	0	0	9.768E+00	2.732E-01	0	0	2.713E-03	7.590E-05	0	0

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	1.0087	1.0253	1.0579	1.0895	1.1200	1.1495	1.1779	1.3109	1.4527	1.4407	1.4206	1.3922	1.3555	1.3106	1.2576	1.1963	1.1268	1.0491	
NO2	0.0283	0.0288	0.0297	0.0306	0.0314	0.0322	0.0330	0.0368	0.0407	0.0404	0.0398	0.0390	0.0380	0.0368	0.0353	0.0336	0.0316	0.0294	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Terminating Vehicles	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (adjusted with fuel %) (g) NO	NO_2	RSP	FSP
2400	100	*0*																			0.000E+00	0.000E+00	0	0
100	200	*0*																			0.000E+00	0.000E+00	0	0
200	300	*0*																			0.000E+00	0.000E+00	0	0
300	400	*0*																			0.000E+00	0.000E+00	0	0
400	500	*0*																			0.000E+00	0.000E+00	0	0
500	600	*0*																			0.000E+00	0.000E+00	0	0
600	700	*1*		1																	1.025E+00	2.880E-02	0	0
700	800	*0*																			0.000E+00	0.000E+00	0	0
800	900	*1*			1																1.058E+00	2.970E-02	0	0
900	1000	*0*																			0.000E+00	0.000E+00	0	0
1000	1100	*1*	1																		1.009E+00	2.830E-02	0	0
1100	1200	*0*																			0.000E+00	0.000E+00	0	0
1200	1300	*0*																			0.000E+00	0.000E+00	0	0
1300	1400	*0*																			0.000E+00	0.000E+00	0	0
1400	1500	*0*																			0.000E+00	0.000E+00	0	0
1500	1600	*1*			1																1.058E+00	2.970E-02	0	0
1600	1700	*0*																			0.000E+00	0.000E+00	0	0
1700	1800	*1*					1														1.120E+00	3.140E-02	0	0
1800	1900	*0*																			0.000E+00	0.000E+00	0	0
1900	2000	*1*		1																	1.025E+00	2.880E-02	0	0
2000	2100	*0*																			0.000E+00	0.000E+00	0	0
2100	2200	*0*																			0.000E+00	0.000E+00	0	0
2200	2300	*0*																			0.000E+00	0.000E+00	0	0
2300	2400	*0*																			0.000E+00	0.000E+00	0	0

Remark: Number of trips were derived based on on-site observations at the PTI.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 2 min(s) *As On-Site observations

*Cold Idling = 240-720min; Hot idling = 5-180min.

*Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Trips (adjusted with fuel %) (240-	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (adjusted with fuel %)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*1.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.254E-01	1.190E-02	1.962E-03	1.962E-03	4.254E-01	1.190E-02	1.962E-03	1.962E-03	1.182E-04	3.305E-06	5.451E-07	5.451E-07
700	800	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*1.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.254E-01	1.190E-02	1.962E-03	1.962E-03	4.254E-01	1.190E-02	1.962E-03	1.962E-03	1.182E-04	3.305E-06	5.451E-07	5.451E-07
900	1000	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1000	1100	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*1.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.254E-01	1.190E-02	1.962E-03	1.962E-03	4.254E-01	1.190E-02	1.962E-03	1.962E-03	1.182E-04	3.305E-06	5.451E-07	5.451E-07
1100	1200	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*1.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.254E-01	1.190E-02	1.962E-03	1.962E-03	4.254E-01	1.190E-02	1.962E-03	1.962E-03	1.182E-04	3.305E-06	5.451E-07	5.451E-07
1600	1700	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*1.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.254E-01	1.190E-02	1.962E-03	1.962E-03	4.254E-01	1.190E-02	1.962E-03	1.962E-03	1.182E-04	3.305E-06	5.451E-07	5.451E-07
1800	1900	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*1.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.254E-01	1.190E-02	1.962E-03	1.962E-03	4.254E-01	1.190E-02	1.962E-03	1.962E-03	1.182E-04	3.305E-06	5.451E-07	5.451E-07
2000	2100	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	*0.00*	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	*0.00*	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Parameters

Maximum Duration for adjusting Start Emission =	0.5	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	90	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	60	m	(Section 3) * (Section 2)+(Section 3) = 150m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	1.063E-01	2.975E-03	4.906E-04	4.906E-04	5.513E-01	1.549E-02	0	0	1.531E-04	4.304E-06	0	0	3.676E-01	1.033E-02	0	0	1.021E-04	2.869E-06	0	0
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
800	900	1.063E-01	2.975E-03	4.906E-04	4.906E-04	5.709E-01	1.603E-02	0	0	1.586E-04	4.454E-06	0	0	3.806E-01	1.069E-02	0	0	1.057E-04	2.969E-06	0	0
900	1000	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1000	1100	1.063E-01	2.975E-03	4.906E-04	4.906E-04	5.414E-01	1.519E-02	0	0	1.504E-04	4.220E-06	0	0	3.609E-01	1.013E-02	0	0	1.003E-04	2.814E-06	0	0
1100	1200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1500	1600	1.063E-01	2.975E-03	4.906E-04	4.906E-04	5.709E-01	1.603E-02	0	0	1.586E-04	4.454E-06	0	0	3.806E-01	1.069E-02	0	0	1.057E-04	2.969E-06	0	0
1600	1700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1700	1800	1.063E-01	2.975E-03	4.906E-04	4.906E-04	6.081E-01	1.705E-02	0	0	1.689E-04	4.737E-06	0	0	4.054E-01	1.137E-02	0	0	1.126E-04	3.158E-06	0	0
1800	1900	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1900	2000	1.063E-01	2.975E-03	4.906E-04	4.906E-04	5.513E-01	1.549E-02	0	0	1.531E-04	4.304E-06	0	0	3.676E-01	1.033E-02	0	0	1.021E-04	2.869E-06	0	0
2000	2100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 2.5 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Bypass Vehicle (adjusted with	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
				NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	1	1.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	5.317E-01	1.487E-02	2.453E-03	2.453E-03	1.477E-04	4.132E-06	6.813E-07	6.813E-07
500	600	5	5.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.659E+00	7.437E-02	1.226E-02	1.226E-02	7.385E-04	2.066E-05	3.407E-06	3.407E-06
600	700	35	35.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	1.861E+01	5.206E-01	8.585E-02	8.585E-02	5.170E-03	1.446E-04	2.385E-05	2.385E-05
700	800	78	77.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.148E+01	1.160E+00	1.913E-01	1.913E-01	1.152E-02	3.223E-04	5.315E-05	5.315E-05
800	900	90	89.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.786E+01	1.339E+00	2.208E-01	2.208E-01	1.329E-02	3.719E-04	6.132E-05	6.132E-05
900	1000	93	92.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.945E+01	1.383E+00	2.281E-01	2.281E-01	1.374E-02	3.843E-04	6.337E-05	6.337E-05
1000	1100	82	81.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.360E+01	1.220E+00	2.011E-01	2.011E-01	1.211E-02	3.388E-04	5.587E-05	5.587E-05
1100	1200	84	83.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.467E+01	1.249E+00	2.060E-01	2.060E-01	1.241E-02	3.471E-04	5.723E-05	5.723E-05
1200	1300	87	86.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.626E+01	1.294E+00	2.134E-01	2.134E-01	1.285E-02	3.595E-04	5.928E-05	5.928E-05
1300	1400	85	84.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.520E+01	1.264E+00	2.085E-01	2.085E-01	1.255E-02	3.512E-04	5.791E-05	5.791E-05
1400	1500	67	66.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.563E+01	9.966E-01	1.643E-01	1.643E-01	9.896E-03	2.768E-04	4.565E-05	4.565E-05
1500	1600	90	89.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.786E+01	1.339E+00	2.208E-01	2.208E-01	1.329E-02	3.719E-04	6.132E-05	6.132E-05
1600	1700	81	80.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	4.307E+01	1.205E+00	1.987E-01	1.987E-01	1.196E-02	3.347E-04	5.519E-05	5.519E-05
1700	1800	75	74.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.988E+01	1.116E+00	1.840E-01	1.840E-01	1.108E-02	3.099E-04	5.110E-05	5.110E-05
1800	1900	59	59.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.137E+01	8.776E-01	1.447E-01	1.447E-01	8.715E-03	2.438E-04	4.020E-05	4.020E-05
1900	2000	55	55.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.925E+01	8.181E-01	1.349E-01	1.349E-01	8.124E-03	2.273E-04	3.747E-05	3.747E-05
2000	2100	59	59.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.137E+01	8.776E-01	1.447E-01	1.447E-01	8.715E-03	2.438E-04	4.020E-05	4.020E-05
2100	2200	58	58.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.084E+01	8.627E-01	1.423E-01	1.423E-01	8.567E-03	2.396E-04	3.952E-05	3.952E-05
2200	2300	60	60.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.190E+01	8.925E-01	1.472E-01	1.472E-01	8.862E-03	2.479E-04	4.088E-05	4.088E-05
2300	2400	57	57.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.031E+01	8.479E-01	1.398E-01	1.398E-01	8.419E-03	2.355E-04	3.884E-05	3.884E-05

PART 5 - Sum up all above parts

Calculations		Model ID: CHE_TLA1 Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)				Model ID: CHE_TLSW Spread distance = E to Ching Hiu Road WB (Section 3) Total Emission (g/s)				Model ID: CHE_TLSE Spread distance = E to Ching Hiu Road EB (Section 3) Total Emission (g/s)				Split Ratio	
Start Hour	End Hour	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	to CHRWB (%)	to CHRWB (%)
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	10.00%	90.00%
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	15.00%	85.00%
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	10.00%	90.00%
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	15.00%	85.00%
400	500	1.953E-04	5.463E-06	6.813E-07	6.813E-07	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	25.00%	75.00%
500	600	9.765E-04	2.732E-05	3.407E-06	3.407E-06	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	10.00%	90.00%
600	700	7.155E-03	2.002E-04	2.439E-05	2.439E-05	1.531E-05	4.304E-07	0	0	8.678E-05	2.439E-06	0	0	15.00%	85.00%
700	800	1.523E-02	4.261E-04	5.315E-05	5.315E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	15.00%	85.00%
800	**900**	**1.790E-02**	**5.008E-04**	**6.187E-05**	**6.187E-05**	**1.057E-05**	**2.969E-07**	**0**	**0**	**9.515E-05**	**2.672E-06**	**0**	**0**	**10.00%**	**90.00%**
900	1000	1.816E-02	5.081E-04	6.337E-05	6.337E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	10.00%	90.00%
1000	1100	1.633E-02	4.569E-04	5.642E-05	5.642E-05	1.003E-05	2.814E-07	0	0	9.023E-05	2.532E-06	0	0	10.00%	90.00%
1100	1200	1.641E-02	4.589E-04	5.723E-05	5.723E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	10.00%	90.00%
1200	1300	1.699E-02	4.753E-04	5.928E-05	5.928E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	15.00%	85.00%
1300	1400	1.660E-02	4.644E-04	5.791E-05	5.791E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	10.00%	90.00%
1400	1500	1.309E-02	3.660E-04	4.565E-05	4.565E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	5.00%	95.00%
1500	1600	1.790E-02	5.008E-04	6.187E-05	6.187E-05	1.586E-05	4.454E-07	0	0	8.986E-05	2.524E-06	0	0	15.00%	85.00%
1600	1700	1.582E-02	4.425E-04	5.519E-05	5.519E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	20.00%	80.00%
1700	1800	1.498E-02	4.191E-04	5.165E-05	5.165E-05	2.252E-05	6.316E-07	0	0	9.009E-05	2.526E-06	0	0	20.00%	80.00%
1800	1900	1.152E-02	3.223E-04	4.020E-05	4.020E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	25.00%	75.00%
1900	2000	1.106E-02	3.094E-04	3.802E-05	3.802E-05	5.105E-06	1.435E-07	0	0	9.699E-05	2.726E-06	0	0	5.00%	95.00%
2000	2100	1.152E-02	3.223E-04	4.020E-05	4.020E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	25.00%	75.00%
2100	2200	1.133E-02	3.169E-04	3.952E-05	3.952E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	15.00%	85.00%
2200	2300	1.172E-02	3.278E-04	4.088E-05	4.088E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	10.00%	90.00%
2300	2400	1.113E-02	3.114E-04	3.884E-05	3.884E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	25.00%	75.00%

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0
400	500	0.0109	0.0109	0.0110	0.0110	0.0000	0.0000	0	0	0.0000	0.0000	0	0
500	600	0.0545	0.0545	0.0551	0.0551	0.0000	0.0000	0	0	0.0000	0.0000	0	0
600	700	0.3997	0.3997	0.3943	0.3943	1.4486	1.4495	0	0	0.9121	0.9126	0	0
700	800	0.8510	0.8509	0.8590	0.8590	0.0000	0.0000	0	0	0.0000	0.0000	0	0
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**0**	**0**	**1.0000**	**1.0000**	**0**	**0**
900	1000	1.0146	1.0146	1.0242	1.0242	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1000	1100	0.9123	0.9123	0.9119	0.9119	0.9483	0.9476	0	0	0.9483	0.9476	0	0
1100	1200	0.9164	0.9164	0.9251	0.9251	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1200	1300	0.9492	0.9491	0.9581	0.9581	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1300	1400	0.9273	0.9273	0.9361	0.9361	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1400	1500	0.7310	0.7309	0.7379	0.7379	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1500	1600	1.0000	1.0000	1.0000	1.0000	1.5000	1.5000	0	0	0.9444	0.9444	0	0
1600	1700	0.8837	0.8837	0.8921	0.8921	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1700	1800	0.8369	0.8369	0.8348	0.8348	2.1305	2.1272	0	0	0.9469	0.9454	0	0
1800	1900	0.6437	0.6437	0.6498	0.6498	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1900	2000	0.6179	0.6179	0.6145	0.6145	0.4829	0.4832	0	0	1.0194	1.0200	0	0
2000	2100	0.6437	0.6437	0.6498	0.6498	0.0000	0.0000	0	0	0.0000	0.0000	0	0
2100	2200	0.6328	0.6327	0.6388	0.6388	0.0000	0.0000	0	0	0.0000	0.0000	0	0
2200	2300	0.6546	0.6546	0.6608	0.6608	0.0000	0.0000	0	0	0.0000	0.0000	0	0
2300	2400	0.6219	0.6218	0.6278	0.6278	0.0000	0.0000	0	0	0.0000	0.0000	0	0

Ching Ho Estate PTI

PTI Type: Open-area

Assessment Vehicle: TAXI
Fuel: PETROL

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	80	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	90	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.170	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Population Ratio Extracted from EMFAC

LPG %	Petrol %
99.99%	0.01%

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Total (adjusted with fuel %)	Within PTI (Section 1)+(Section 2) Running Emission Factor (g/km·vehicle) NO	NO_2	RSP	FSP	Running Emission Within PTI (g) NO	NO_2	RSP	FSP	A Running Emission Within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	0.00	0.0596	0.0031	0.0096	0.0089	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	0.00	0.0596	0.0031	0.0096	0.0089	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	0.00	0.0596	0.0031	0.0096	0.0089	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	0.00	0.0596	0.0031	0.0096	0.0089	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	1	0.00	0.0596	0.0031	0.0096	0.0089	7.576E-07	3.940E-08	1.220E-07	1.131E-07	2.104E-10	1.095E-11	3.390E-11	3.142E-11
500	600	5	0.00	0.0596	0.0031	0.0096	0.0089	3.788E-06	1.970E-07	6.101E-07	5.656E-07	1.052E-09	5.473E-11	1.695E-10	1.571E-10
600	700	36	0.00	0.0596	0.0031	0.0096	0.0089	2.727E-05	1.419E-06	4.393E-06	4.073E-06	7.576E-09	3.940E-10	1.220E-09	1.131E-09
700	800	78	0.01	0.0596	0.0031	0.0096	0.0089	5.905E-05	3.073E-06	9.518E-06	8.824E-06	1.641E-08	8.537E-10	2.644E-09	2.451E-09
800	900	91	0.01	0.0596	0.0031	0.0096	0.0089	6.894E-05	3.586E-06	1.110E-05	1.029E-05	1.915E-08	9.960E-10	3.084E-09	2.860E-09
900	1000	93	0.01	0.0596	0.0031	0.0096	0.0089	7.045E-05	3.665E-06	1.135E-05	1.052E-05	1.957E-08	1.018E-09	3.152E-09	2.922E-09
1000	1100	83	0.01	0.0596	0.0031	0.0096	0.0089	6.288E-05	3.270E-06	1.013E-05	9.389E-06	1.747E-08	9.085E-10	2.813E-09	2.608E-09
1100	1200	84	0.01	0.0596	0.0031	0.0096	0.0089	6.364E-05	3.310E-06	1.025E-05	9.503E-06	1.768E-08	9.194E-10	2.847E-09	2.640E-09
1200	1300	87	0.01	0.0596	0.0031	0.0096	0.0089	6.591E-05	3.428E-06	1.062E-05	9.842E-06	1.831E-08	9.522E-10	2.949E-09	2.734E-09
1300	1400	85	0.01	0.0596	0.0031	0.0096	0.0089	6.439E-05	3.349E-06	1.037E-05	9.616E-06	1.789E-08	9.304E-10	2.881E-09	2.671E-09
1400	1500	67	0.01	0.0596	0.0031	0.0096	0.0089	5.076E-05	2.640E-06	8.176E-06	7.579E-06	1.410E-08	7.333E-10	2.271E-09	2.105E-09
1500	1600	91	0.01	0.0596	0.0031	0.0096	0.0089	6.894E-05	3.586E-06	1.110E-05	1.029E-05	1.915E-08	9.960E-10	3.084E-09	2.860E-09
1600	1700	81	0.01	0.0596	0.0031	0.0096	0.0089	6.136E-05	3.192E-06	9.884E-06	9.163E-06	1.705E-08	8.866E-10	2.746E-09	2.545E-09
1700	1800	76	0.01	0.0596	0.0031	0.0096	0.0089	5.757E-05	2.995E-06	9.274E-06	8.598E-06	1.599E-08	8.319E-10	2.576E-09	2.388E-09
1800	1900	59	0.00	0.0596	0.0031	0.0096	0.0089	4.470E-05	2.325E-06	7.199E-06	6.674E-06	1.242E-08	6.458E-10	2.000E-09	1.854E-09
1900	2000	56	0.00	0.0596	0.0031	0.0096	0.0089	4.242E-05	2.207E-06	6.833E-06	6.335E-06	1.178E-08	6.129E-10	1.898E-09	1.760E-09
2000	2100	59	0.00	0.0596	0.0031	0.0096	0.0089	4.470E-05	2.325E-06	7.199E-06	6.674E-06	1.242E-08	6.458E-10	2.000E-09	1.854E-09
2100	2200	58	0.00	0.0596	0.0031	0.0096	0.0089	4.394E-05	2.285E-06	7.077E-06	6.561E-06	1.221E-08	6.348E-10	1.966E-09	1.823E-09
2200	2300	60	0.00	0.0596	0.0031	0.0096	0.0089	4.545E-05	2.364E-06	7.321E-06	6.788E-06	1.263E-08	6.567E-10	2.034E-09	1.885E-09
2300	2400	57	0.00	0.0596	0.0031	0.0096	0.0089	4.318E-05	2.246E-06	6.955E-06	6.448E-06	1.199E-08	6.239E-10	1.932E-09	1.791E-09

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.0754	0.0767	0.0791	0.0814	0.0837	0.0860	0.0881	0.0980	0.1086	0.1077	0.1062	0.1040	0.1014	0.0979	0.0941	0.0894	0.0843	0.0785	
NO2	0.0040	0.0040	0.0042	0.0043	0.0044	0.0045	0.0046	0.0052	0.0057	0.0057	0.0056	0.0055	0.0053	0.0052	0.0049	0.0047	0.0044	0.0041	
RSP	0.0004	0.0008	0.0015	0.0023	0.0030	0.0036	0.0042	0.0070	0.0079	0.0087	0.0093	0.0099	0.0104	0.0107	0.0110	0.0112	0.0113	0.0113	
FSP	0.0004	0.0007	0.0014	0.0021	0.0027	0.0034	0.0039	0.0065	0.0073	0.0080	0.0087	0.0092	0.0096	0.0100	0.0102	0.0104	0.0105	0.0105	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Terminating Vehicles	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (adjusted with fuel %) (g) NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	1		1																	5.735E-06	2.991E-07	5.982E-08	5.234E-08
700	800	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	1			1																5.914E-06	3.140E-07	1.122E-07	1.047E-07
900	1000	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1000	1100	1	1																		5.638E-06	2.991E-07	2.991E-08	2.991E-08
1100	1200	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	1			1																5.914E-06	3.140E-07	1.122E-07	1.047E-07
1600	1700	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	1					1														6.258E-06	3.290E-07	2.243E-07	2.019E-07
1800	1900	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	1		1																	5.735E-06	2.991E-07	5.982E-08	5.234E-08
2000	2100	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00

Remark: Number of trips were derived based on on-site observations at the PTI.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 2 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 240-720min; Hot idling = 5-180min. *Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Trips (adjusted with fuel %) (240-	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (adjusted with fuel %)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.464E-07	1.282E-08	3.240E-08	3.240E-08	2.464E-07	1.282E-08	3.240E-08	3.240E-08	6.844E-11	3.560E-12	9.000E-12	9.000E-12
600	700	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.464E-07	1.282E-08	3.240E-08	3.240E-08	2.464E-07	1.282E-08	3.240E-08	3.240E-08	6.844E-11	3.560E-12	9.000E-12	9.000E-12
800	900	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	1000	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.464E-07	1.282E-08	3.240E-08	3.240E-08	2.464E-07	1.282E-08	3.240E-08	3.240E-08	6.844E-11	3.560E-12	9.000E-12	9.000E-12
1000	1100	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.464E-07	1.282E-08	3.240E-08	3.240E-08	2.464E-07	1.282E-08	3.240E-08	3.240E-08	6.844E-11	3.560E-12	9.000E-12	9.000E-12
1600	1700	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.464E-07	1.282E-08	3.240E-08	3.240E-08	2.464E-07	1.282E-08	3.240E-08	3.240E-08	6.844E-11	3.560E-12	9.000E-12	9.000E-12
1800	1900	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.464E-07	1.282E-08	3.240E-08	3.240E-08	2.464E-07	1.282E-08	3.240E-08	3.240E-08	6.844E-11	3.560E-12	9.000E-12	9.000E-12
2000	2100	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Parameters

Maximum Duration for adjusting Start Emission =	0	min(s)	*No adjustment
Travelling Distance from Start Point to PTI Egress =	90	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	n/a	m	(Section 3) *Not Applicable

Adjusted Calculations for Idling Emission *No adjustment, direct equal to Start Emission *No Spread Distance, emit right at Start point

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
100	200	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
200	300	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
300	400	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
400	500	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
500	600	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
600	700	0	0	0	0	5.735E-06	2.991E-07	5.982E-08	5.234E-08	1.593E-09	8.308E-11	1.66154E-11	1.45385E-11	0	0	0	0	0	0	0	0
700	800	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
800	900	0	0	0	0	5.914E-06	3.140E-07	1.122E-07	1.047E-07	1.643E-09	8.723E-11	3.11539E-11	2.9077E-11	0	0	0	0	0	0	0	0
900	1000	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
1000	1100	0	0	0	0	5.638E-06	2.991E-07	2.991E-08	2.991E-08	1.566E-09	8.308E-11	8.3077E-12	8.3077E-12	0	0	0	0	0	0	0	0
1100	1200	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
1200	1300	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
1300	1400	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
1400	1500	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
1500	1600	0	0	0	0	5.914E-06	3.140E-07	1.122E-07	1.047E-07	1.643E-09	8.723E-11	3.11539E-11	2.9077E-11	0	0	0	0	0	0	0	0
1600	1700	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
1700	1800	0	0	0	0	6.258E-06	3.290E-07	2.243E-07	2.019E-07	1.738E-09	9.138E-11	6.23078E-11	5.6077E-11	0	0	0	0	0	0	0	0
1800	1900	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
1900	2000	0	0	0	0	5.735E-06	2.991E-07	5.982E-08	5.234E-08	1.593E-09	8.308E-11	1.66154E-11	1.45385E-11	0	0	0	0	0	0	0	0
2000	2100	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
2100	2200	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
2200	2300	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0
2300	2400	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 2.5 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Bypass Vehicle (adjusted with	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
				NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	1	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	3.080E-07	1.602E-08	4.050E-08	4.050E-08	8.555E-11	4.450E-12	1.125E-11	1.125E-11
500	600	5	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.540E-06	8.010E-08	2.025E-07	2.025E-07	4.278E-10	2.225E-11	5.625E-11	5.625E-11
600	700	35	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.078E-05	5.607E-07	1.418E-06	1.418E-06	2.994E-09	1.557E-10	3.938E-10	3.938E-10
700	800	78	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.402E-05	1.249E-06	3.159E-06	3.159E-06	6.673E-09	3.471E-10	8.775E-10	8.775E-10
800	900	90	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.772E-05	1.442E-06	3.645E-06	3.645E-06	7.700E-09	4.005E-10	1.013E-09	1.013E-09
900	1000	93	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.864E-05	1.490E-06	3.767E-06	3.767E-06	7.956E-09	4.138E-10	1.046E-09	1.046E-09
1000	1100	82	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.525E-05	1.314E-06	3.321E-06	3.321E-06	7.015E-09	3.649E-10	9.225E-10	9.225E-10
1100	1200	84	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.587E-05	1.346E-06	3.402E-06	3.402E-06	7.186E-09	3.738E-10	9.450E-10	9.450E-10
1200	1300	87	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.679E-05	1.394E-06	3.524E-06	3.524E-06	7.443E-09	3.871E-10	9.788E-10	9.788E-10
1300	1400	85	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.618E-05	1.362E-06	3.443E-06	3.443E-06	7.272E-09	3.782E-10	9.563E-10	9.563E-10
1400	1500	67	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.063E-05	1.073E-06	2.714E-06	2.714E-06	5.732E-09	2.981E-10	7.538E-10	7.538E-10
1500	1600	90	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.772E-05	1.442E-06	3.645E-06	3.645E-06	7.700E-09	4.005E-10	1.013E-09	1.013E-09
1600	1700	81	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.495E-05	1.298E-06	3.281E-06	3.281E-06	6.930E-09	3.604E-10	9.113E-10	9.113E-10
1700	1800	75	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.310E-05	1.201E-06	3.038E-06	3.038E-06	6.416E-09	3.337E-10	8.438E-10	8.438E-10
1800	1900	59	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.817E-05	9.451E-07	2.390E-06	2.390E-06	5.047E-09	2.625E-10	6.638E-10	6.638E-10
1900	2000	55	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.694E-05	8.811E-07	2.228E-06	2.228E-06	4.705E-09	2.447E-10	6.188E-10	6.188E-10
2000	2100	59	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.817E-05	9.451E-07	2.390E-06	2.390E-06	5.047E-09	2.625E-10	6.638E-10	6.638E-10
2100	2200	58	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.786E-05	9.291E-07	2.349E-06	2.349E-06	4.962E-09	2.581E-10	6.525E-10	6.525E-10
2200	2300	60	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.848E-05	9.611E-07	2.430E-06	2.430E-06	5.133E-09	2.670E-10	6.750E-10	6.750E-10
2300	2400	57	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.755E-05	9.131E-07	2.309E-06	2.309E-06	4.876E-09	2.536E-10	6.413E-10	6.413E-10

PART 5 - Sum up all above parts

Model ID: CHE_TPA1

*No Spread Distance, emit right at Start point

*No Spread Distance, emit right at Start point

Calculations

Start Hour	End Hour	Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)				Spread distance = E to Ching Hiu Road WB (Section 3) Total Emission (g/s)				Spread distance = E to Ching Hiu Road EB (Section 3) Total Emission (g/s)				Spilt Ratio	
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	to CHRWB (%)	to CHRWB (%)
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	10.00%	90.00%
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	15.00%	85.00%
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	10.00%	90.00%
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0	15.00%	85.00%
400	500	2.960E-10	1.540E-11	4.515E-11	4.267E-11	0	0	0	0	0	0	0	0	25.00%	75.00%
500	600	1.480E-09	7.698E-11	2.257E-10	2.134E-10	0	0	0	0	0	0	0	0	10.00%	90.00%
600	700	1.223E-08	6.364E-10	1.640E-09	1.549E-09	0	0	0	0	0	0	0	0	15.00%	85.00%
700	800	2.309E-08	1.201E-09	3.521E-09	3.329E-09	0	0	0	0	0	0	0	0	15.00%	85.00%
800	**900**	**2.856E-08**	**1.487E-09**	**4.137E-09**	**3.910E-09**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10.00%**	**90.00%**
900	1000	2.753E-08	1.432E-09	4.199E-09	3.969E-09	0	0	0	0	0	0	0	0	10.00%	90.00%
1000	1100	2.612E-08	1.360E-09	3.753E-09	3.548E-09	0	0	0	0	0	0	0	0	10.00%	90.00%
1100	1200	2.486E-08	1.293E-09	3.792E-09	3.585E-09	0	0	0	0	0	0	0	0	10.00%	90.00%
1200	1300	2.575E-08	1.339E-09	3.928E-09	3.713E-09	0	0	0	0	0	0	0	0	15.00%	85.00%
1300	1400	2.516E-08	1.309E-09	3.837E-09	3.627E-09	0	0	0	0	0	0	0	0	10.00%	90.00%
1400	1500	1.983E-08	1.031E-09	3.025E-09	2.859E-09	0	0	0	0	0	0	0	0	5.00%	95.00%
1500	1600	2.856E-08	1.487E-09	4.137E-09	3.910E-09	0	0	0	0	0	0	0	0	15.00%	85.00%
1600	1700	2.397E-08	1.247E-09	3.657E-09	3.457E-09	0	0	0	0	0	0	0	0	20.00%	80.00%
1700	1800	2.422E-08	1.261E-09	3.491E-09	3.297E-09	0	0	0	0	0	0	0	0	20.00%	80.00%
1800	1900	1.746E-08	9.083E-10	2.664E-09	2.518E-09	0	0	0	0	0	0	0	0	25.00%	75.00%
1900	2000	1.815E-08	9.443E-10	2.543E-09	2.402E-09	0	0	0	0	0	0	0	0	5.00%	95.00%
2000	2100	1.746E-08	9.083E-10	2.664E-09	2.518E-09	0	0	0	0	0	0	0	0	25.00%	75.00%
2100	2200	1.717E-08	8.929E-10	2.618E-09	2.475E-09	0	0	0	0	0	0	0	0	15.00%	85.00%
2200	2300	1.776E-08	9.237E-10	2.709E-09	2.560E-09	0	0	0	0	0	0	0	0	10.00%	90.00%
2300	2400	1.687E-08	8.775E-10	2.573E-09	2.432E-09	0	0	0	0	0	0	0	0	25.00%	75.00%

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000	0	0	0	0	0	0	0	0
100	200	0.0000	0.0000	0.0000	0.0000	0	0	0	0	0	0	0	0
200	300	0.0000	0.0000	0.0000	0.0000	0	0	0	0	0	0	0	0
300	400	0.0000	0.0000	0.0000	0.0000	0	0	0	0	0	0	0	0
400	500	0.0104	0.0104	0.0109	0.0109	0	0	0	0	0	0	0	0
500	600	0.0518	0.0518	0.0546	0.0546	0	0	0	0	0	0	0	0
600	700	0.4283	0.4279	0.3963	0.3960	0	0	0	0	0	0	0	0
700	800	0.8084	0.8074	0.8512	0.8513	0	0	0	0	0	0	0	0
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
900	1000	0.9638	0.9627	1.0148	1.0150	0	0	0	0	0	0	0	0
1000	1100	0.9144	0.9144	0.9072	0.9074	0	0	0	0	0	0	0	0
1100	1200	0.8705	0.8695	0.9166	0.9167	0	0	0	0	0	0	0	0
1200	1300	0.9016	0.9005	0.9494	0.9495	0	0	0	0	0	0	0	0
1300	1400	0.8809	0.8798	0.9275	0.9277	0	0	0	0	0	0	0	0
1400	1500	0.6944	0.6935	0.7311	0.7312	0	0	0	0	0	0	0	0
1500	1600	1.0000	1.0000	1.0000	1.0000	0	0	0	0	0	0	0	0
1600	1700	0.8394	0.8384	0.8839	0.8840	0	0	0	0	0	0	0	0
1700	1800	0.8479	0.8475	0.8438	0.8432	0	0	0	0	0	0	0	0
1800	1900	0.6114	0.6107	0.6438	0.6439	0	0	0	0	0	0	0	0
1900	2000	0.6355	0.6349	0.6146	0.6143	0	0	0	0	0	0	0	0
2000	2100	0.6114	0.6107	0.6438	0.6439	0	0	0	0	0	0	0	0
2100	2200	0.6011	0.6004	0.6329	0.6330	0	0	0	0	0	0	0	0
2200	2300	0.6218	0.6211	0.6547	0.6548	0	0	0	0	0	0	0	0
2300	2400	0.5907	0.5900	0.6220	0.6221	0	0	0	0	0	0	0	0

Sheung Shui Bus Terminus

PTI Type: Semi-confined **Assessment Vehicle:** FBDD

PART 1 - Running Emission

Parameters

Parameter	Value	Unit	Note
Average Travelling Distance from PTI Ingress to Start Point =	150	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	120	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.270	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Running Emission Factor (g/km·vehicle)				Within PTI (Section 1)+(Section 2) Running Emission Within PTI (g)				A Running Emission Within PTI (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	9	10.62	0.7139	0.3809	0.3504	2.581E+01	1.735E+00	9.256E-01	8.515E-01	7.169E-03	4.819E-04	2.571E-04	2.365E-04
100	200	7	10.62	0.7139	0.3809	0.3504	2.007E+01	1.349E+00	7.199E-01	6.623E-01	5.576E-03	3.748E-04	2.000E-04	1.840E-04
200	300	1	10.62	0.7139	0.3809	0.3504	2.867E+00	1.928E-01	1.028E-01	9.461E-02	7.965E-04	5.354E-05	2.857E-05	2.628E-05
300	400	1	10.62	0.7139	0.3809	0.3504	2.867E+00	1.928E-01	1.028E-01	9.461E-02	7.965E-04	5.354E-05	2.857E-05	2.628E-05
400	500	7	10.62	0.7139	0.3809	0.3504	2.007E+01	1.349E+00	7.199E-01	6.623E-01	5.576E-03	3.748E-04	2.000E-04	1.840E-04
500	600	19	10.62	0.7139	0.3809	0.3504	5.448E+01	3.662E+00	1.954E+00	1.798E+00	1.513E-02	1.017E-03	5.428E-04	4.993E-04
600	700	53	10.62	0.7139	0.3809	0.3504	1.520E+02	1.022E+01	5.451E+00	5.014E+00	4.221E-02	2.838E-03	1.514E-03	1.393E-03
700	800	61	10.62	0.7139	0.3809	0.3504	1.749E+02	1.176E+01	6.273E+00	5.771E+00	4.859E-02	3.266E-03	1.743E-03	1.603E-03
800	900	37	10.62	0.7139	0.3809	0.3504	1.061E+02	7.132E+00	3.805E+00	3.500E+00	2.947E-02	1.981E-03	1.057E-03	9.724E-04
900	1000	28	10.62	0.7139	0.3809	0.3504	8.029E+01	5.397E+00	2.880E+00	2.649E+00	2.230E-02	1.499E-03	7.999E-04	7.358E-04
1000	1100	51	10.62	0.7139	0.3809	0.3504	1.462E+02	9.830E+00	5.245E+00	4.825E+00	4.062E-02	2.731E-03	1.457E-03	1.340E-03
1100	1200	43	10.62	0.7139	0.3809	0.3504	1.233E+02	8.288E+00	4.422E+00	4.068E+00	3.425E-02	2.302E-03	1.228E-03	1.130E-03
1200	1300	38	10.62	0.7139	0.3809	0.3504	1.090E+02	7.325E+00	3.908E+00	3.595E+00	3.027E-02	2.035E-03	1.086E-03	9.986E-04
1300	1400	46	10.62	0.7139	0.3809	0.3504	1.319E+02	8.867E+00	4.731E+00	4.352E+00	3.664E-02	2.463E-03	1.314E-03	1.209E-03
1400	1500	41	10.62	0.7139	0.3809	0.3504	1.176E+02	7.903E+00	4.217E+00	3.879E+00	3.266E-02	2.195E-03	1.171E-03	1.077E-03
1500	1600	42	10.62	0.7139	0.3809	0.3504	1.204E+02	8.096E+00	4.319E+00	3.974E+00	3.345E-02	2.249E-03	1.200E-03	1.104E-03
1600	1700	32	10.62	0.7139	0.3809	0.3504	9.176E+01	6.168E+00	3.291E+00	3.027E+00	2.549E-02	1.713E-03	9.142E-04	8.410E-04
1700	1800	48	10.62	0.7139	0.3809	0.3504	1.376E+02	9.252E+00	4.936E+00	4.541E+00	3.823E-02	2.570E-03	1.371E-03	1.261E-03
1800	1900	34	10.62	0.7139	0.3809	0.3504	9.749E+01	6.554E+00	3.497E+00	3.217E+00	2.708E-02	1.820E-03	9.713E-04	8.935E-04
1900	2000	46	10.62	0.7139	0.3809	0.3504	1.319E+02	8.867E+00	4.731E+00	4.352E+00	3.664E-02	2.463E-03	1.314E-03	1.209E-03
2000	2100	48	10.62	0.7139	0.3809	0.3504	1.376E+02	9.252E+00	4.936E+00	4.541E+00	3.823E-02	2.570E-03	1.371E-03	1.261E-03
2100	2200	38	10.62	0.7139	0.3809	0.3504	1.090E+02	7.325E+00	3.908E+00	3.595E+00	3.027E-02	2.035E-03	1.086E-03	9.986E-04
2200	2300	36	10.62	0.7139	0.3809	0.3504	1.032E+02	6.939E+00	3.702E+00	3.406E+00	2.867E-02	1.928E-03	1.028E-03	9.461E-04
2300	2400	35	10.62	0.7139	0.3809	0.3504	1.004E+02	6.746E+00	3.600E+00	3.311E+00	2.788E-02	1.874E-03	9.999E-04	9.198E-04

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.6686	1.2035	1.6047	2.2733	2.8082	3.7444	5.4828	6.8200	10.0295	13.1053	14.7100	17.3846	19.1230	20.0591	20.5940	21.1289	21.3964	21.3964	
NO2	0.0503	0.0905	0.1206	0.1709	0.2111	0.2814	0.4121	0.5126	0.7538	0.9849	1.1055	1.3065	1.4372	1.5075	1.5477	1.5879	1.6080	1.6080	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Total #	Number of Trips: 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720
2400	100	0																		
100	200	3					1			2										
200	300	0																		
300	400	1					1													
400	500	5		1						1			3							
500	600	11			4			1						6						
600	700	11	3	1		1		1		2			1		2					
700	800	32	11	9	10	1					1									
800	900	21	7	6	5	2	1													
900	1000	20	4	4	4	6	2													
1000	1100	29	3	7	6	4	2	3	1	3										
1100	1200	24	1	4	6	3	1	1	1	6	1									
1200	1300	22	1	3	9	2	4			3										
1300	1400	26	1	7	9	4	1		1	3										
1400	1500	23	4	4	5	5		1	1	3										
1500	1600	22	5	4	7	2		2		2										
1600	1700	21	3	4	4	4	3		1	2										
1700	1800	26	6	8	7	2	1	1		1										
1800	1900	20	3	4	6	6	1													
1900	2000	26	6	6	5	6	2		1											
2000	2100	28	8	5	9	1	2			3										
2100	2200	21	5	3	4	2				6	1									
2200	2300	24	3	4	8	2	2		3	2										
2300	2400	17	4	1	5	3	2			2										

Start Hour	End Hour	Start Emission (g) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	1.645E+01	1.236E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	2.808E+00	2.111E-01	0	0
400	500	5.215E+01	3.920E+00	0	0
500	600	1.145E+02	8.603E+00	0	0
600	700	7.582E+01	5.699E+00	0	0
700	800	4.654E+01	3.499E+00	0	0
800	900	2.728E+01	2.051E+00	0	0
900	1000	3.316E+01	2.493E+00	0	0
1000	1100	7.194E+01	5.408E+00	0	0
1100	1200	8.492E+01	6.383E+00	0	0
1200	1300	5.496E+01	4.131E+00	0	0
1300	1400	6.138E+01	4.614E+00	0	0
1400	1500	5.657E+01	4.252E+00	0	0
1500	1600	4.507E+01	3.388E+00	0	0
1600	1700	4.988E+01	3.750E+00	0	0
1700	1800	4.279E+01	3.217E+00	0	0
1800	1900	3.290E+01	2.473E+00	0	0
1900	2000	4.400E+01	3.308E+00	0	0
2000	2100	5.416E+01	4.071E+00	0	0
2100	2200	6.887E+01	5.177E+00	0	0
2200	2300	5.991E+01	4.503E+00	0	0
2300	2400	3.798E+01	2.855E+00	0	0

Remark: Number of trips were derived based on on-site observations at the PTI.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 2.5 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min.

Start Hour	End Hour	Trips (60-720min)	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP
2400	100	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	2	6.008E+00	4.039E-01	1.473E-03	1.473E-03	3.004E+01	2.019E+00	7.363E-03	7.363E-03
200	300	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	4	6.008E+00	4.039E-01	1.473E-03	1.473E-03	6.008E+01	4.039E+00	1.473E-02	1.473E-02
500	600	6	6.008E+00	4.039E-01	1.473E-03	1.473E-03	9.012E+01	6.058E+00	2.209E-02	2.209E-02
600	700	5	6.008E+00	4.039E-01	1.473E-03	1.473E-03	7.510E+01	5.048E+00	1.841E-02	1.841E-02
700	800	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.502E+01	1.010E+00	3.681E-03	3.681E-03
800	900	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	1000	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1000	1100	4	6.008E+00	4.039E-01	1.473E-03	1.473E-03	6.008E+01	4.039E+00	1.473E-02	1.473E-02
1100	1200	8	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.202E+02	8.078E+00	2.945E-02	2.945E-02
1200	1300	3	6.008E+00	4.039E-01	1.473E-03	1.473E-03	4.506E+01	3.029E+00	1.104E-02	1.104E-02
1300	1400	4	6.008E+00	4.039E-01	1.473E-03	1.473E-03	6.008E+01	4.039E+00	1.473E-02	1.473E-02
1400	1500	4	6.008E+00	4.039E-01	1.473E-03	1.473E-03	6.008E+01	4.039E+00	1.473E-02	1.473E-02
1500	1600	2	6.008E+00	4.039E-01	1.473E-03	1.473E-03	3.004E+01	2.019E+00	7.363E-03	7.363E-03
1600	1700	3	6.008E+00	4.039E-01	1.473E-03	1.473E-03	4.506E+01	3.029E+00	1.104E-02	1.104E-02
1700	1800	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.502E+01	1.010E+00	3.681E-03	3.681E-03
1800	1900	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.502E+01	1.010E+00	3.681E-03	3.681E-03
2000	2100	3	6.008E+00	4.039E-01	1.473E-03	1.473E-03	4.506E+01	3.029E+00	1.104E-02	1.104E-02
2100	2200	7	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.051E+02	7.068E+00	2.577E-02	2.577E-02
2200	2300	5	6.008E+00	4.039E-01	1.473E-03	1.473E-03	7.510E+01	5.048E+00	1.841E-02	1.841E-02
2300	2400	2	6.008E+00	4.039E-01	1.473E-03	1.473E-03	3.004E+01	2.019E+00	7.363E-03	7.363E-03

Start Hour	End Hour	Trips (5-50min)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP
2400	100	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	1	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.144E-01	2.786E-02	3.681E-03	3.681E-03
200	300	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	1	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.144E-01	2.786E-02	3.681E-03	3.681E-03
400	500	1	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.144E-01	2.786E-02	3.681E-03	3.681E-03
500	600	5	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.072E+00	1.393E-01	1.841E-02	1.841E-02
600	700	6	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.486E+00	1.671E-01	2.209E-02	2.209E-02
700	800	31	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.285E+01	8.635E-01	1.141E-01	1.141E-01
800	900	21	1.658E-01	1.114E-02	1.473E-03	1.473E-03	8.702E+00	5.850E-01	7.731E-02	7.731E-02
900	1000	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	8.288E+00	5.571E-01	7.363E-02	7.363E-02
1000	1100	25	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.036E+01	6.964E-01	9.203E-02	9.203E-02
1100	1200	16	1.658E-01	1.114E-02	1.473E-03	1.473E-03	6.630E+00	4.457E-01	5.890E-02	5.890E-02
1200	1300	19	1.658E-01	1.114E-02	1.473E-03	1.473E-03	7.873E+00	5.293E-01	6.994E-02	6.994E-02
1300	1400	22	1.658E-01	1.114E-02	1.473E-03	1.473E-03	9.116E+00	6.128E-01	8.099E-02	8.099E-02
1400	1500	19	1.658E-01	1.114E-02	1.473E-03	1.473E-03	7.873E+00	5.293E-01	6.994E-02	6.994E-02
1500	1600	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	8.288E+00	5.571E-01	7.363E-02	7.363E-02
1600	1700	18	1.658E-01	1.114E-02	1.473E-03	1.473E-03	7.459E+00	5.014E-01	6.626E-02	6.626E-02
1700	1800	25	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.036E+01	6.964E-01	9.203E-02	9.203E-02
1800	1900	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	8.288E+00	5.571E-01	7.363E-02	7.363E-02
1900	2000	25	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.036E+01	6.964E-01	9.203E-02	9.203E-02
2000	2100	25	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.036E+01	6.964E-01	9.203E-02	9.203E-02
2100	2200	14	1.658E-01	1.114E-02	1.473E-03	1.473E-03	5.801E+00	3.900E-01	5.154E-02	5.154E-02
2200	2300	19	1.658E-01	1.114E-02	1.473E-03	1.473E-03	7.873E+00	5.293E-01	6.994E-02	6.994E-02
2300	2400	15	1.658E-01	1.114E-02	1.473E-03	1.473E-03	6.216E+00	4.178E-01	5.522E-02	5.522E-02

*Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	3.046E+01	2.047E+00	1.104E-02	1.104E-02	8.460E-03	5.687E-04	3.068E-06	3.068E-06
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	4.144E-01	2.786E-02	3.681E-03	3.681E-03	1.151E-04	7.738E-06	1.023E-06	1.023E-06
400	500	6.050E+01	4.067E+00	1.841E-02	1.841E-02	1.680E-02	1.130E-03	5.113E-06	5.113E-06
500	600	9.219E+01	6.197E+00	4.049E-02	4.049E-02	2.561E-02	1.722E-03	1.125E-05	1.125E-05
600	700	7.759E+01	5.216E+00	4.049E-02	4.049E-02	2.155E-02	1.449E-03	1.125E-05	1.125E-05
700	800	2.787E+01	1.873E+00	1.178E-01	1.178E-01	7.741E-03	5.203E-04	3.272E-05	3.272E-05
800	900	8.702E+00	5.850E-01	7.731E-02	7.731E-02	2.417E-03	1.625E-04	2.147E-05	2.147E-05
900	1000	8.288E+00	5.571E-01	7.363E-02	7.363E-02	2.302E-03	1.548E-04	2.045E-05	2.045E-05
1000	1100	7.044E+01	4.735E+00	1.068E-01	1.068E-01	1.957E-02	1.315E-03	2.965E-05	2.965E-05
1100	1200	1.268E+02	8.523E+00	8.835E-02	8.835E-02	3.522E-02	2.368E-03	2.454E-05	2.454E-05
1200	1300	5.293E+01	3.558E+00	8.099E-02	8.099E-02	1.470E-02	9.884E-04	2.250E-05	2.250E-05
1300	1400	6.920E+01	4.652E+00	9.571E-02	9.571E-02	1.922E-02	1.292E-03	2.659E-05	2.659E-05
1400	1500	6.795E+01	4.568E+00	8.467E-02	8.467E-02	1.888E-02	1.269E-03	2.352E-05	2.352E-05
1500	1600	3.833E+01	2.577E+00	8.099E-02	8.099E-02	1.065E-02	7.157E-04	2.250E-05	2.250E-05
1600	1700	5.252E+01	3.531E+00	7.731E-02	7.731E-02	1.459E-02	9.807E-04	2.147E-05	2.147E-05
1700	1800	2.538E+01	1.706E+00	9.571E-02	9.571E-02	7.050E-03	4.739E-04	2.659E-05	2.659E-05
1800	1900	8.288E+00	5.571E-01	7.363E-02	7.363E-02	2.302E-03	1.548E-04	2.045E-05	2.045E-05
1900	2000	2.538E+01	1.706E+00	9.571E-02	9.571E-02	7.050E-03	4.739E-04	2.659E-05	2.659E-05
2000	2100	5.542E+01	3.725E+00	1.031E-01	1.031E-01	1.539E-02	1.035E-03	2.863E-05	2.863E-05
2100	2200	1.109E+02	7.458E+00	7.731E-02	7.731E-02	3.082E-02	2.072E-03	2.147E-05	2.147E-05
2200	2300	8.297E+01	5.578E+00	8.835E-02	8.835E-02	2.305E-02	1.549E-03	2.454E-05	2.454E-05
2300	2400	3.626E+01	2.437E+00	6.258E-02	6.258E-02	1.007E-02	6.770E-04	1.738E-05	1.738E-05

Parameters

Parameter	Value	Unit	Note
Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	120	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	580	m	(Section 3) * (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
100	200	1.218E+01	8.189E-01	4.418E-03	4.418E-03	7.313E-01	7.155E-02	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
300	400	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.530E-01	3.428E-02	0	0
400	500	2.420E+01	1.627E+00	7.363E-03	7.363E-03	4.792E+00	3.931E-01	0	0
500	600	3.688E+01	2.479E+00	1.620E-02	1.620E-02	1.330E+01	1.050E+00	0	0
600	700	3.104E+01	2.086E+00	1.620E-02	1.620E-02	7.678E+00	6.193E-01	0	0
700	800	1.115E+01	7.493E-01	4.712E-02	4.712E-02	6.067E+00	4.713E-01	0	0
800	900	3.481E+00	2.340E-01	3.092E-02	3.092E-02	4.080E+00	3.115E-01	0	0
900	1000	3.315E+00	2.228E-01	2.945E-02	2.945E-02	5.117E+00	3.892E-01	0	0
1000	1100	2.818E+01	1.894E+00	4.270E-02	4.270E-02	7.503E+00	6.024E-01	0	0
1100	1200	5.072E+01	3.409E+00	3.534E-02	3.534E-02	5.863E+00	5.097E-01	0	0
1200	1300	2.117E+01	1.423E+00	3.240E-02	3.240E-02	5.792E+00	4.642E-01	0	0
1300	1400	2.768E+01	1.861E+00	3.829E-02	3.829E-02	5.777E+00	4.720E-01	0	0
1400	1500	2.718E+01	1.827E+00	3.387E-02	3.387E-02	5.037E+00	4.157E-01	0	0
1500	1600	1.533E+01	1.031E+00	3.240E-02	3.240E-02	5.097E+00	4.040E-01	0	0
1600	1700	2.101E+01	1.412E+00	3.092E-02	3.092E-02	4.949E+00	4.007E-01	0	0
1700	1800	1.015E+01	6.824E-01	3.829E-02	3.829E-02	5.595E+00	4.345E-01	0	0
1800	1900	3.315E+00	2.228E-01	2.945E-02	2.945E-02	5.071E+00	3.857E-01	0	0
1900	2000	1.015E+01	6.824E-01	3.829E-02	3.829E-02	5.802E+00	4.500E-01	0	0
2000	2100	2.217E+01	1.490E+00	4.123E-02	4.123E-02	5.484E+00	4.425E-01	0	0
2100	2200	4.438E+01	2.983E+00	3.092E-02	3.092E-02	4.198E+00	3.760E-01	0	0
2200	2300	3.319E+01	2.231E+00	3.534E-02	3.534E-02	4.580E+00	3.895E-01	0	0
2300	2400	1.450E+01	9.749E-01	2.503E-02	2.503E-02	4.024E+00	3.223E-01	0	0

Start Hour	End Hour	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	2.032E-04	1.988E-05	0	0	3.535E+00	3.458E-01	0	0	9.819E-04	9.607E-05	0	0
200	300	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	1.258E-04	9.522E-06	0	0	2.189E+00	1.657E-01	0	0	6.082E-04	4.602E-05	0	0
400	500	1.331E-03	1.092E-04	0	0	2.316E+01	1.900E+00	0	0	6.434E-03	5.277E-04	0	0
500	600	3.695E-03	2.916E-04	0	0	6.429E+01	5.074E+00	0	0	1.786E-02	1.409E-03	0	0
600	700	2.133E-03	1.720E-04	0	0	3.711E+01	2.993E+00	0	0	1.031E-02	8.315E-04	0	0
700	800	1.685E-03	1.309E-04	0	0	2.932E+01	2.278E+00	0	0	8.145E-03	6.328E-04	0	0
800	900	1.133E-03	8.652E-05	0	0	1.972E+01	1.506E+00	0	0	5.477E-03	4.182E-04	0	0
900	1000	1.421E-03	1.081E-04	0	0	2.473E+01	1.881E+00	0	0	6.870E-03	5.225E-04	0	0
1000	1100	2.084E-03	1.673E-04	0	0	3.626E+01	2.911E+00	0	0	1.007E-02	8.087E-04	0	0
1100	1200	1.628E-03	1.416E-04	0	0	2.834E+01	2.464E+00	0	0	7.871E-03	6.843E-04	0	0
1200	1300	1.609E-03	1.289E-04	0	0	2.800E+01	2.244E+00	0	0	7.776E-03	6.232E-04	0	0
1300	1400	1.605E-03	1.311E-04	0	0	2.792E+01	2.281E+00	0	0	7.756E-03	6.337E-04	0	0
1400	1500	1.399E-03	1.155E-04	0	0	2.435E+01	2.009E+00	0	0	6.763E-03	5.581E-04	0	0
1500	1600	1.416E-03	1.122E-04	0	0	2.464E+01	1.953E+00	0	0	6.844E-03	5.425E-04	0	0
1600	1700	1.375E-03	1.113E-04	0	0	2.392E+01	1.937E+00	0	0	6.645E-03	5.379E-04	0	0
1700	1800	1.554E-03	1.207E-04	0	0	2.704E+01	2.100E+00	0	0	7.512E-03	5.833E-04	0	0
1800	1900	1.409E-03	1.072E-04	0	0	2.451E+01	1.864E+00	0	0	6.808E-03	5.179E-04	0	0
1900	2000	1.612E-03	1.250E-04	0	0	2.804E+01	2.175E+00	0	0	7.789E-03	6.042E-04	0	0
2000	2100	1.523E-03	1.229E-04	0	0	2.651E+01	2.139E+00	0	0	7.363E-03	5.940E-04	0	0
2100	2200	1.166E-03	1.044E-04	0	0	2.029E+01	1.817E+00	0	0	5.637E-03	5.048E-04	0	0
2200	2300	1.272E-03	1.082E-04	0	0	2.214E+01	1.883E+00	0	0	6.150E-03	5.229E-04	0	0
2300	2400	1.118E-03	8.952E-05	0	0	1.945E+01	1.558E+00	0	0	5.403E-03	4.327E-04	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 1 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PT1 (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	9	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
100	200	4	1.658E-01	1.114E-02	1.473E-03	1.473E-03	6.630E-01	4.457E-02	5.890E-03	5.890E-03	1.842E-04	1.238E-05	1.636E-06	1.636E-06
200	300	1	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.604E-05	3.095E-06	4.090E-07	4.090E-07
300	400	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	2	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.315E-01	2.228E-02	2.945E-03	2.945E-03	9.209E-05	6.190E-06	8.181E-07	8.181E-07
500	600	8	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.326E+00	8.914E-02	1.178E-02	1.178E-02	3.683E-04	2.476E-05	3.272E-06	3.272E-06
600	700	42	1.658E-01	1.114E-02	1.473E-03	1.473E-03	6.962E+00	4.680E-01	6.185E-02	6.185E-02	1.934E-03	1.300E-04	1.718E-05	1.718E-05
700	800	29	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.807E+00	3.231E-01	4.270E-02	4.270E-02	1.335E-03	8.976E-05	1.186E-05	1.186E-05
800	900	16	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.652E+00	1.783E-01	2.356E-02	2.356E-02	7.367E-04	4.952E-05	6.544E-06	6.544E-06
900	1000	8	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.326E+00	8.914E-02	1.178E-02	1.178E-02	3.683E-04	2.476E-05	3.272E-06	3.272E-06
1000	1100	22	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.647E+00	2.451E-01	3.240E-02	3.240E-02	1.013E-03	6.809E-05	8.999E-06	8.999E-06
1100	1200	19	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.149E+00	2.117E-01	2.798E-02	2.798E-02	8.748E-04	5.881E-05	7.772E-06	7.772E-06
1200	1300	16	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.652E+00	1.783E-01	2.356E-02	2.356E-02	7.367E-04	4.952E-05	6.544E-06	6.544E-06
1300	1400	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.315E+00	2.228E-01	2.945E-02	2.945E-02	9.209E-04	6.190E-05	8.181E-06	8.181E-06
1400	1500	18	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.984E+00	2.006E-01	2.651E-02	2.651E-02	8.288E-04	5.571E-05	7.363E-06	7.363E-06
1500	1600	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.315E+00	2.228E-01	2.945E-02	2.945E-02	9.209E-04	6.190E-05	8.181E-06	8.181E-06
1600	1700	11	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.823E+00	1.226E-01	1.620E-02	1.620E-02	5.065E-04	3.405E-05	4.499E-06	4.499E-06
1700	1800	22	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.647E+00	2.451E-01	3.240E-02	3.240E-02	1.013E-03	6.809E-05	8.999E-06	8.999E-06
1800	1900	14	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.321E+00	1.560E-01	2.062E-02	2.062E-02	6.446E-04	4.333E-05	5.726E-06	5.726E-06
1900	2000	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.315E+00	2.228E-01	2.945E-02	2.945E-02	9.209E-04	6.190E-05	8.181E-06	8.181E-06
2000	2100	20	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.315E+00	2.228E-01	2.945E-02	2.945E-02	9.209E-04	6.190E-05	8.181E-06	8.181E-06
2100	2200	17	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.818E+00	1.894E-01	2.503E-02	2.503E-02	7.827E-04	5.262E-05	6.954E-06	6.954E-06
2200	2300	12	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.989E+00	1.337E-01	1.767E-02	1.767E-02	5.525E-04	3.714E-05	4.908E-06	4.908E-06
2300	2400	18	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.984E+00	2.006E-01	2.651E-02	2.651E-02	8.288E-04	5.571E-05	7.363E-06	7.363E-06

PART 5 - Sum up all above parts

Calculations

Start Hour	End Hour	Model ID: SSB_BD401-416, SSB_BDA1-2 Emissions Within PT1 = A+B+C+D Within PT1 (Section 1 + Section 2) Total Emission (g/s)				Model ID: SSB_BDSS Spread distance = E to SWREB (Section 3) Total Emission (g/s)				Model ID: SSB_BDSN Spread distance = E to SFANB (Section 3) Total Emission (g/s)				Model ID: SSB_BDSE Spread distance = E to LSANB (Section 3) Total Emission (g/s)				Spill Ratio		
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	to SWREB (%)	to SFANB (%)	to LSANB (%)
2400	100	7.583E-03	5.097E-04	2.608E-04	2.402E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	100.00%	0.00%	0.00%
100	200	1.442E-02	9.757E-04	2.047E-04	1.887E-04	9.819E-04	9.607E-05	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	100.00%	0.00%	0.00%
200	300	8.425E-04	5.664E-05	2.898E-05	2.669E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%
300	400	1.037E-03	7.080E-05	2.959E-05	2.730E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%
400	500	2.380E-02	1.620E-03	2.059E-04	1.899E-04	0.000E+00	0.000E+00	0	0	6.434E-03	5.277E-04	0	0	0.000E+00	0.000E+00	0	0	0.00%	100.00%	0.00%
500	600	4.481E-02	3.055E-03	5.573E-04	5.138E-04	1.228E-02	9.690E-04	0	0	5.581E-03	4.405E-04	0	0	0.000E+00	0.000E+00	0	0	68.75%	31.25%	0.00%
600	700	6.783E-02	4.589E-03	1.543E-03	1.421E-03	7.827E-03	6.313E-04	0	0	2.291E-03	1.848E-04	0	0	1.909E-04	1.540E-05	0	0	75.93%	22.22%	1.85%
700	**800**	5.935E-02	4.007E-03	1.787E-03	1.648E-03	6.541E-03	5.081E-04	0	0	1.481E-03	1.150E-04	0	0	**1.234E-04**	**9.587E-06**	**0**	**0**	80.30%	18.18%	1.52%
800	**900**	**3.376E-02**	**2.280E-03**	**1.085E-03**	**1.000E-03**	**4.494E-03**	**3.431E-04**	**0**	**0**	**9.831E-04**	**7.506E-05**	**0**	**0**	0.000E+00	0.000E+00	0	0	**82.05%**	**17.95%**	**0.00%**
900	1000	2.639E-02	1.787E-03	8.236E-04	7.596E-04	5.204E-03	3.959E-04	0	0	1.249E-03	9.501E-05	0	0	4.164E-04	3.167E-05	0	0	75.76%	18.18%	6.06%
1000	1100	6.329E-02	4.281E-03	1.496E-03	1.379E-03	7.799E-03	6.261E-04	0	0	1.625E-03	1.304E-04	0	0	6.499E-04	5.218E-05	0	0	77.42%	16.13%	6.45%
1100	1200	7.197E-02	4.870E-03	1.261E-03	1.162E-03	6.201E-03	5.392E-04	0	0	1.193E-03	1.037E-04	0	0	4.770E-04	4.147E-05	0	0	78.79%	15.15%	6.06%
1200	1300	4.732E-02	3.202E-03	1.115E-03	1.028E-03	6.127E-03	4.910E-04	0	0	1.178E-03	9.443E-05	0	0	4.713E-04	3.777E-05	0	0	78.79%	15.15%	6.06%
1300	1400	5.839E-02	3.948E-03	1.349E-03	1.244E-03	6.111E-03	4.992E-04	0	0	1.175E-03	9.601E-05	0	0	4.701E-04	3.840E-05	0	0	78.79%	15.15%	6.06%
1400	1500	5.376E-02	3.635E-03	1.202E-03	1.108E-03	5.284E-03	4.360E-04	0	0	1.057E-03	8.720E-05	0	0	4.227E-04	3.488E-05	0	0	78.13%	15.63%	6.25%
1500	1600	4.644E-02	3.139E-03	1.231E-03	1.134E-03	5.513E-03	4.370E-04	0	0	9.505E-04	7.534E-05	0	0	3.802E-04	3.014E-05	0	0	80.56%	13.89%	5.56%
1600	1700	4.196E-02	2.839E-03	9.401E-04	8.669E-04	4.862E-03	3.936E-04	0	0	1.459E-03	1.181E-04	0	0	3.241E-04	2.624E-05	0	0	73.17%	21.95%	4.88%
1700	1800	4.785E-02	3.233E-03	1.407E-03	1.297E-03	5.416E-03	4.205E-04	0	0	1.747E-03	1.357E-04	0	0	3.494E-04	2.713E-05	0	0	72.09%	23.26%	4.65%
1800	1900	3.144E-02	2.126E-03	9.975E-04	9.197E-04	4.936E-03	3.755E-04	0	0	1.532E-03	1.165E-04	0	0	3.404E-04	2.588E-05	0	0	72.50%	22.50%	5.00%
1900	2000	4.622E-02	3.124E-03	1.349E-03	1.244E-03	5.564E-03	4.316E-04	0	0	1.780E-03	1.381E-04	0	0	4.451E-04	3.452E-05	0	0	71.43%	22.86%	5.71%
2000	2100	5.607E-02	3.790E-03	1.408E-03	1.298E-03	5.355E-03	4.320E-04	0	0	2.008E-03	1.620E-04	0	0	0.000E+00	0.000E+00	0	0	72.73%	27.27%	0.00%
2100	2200	6.303E-02	4.263E-03	1.114E-03	1.027E-03	4.270E-03	3.825E-04	0	0	1.366E-03	1.224E-04	0	0	0.000E+00	0.000E+00	0	0	75.76%	24.24%	0.00%
2200	2300	5.355E-02	3.622E-03	1.058E-03	9.755E-04	4.510E-03	3.835E-04	0	0	1.640E-03	1.395E-04	0	0	0.000E+00	0.000E+00	0	0	73.33%	26.67%	0.00%
2300	2400	3.990E-02	2.696E-03	1.025E-03	9.445E-04	4.728E-03	3.786E-04	0	0	6.754E-04	5.408E-05	0	0	0.000E+00	0.000E+00	0	0	87.50%	12.50%	0.00%

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0700-0800 as Baseline)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.2246	0.2236	0.2404	0.2401	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
100	200	0.4272	0.4280	0.1886	0.1886	0.2185	0.2800	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
200	300	0.0250	0.0248	0.0267	0.0267	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
300	400	0.0307	0.0311	0.0273	0.0273	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
400	500	0.7051	0.7106	0.1898	0.1898	0.0000	0.0000	0	0	6.5445	7.0307	0	0	0.0000	0.0000	0	0
500	600	1.3273	1.3402	0.5136	0.5136	2.7319	2.8239	0	0	5.6766	5.8679	0	0	0.0000	0.0000	0	0
600	700	2.0094	2.0129	1.4216	1.4207	1.7415	1.8398	0	0	2.3300	2.4616	0	0	1.5468	1.6080	0	0
700	**800**	1.7580	1.7578	1.6472	1.6470	1.4553	1.4808	0	0	1.5063	1.5327	0	0	**1.0000**	**1.0000**	**0**	**0**
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**0**	**0**	**1.0000**	**1.0000**	**0**	**0**	0.0000	0.0000	0	0
900	1000	0.7819	0.7838	0.7591	0.7593	1.1580	1.1537	0	0	1.2705	1.2657	0	0	3.3737	3.3033	0	0
1000	1100	1.8747	1.8781	1.3784	1.3784	1.7353	1.8247	0	0	1.6526	1.7378	0	0	5.2661	5.4423	0	0
1100	1200	2.1320	2.1365	1.1619	1.1619	1.3798	1.5713	0	0	1.2130	1.3813	0	0	3.8654	4.3260	0	0
1200	1300	1.4017	1.4044	1.0273	1.0273	1.3632	1.4310	0	0	1.1985	1.2580	0	0	3.8189	3.9398	0	0
1300	1400	1.7296	1.7319	1.2432	1.2432	1.3597	1.4549	0	0	1.1954	1.2791	0	0	3.8091	4.0057	0	0
1400	1500	1.5925	1.5947	1.1080	1.1079	1.1756	1.2706	0	0	1.0748	1.1617	0	0	3.4250	3.6382	0	0
1500	1600	1.3756	1.3768	1.1341	1.1340	1.2266	1.2735	0	0	0.9668	1.0037	0	0	3.0807	3.1434	0	0
1600	1700	1.2429	1.2456	0.8665	0.8666	1.0818	1.1471	0	0	1.4837	1.5732	0	0	2.6265	2.7371	0	0
1700	1800	1.4174	1.4181	1.2966	1.2965	1.2050	1.2256	0	0	1.7770	1.8073	0	0	2.8313	2.8300	0	0
1800	1900	0.9312	0.9325	0.9193	0.9193	1.0983	1.0942	0	0	1.5581	1.5524	0	0	2.7584	2.7010	0	0
1900	2000	1.3692	1.3703	1.2432	1.2432	1.2380	1.2577	0	0	1.8109	1.8398	0	0	3.6066	3.6011	0	0
2000	2100	1.6610	1.6624	1.2977	1.2978	1.1914	1.2590	0	0	2.0425	2.1584	0	0	0.0000	0.0000	0	0
2100	2200	1.8672	1.8702	1.0267	1.0267	0.9502	1.1146	0	0	1.3899	1.6305	0	0	0.0000	0.0000	0	0
2200	2300	1.5862	1.5890	0.9750	0.9752	1.0034	1.1176	0	0	1.6680	1.8578	0	0	0.0000	0.0000	0	0
2300	2400	1.1818	1.1828	0.9443	0.9442	1.0519	1.1033	0	0	0.6870	0.7205	0	0	0.0000	0.0000	0	0

Sheung Shui Bus Terminus PTI Type: Semi-confined Assessment Vehicle: FBSD

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	150	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	120	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.270	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Running Emission Factor (g/km·vehicle) NO	NO_2	RSP	FSP	Within PTI (Section 1)+(Section 2) Running Emission Within PTI (g) NO	NO_2	RSP	FSP	A Running Emission Within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	1	2.9636	0.5374	0.0834	0.0768	8.002E-01	1.451E-01	2.252E-02	2.074E-02	2.223E-04	4.031E-05	6.255E-06	5.760E-06
300	400	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	3	2.9636	0.5374	0.0834	0.0768	2.401E+00	4.353E-01	6.755E-02	6.221E-02	6.668E-04	1.209E-04	1.877E-05	1.728E-05
600	700	5	2.9636	0.5374	0.0834	0.0768	4.001E+00	7.255E-01	1.126E-01	1.037E-01	1.111E-03	2.015E-04	3.128E-05	2.880E-05
700	800	2	2.9636	0.5374	0.0834	0.0768	1.600E+00	2.902E-01	4.504E-02	4.147E-02	4.445E-04	8.061E-05	1.251E-05	1.152E-05
800	900	3	2.9636	0.5374	0.0834	0.0768	2.401E+00	4.353E-01	6.755E-02	6.221E-02	6.668E-04	1.209E-04	1.877E-05	1.728E-05
900	1000	4	2.9636	0.5374	0.0834	0.0768	3.201E+00	5.804E-01	9.007E-02	8.294E-02	8.891E-04	1.612E-04	2.502E-05	2.304E-05
1000	1100	2	2.9636	0.5374	0.0834	0.0768	1.600E+00	2.902E-01	4.504E-02	4.147E-02	4.445E-04	8.061E-05	1.251E-05	1.152E-05
1100	1200	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	1	2.9636	0.5374	0.0834	0.0768	8.002E-01	1.451E-01	2.252E-02	2.074E-02	2.223E-04	4.031E-05	6.255E-06	5.760E-06
1400	1500	6	2.9636	0.5374	0.0834	0.0768	4.801E+00	8.706E-01	1.351E-01	1.244E-01	1.334E-03	2.419E-04	3.753E-05	3.456E-05
1500	1600	3	2.9636	0.5374	0.0834	0.0768	2.401E+00	4.353E-01	6.755E-02	6.221E-02	6.668E-04	1.209E-04	1.877E-05	1.728E-05
1600	1700	1	2.9636	0.5374	0.0834	0.0768	8.002E-01	1.451E-01	2.252E-02	2.074E-02	2.223E-04	4.031E-05	6.255E-06	5.760E-06
1700	1800	3	2.9636	0.5374	0.0834	0.0768	2.401E+00	4.353E-01	6.755E-02	6.221E-02	6.668E-04	1.209E-04	1.877E-05	1.728E-05
1800	1900	2	2.9636	0.5374	0.0834	0.0768	1.600E+00	2.902E-01	4.504E-02	4.147E-02	4.445E-04	8.061E-05	1.251E-05	1.152E-05
1900	2000	2	2.9636	0.5374	0.0834	0.0768	1.600E+00	2.902E-01	4.504E-02	4.147E-02	4.445E-04	8.061E-05	1.251E-05	1.152E-05
2000	2100	3	2.9636	0.5374	0.0834	0.0768	2.401E+00	4.353E-01	6.755E-02	6.221E-02	6.668E-04	1.209E-04	1.877E-05	1.728E-05
2100	2200	2	2.9636	0.5374	0.0834	0.0768	1.600E+00	2.902E-01	4.504E-02	4.147E-02	4.445E-04	8.061E-05	1.251E-05	1.152E-05
2200	2300	2	2.9636	0.5374	0.0834	0.0768	1.600E+00	2.902E-01	4.504E-02	4.147E-02	4.445E-04	8.061E-05	1.251E-05	1.152E-05
2300	2400	2	2.9636	0.5374	0.0834	0.0768	1.600E+00	2.902E-01	4.504E-02	4.147E-02	4.445E-04	8.061E-05	1.251E-05	1.152E-05

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.1693	0.3048	0.4064	0.5757	0.7112	0.9482	1.3885	1.7272	2.5400	3.3189	3.7253	4.4026	4.8429	5.0800	5.2154	5.3510	5.4186	5.4186	
NO2	0.0316	0.0569	0.0758	0.1074	0.1327	0.1769	0.2590	0.3222	0.4738	0.6191	0.6949	0.8213	0.9034	0.9476	0.9729	0.9981	1.0108	1.0108	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Total #	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (g) NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	1						1													9.482E-01	1.769E-01	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	3		1	1									1							5.114E+00	9.540E-01	0	0
600	700	3	2		1																7.450E-01	1.390E-01	0	0
700	800	1		1																	3.048E-01	5.690E-02	0	0
800	900	0																			0.000E+00	0.000E+00	0	0
900	1000	2	1	1																	4.741E-01	8.850E-02	0	0
1000	1100	0																			0.000E+00	0.000E+00	0	0
1100	1200	0																			0.000E+00	0.000E+00	0	0
1200	1300	0																			0.000E+00	0.000E+00	0	0
1300	1400	0																			0.000E+00	0.000E+00	0	0
1400	1500	3	1	1		1															1.050E+00	1.959E-01	0	0
1500	1600	2		1	1																7.112E-01	1.327E-01	0	0
1600	1700	1		1																	3.048E-01	5.690E-02	0	0
1700	1800	2	2																		3.388E-01	6.320E-02	0	0
1800	1900	2	2																		3.388E-01	6.320E-02	0	0
1900	2000	2		2																	6.096E-01	1.138E-01	0	0
2000	2100	3		3																	9.144E-01	1.707E-01	0	0
2100	2200	2		2																	6.096E-01	1.138E-01	0	0
2200	2300	2		2																	6.096E-01	1.138E-01	0	0
2300	2400	2			2																8.128E-01	1.516E-01	0	0

Remark: Number of trips were derived based on on-site observations at the PTIs and operators' published schedules.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 2 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min. *Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Trips (60-720min)	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (5-50min)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.212E-01	2.197E-02	1.067E-03	1.067E-03	1.212E-01	2.197E-02	1.067E-03	1.067E-03	3.365E-05	6.102E-06	2.963E-07	2.963E-07
300	400	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	1	7.797E-01	1.414E-01	5.333E-04	5.333E-04	1.559E+00	2.828E-01	1.067E-03	1.067E-03	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	1.802E+00	3.267E-01	3.200E-03	3.200E-03	5.005E-04	9.076E-05	8.888E-07	8.888E-07
600	700	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3	6.058E-02	1.098E-02	5.333E-04	5.333E-04	3.635E-01	6.591E-02	3.200E-03	3.200E-03	3.635E-01	6.591E-02	3.200E-03	3.200E-03	1.010E-04	1.831E-05	8.888E-07	8.888E-07
700	800	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.212E-01	2.197E-02	1.067E-03	1.067E-03	1.212E-01	2.197E-02	1.067E-03	1.067E-03	3.365E-05	6.102E-06	2.963E-07	2.963E-07
800	900	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	1000	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	2.423E-01	4.394E-02	2.133E-03	2.133E-03	6.731E-05	1.220E-05	5.925E-07	5.925E-07
1000	1100	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3	6.058E-02	1.098E-02	5.333E-04	5.333E-04	3.635E-01	6.591E-02	3.200E-03	3.200E-03	3.635E-01	6.591E-02	3.200E-03	3.200E-03	1.010E-04	1.831E-05	8.888E-07	8.888E-07
1500	1600	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	2.423E-01	4.394E-02	2.133E-03	2.133E-03	6.731E-05	1.220E-05	5.925E-07	5.925E-07
1600	1700	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.212E-01	2.197E-02	1.067E-03	1.067E-03	1.212E-01	2.197E-02	1.067E-03	1.067E-03	3.365E-05	6.102E-06	2.963E-07	2.963E-07
1700	1800	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	2.423E-01	4.394E-02	2.133E-03	2.133E-03	6.731E-05	1.220E-05	5.925E-07	5.925E-07
1800	1900	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	2.423E-01	4.394E-02	2.133E-03	2.133E-03	6.731E-05	1.220E-05	5.925E-07	5.925E-07
1900	2000	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	2.423E-01	4.394E-02	2.133E-03	2.133E-03	6.731E-05	1.220E-05	5.925E-07	5.925E-07
2000	2100	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3	6.058E-02	1.098E-02	5.333E-04	5.333E-04	3.635E-01	6.591E-02	3.200E-03	3.200E-03	3.635E-01	6.591E-02	3.200E-03	3.200E-03	1.010E-04	1.831E-05	8.888E-07	8.888E-07
2100	2200	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	2.423E-01	4.394E-02	2.133E-03	2.133E-03	6.731E-05	1.220E-05	5.925E-07	5.925E-07
2200	2300	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	2.423E-01	4.394E-02	2.133E-03	2.133E-03	6.731E-05	1.220E-05	5.925E-07	5.925E-07
2300	2400	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	2.423E-01	4.394E-02	2.133E-03	2.133E-03	6.731E-05	1.220E-05	5.925E-07	5.925E-07

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	120	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	580	m	(Section 3)

* (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.522E-01	2.844E-02	0	0	4.227E-05	7.901E-06	0	0	7.355E-01	1.375E-01	0	0	2.043E-04	3.819E-05	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	9.009E-01	1.634E-01	1.600E-03	1.600E-03	7.222E-01	1.355E-01	0	0	2.006E-04	3.765E-05	0	0	3.491E+00	6.551E-01	0	0	9.696E-04	1.820E-04	0	0
600	700	1.817E-01	3.295E-02	1.600E-03	1.600E-03	9.656E-02	1.818E-02	0	0	2.682E-05	5.050E-06	0	0	4.667E-01	8.787E-02	0	0	1.296E-04	2.441E-05	0	0
700	800	6.058E-02	1.098E-02	5.333E-04	5.333E-04	4.187E-02	7.871E-03	0	0	1.163E-05	2.186E-06	0	0	2.024E-01	3.804E-02	0	0	5.621E-05	1.057E-05	0	0
800	900	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
900	1000	1.212E-01	2.197E-02	1.067E-03	1.067E-03	6.051E-02	1.141E-02	0	0	1.681E-05	3.168E-06	0	0	2.924E-01	5.513E-02	0	0	8.123E-05	1.531E-05	0	0
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1400	1500	1.817E-01	3.295E-02	1.600E-03	1.600E-03	1.488E-01	2.793E-02	0	0	4.134E-05	7.759E-06	0	0	7.193E-01	1.350E-01	0	0	1.998E-04	3.750E-05	0	0
1500	1600	1.212E-01	2.197E-02	1.067E-03	1.067E-03	1.012E-01	1.898E-02	0	0	2.810E-05	5.273E-06	0	0	4.889E-01	9.175E-02	0	0	1.358E-04	2.549E-05	0	0
1600	1700	6.058E-02	1.098E-02	5.333E-04	5.333E-04	4.187E-02	7.871E-03	0	0	1.163E-05	2.186E-06	0	0	2.024E-01	3.804E-02	0	0	5.621E-05	1.057E-05	0	0
1700	1800	1.212E-01	2.197E-02	1.067E-03	1.067E-03	3.728E-02	7.068E-03	0	0	1.035E-05	1.963E-06	0	0	1.802E-01	3.416E-02	0	0	5.005E-05	9.490E-06	0	0
1800	1900	1.212E-01	2.197E-02	1.067E-03	1.067E-03	3.728E-02	7.068E-03	0	0	1.035E-05	1.963E-06	0	0	1.802E-01	3.416E-02	0	0	5.005E-05	9.490E-06	0	0
1900	2000	1.212E-01	2.197E-02	1.067E-03	1.067E-03	8.373E-02	1.574E-02	0	0	2.326E-05	4.373E-06	0	0	4.047E-01	7.609E-02	0	0	1.124E-04	2.114E-05	0	0
2000	2100	1.817E-01	3.295E-02	1.600E-03	1.600E-03	1.256E-01	2.361E-02	0	0	3.489E-05	6.559E-06	0	0	6.071E-01	1.141E-01	0	0	1.686E-04	3.170E-05	0	0
2100	2200	1.212E-01	2.197E-02	1.067E-03	1.067E-03	8.373E-02	1.574E-02	0	0	2.326E-05	4.373E-06	0	0	4.047E-01	7.609E-02	0	0	1.124E-04	2.114E-05	0	0
2200	2300	1.212E-01	2.197E-02	1.067E-03	1.067E-03	8.373E-02	1.574E-02	0	0	2.326E-05	4.373E-06	0	0	4.047E-01	7.609E-02	0	0	1.124E-04	2.114E-05	0	0
2300	2400	1.212E-01	2.197E-02	1.067E-03	1.067E-03	1.186E-01	2.222E-02	0	0	3.294E-05	6.173E-06	0	0	5.731E-01	1.074E-01	0	0	1.592E-04	2.984E-05	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 1.5 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.817E-01	3.295E-02	1.600E-03	1.600E-03	5.048E-05	9.154E-06	4.444E-07	4.444E-07
700	800	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07
800	900	3	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.726E-01	4.943E-02	2.400E-03	2.400E-03	7.572E-05	1.373E-05	6.666E-07	6.666E-07
900	1000	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.817E-01	3.295E-02	1.600E-03	1.600E-03	5.048E-05	9.154E-06	4.444E-07	4.444E-07
1000	1100	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.817E-01	3.295E-02	1.600E-03	1.600E-03	5.048E-05	9.154E-06	4.444E-07	4.444E-07
1100	1200	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07
1400	1500	3	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.726E-01	4.943E-02	2.400E-03	2.400E-03	7.572E-05	1.373E-05	6.666E-07	6.666E-07
1500	1600	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07
1600	1700	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	1	6.058E-02	1.098E-02	5.333E-04	5.333E-04	9.086E-02	1.648E-02	7.999E-04	7.999E-04	2.524E-05	4.577E-06	2.222E-07	2.222E-07
1800	1900	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PART 5 - Sum up all above parts

Calculations

Start Hour	End Hour	Model ID: SSB_BS401-416, SSB_BSA1-2 Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)				Model ID: SSB_BSSS Spread distance = E to SWREB (Section 3) Total Emission (g/s)				Model ID: SSB_BSSN Spread distance = E to SFANB (Section 3) Total Emission (g/s)				Model ID: SSB_BSSE Spread distance = E to LSANB (Section 3) Total Emission (g/s)				Spill Ratio		
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	to SWREB (%)	to SFANB (%)	to LSANB (%)
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	100.00%	0.00%	0.00%
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	100.00%	0.00%	0.00%
200	300	2.982E-04	5.431E-05	6.551E-06	6.056E-06	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	100.00%	0.00%
500	600	1.368E-03	2.493E-04	1.965E-05	1.817E-05	6.666E-04	1.251E-04	0	0	3.030E-04	5.687E-05	0	0	0.000E+00	0.000E+00	0	0	68.75%	31.25%	0.00%
600	700	1.290E-03	2.340E-04	3.261E-05	3.013E-05	9.843E-05	1.853E-05	0	0	2.881E-05	5.424E-06	0	0	2.401E-06	4.520E-07	0	0	75.93%	22.22%	1.85%
700	**800**	5.151E-04	9.348E-05	1.303E-05	1.204E-05	**4.514E-05**	**8.486E-06**	**0**	**0**	**1.022E-05**	**1.921E-06**	**0**	**0**	**8.517E-07**	**1.601E-07**	**0**	**0**	80.30%	18.18%	1.52%
800	**900**	**7.425E-04**	**1.346E-04**	**1.943E-05**	**1.795E-05**	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	82.05%	17.95%	0.00%
900	1000	1.024E-03	1.857E-04	2.606E-05	2.408E-05	6.154E-05	1.160E-05	0	0	1.477E-05	2.784E-06	0	0	4.923E-06	9.280E-07	0	0	75.76%	18.18%	6.06%
1000	1100	4.950E-04	8.976E-05	1.295E-05	1.196E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	77.42%	16.13%	6.45%
1100	1200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	78.79%	15.15%	6.06%
1200	1300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	78.79%	15.15%	6.06%
1300	1400	2.475E-04	4.488E-05	6.477E-06	5.982E-06	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	78.79%	15.15%	6.06%
1400	1500	1.552E-03	2.816E-04	3.909E-05	3.612E-05	1.561E-04	2.930E-05	0	0	3.122E-05	5.860E-06	0	0	1.249E-05	2.344E-06	0	0	78.13%	15.63%	6.25%
1500	1600	7.875E-04	1.430E-04	1.958E-05	1.809E-05	1.094E-04	2.053E-05	0	0	1.886E-05	3.540E-06	0	0	7.545E-06	1.416E-06	0	0	80.56%	13.89%	5.56%
1600	1700	2.676E-04	4.859E-05	6.551E-06	6.056E-06	4.113E-05	7.733E-06	0	0	1.234E-05	2.320E-06	0	0	2.742E-06	5.155E-07	0	0	73.17%	21.95%	4.88%
1700	1800	7.697E-04	1.397E-04	1.958E-05	1.809E-05	3.608E-05	6.841E-06	0	0	1.164E-05	2.207E-06	0	0	2.328E-06	4.414E-07	0	0	72.09%	23.26%	4.65%
1800	1900	5.222E-04	9.478E-05	1.310E-05	1.211E-05	3.628E-05	6.880E-06	0	0	1.126E-05	2.135E-06	0	0	2.502E-06	4.745E-07	0	0	72.50%	22.50%	5.00%
1900	2000	5.351E-04	9.719E-05	1.310E-05	1.211E-05	8.030E-05	1.510E-05	0	0	2.570E-05	4.831E-06	0	0	6.424E-06	1.208E-06	0	0	71.43%	22.86%	5.71%
2000	2100	8.027E-04	1.458E-04	1.965E-05	1.817E-05	1.226E-04	2.306E-05	0	0	4.599E-05	8.646E-06	0	0	0.000E+00	0.000E+00	0	0	72.73%	27.27%	0.00%
2100	2200	5.351E-04	9.719E-05	1.310E-05	1.211E-05	8.517E-05	1.601E-05	0	0	2.722E-05	5.124E-06	0	0	0.000E+00	0.000E+00	0	0	75.76%	24.24%	0.00%
2200	2300	5.351E-04	9.719E-05	1.310E-05	1.211E-05	8.244E-05	1.550E-05	0	0	2.998E-05	5.636E-06	0	0	0.000E+00	0.000E+00	0	0	73.33%	26.67%	0.00%
2300	2400	5.448E-04	9.899E-05	1.310E-05	1.211E-05	1.393E-04	2.611E-05	0	0	1.990E-05	3.729E-06	0	0	0.000E+00	0.000E+00	0	0	87.50%	12.50%	0.00%

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0700-0800 as Baseline)				Hourly Profile Ratio (0700-0800 as Baseline)				Hourly Profile Ratio (0700-0800 as Baseline)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
200	300	0.4016	0.4033	0.3371	0.3375	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
500	600	1.8422	1.8517	1.0114	1.0124	14.7685	14.7421	0	0	29.6488	29.5959	0	0	0.0000	0.0000	0	0
600	700	1.7368	1.7382	1.6781	1.6790	2.1807	2.1837	0	0	2.8189	2.8228	0	0	2.8189	2.8228	0	0
700	**800**	0.6937	0.6942	0.6705	0.6708	**1.0000**	**1.0000**	**0**	**0**	**1.0000**	**1.0000**	**0**	**0**	**1.0000**	**1.0000**	**0**	**0**
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
900	1000	1.3786	1.3795	1.3410	1.3416	1.3634	1.3670	0	0	1.4452	1.4490	0	0	5.7807	5.7960	0	0
1000	1100	0.6667	0.6667	0.6667	0.6667	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1100	1200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1200	1300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1300	1400	0.3333	0.3333	0.3333	0.3333	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1400	1500	2.0897	2.0916	2.0114	2.0124	3.4580	3.4526	0	0	3.0546	3.0498	0	0	14.6619	14.6389	0	0
1500	1600	1.0605	1.0618	1.0076	1.0083	2.4236	2.4192	0	0	1.8456	1.8422	0	0	8.8587	8.8426	0	0
1600	1700	0.3603	0.3609	0.3371	0.3375	0.9112	0.9112	0	0	1.2073	1.2073	0	0	3.2195	3.2195	0	0
1700	1800	1.0366	1.0372	1.0076	1.0083	0.7993	0.8062	0	0	1.1388	1.1486	0	0	2.7332	2.7566	0	0
1800	1900	0.7033	0.7039	0.6743	0.6749	0.8038	0.8107	0	0	1.1018	1.1112	0	0	2.9382	2.9633	0	0
1900	2000	0.7207	0.7218	0.6743	0.6749	1.7790	1.7790	0	0	2.5143	2.5143	0	0	7.5429	7.5429	0	0
2000	2100	1.0810	1.0827	1.0114	1.0124	2.7170	2.7170	0	0	4.5000	4.5000	0	0	0.0000	0.0000	0	0
2100	2200	0.7207	0.7218	0.6743	0.6749	1.8868	1.8868	0	0	2.6667	2.6667	0	0	0.0000	0.0000	0	0
2200	2300	0.7207	0.7218	0.6743	0.6749	1.8264	1.8264	0	0	2.9333	2.9333	0	0	0.0000	0.0000	0	0
2300	2400	0.7337	0.7352	0.6743	0.6749	3.0858	3.0763	0	0	1.9470	1.9410	0	0	0.0000	0.0000	0	0

Sheung Shui Bus Terminus PTI Type: Semi-confined Assessment Vehicle: NFB7

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	150	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	120	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.270	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Running Emission Factor (g/km·vehicle) NO	NO2	RSP	FSP	Within PTI (Section 1)+(Section 2) Running Emission Within PTI (g) NO	NO2	RSP	FSP	A Running Emission Within PTI (g/s) NO	NO2	RSP	FSP
2400	100	0	1.7057	0.8401	0.0526	0.0484	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	1.7057	0.8401	0.0526	0.0484	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	1.7057	0.8401	0.0526	0.0484	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	1.7057	0.8401	0.0526	0.0484	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	1.7057	0.8401	0.0526	0.0484	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	1.7057	0.8401	0.0526	0.0484	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0	1.7057	0.8401	0.0526	0.0484	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	7	1.7057	0.8401	0.0526	0.0484	3.224E+00	1.588E+00	9.941E-02	9.148E-02	8.955E-04	4.411E-04	2.762E-05	2.541E-05
800	900	7	1.7057	0.8401	0.0526	0.0484	3.224E+00	1.588E+00	9.941E-02	9.148E-02	8.955E-04	4.411E-04	2.762E-05	2.541E-05
900	1000	7	1.7057	0.8401	0.0526	0.0484	3.224E+00	1.588E+00	9.941E-02	9.148E-02	8.955E-04	4.411E-04	2.762E-05	2.541E-05
1000	1100	7	1.7057	0.8401	0.0526	0.0484	3.224E+00	1.588E+00	9.941E-02	9.148E-02	8.955E-04	4.411E-04	2.762E-05	2.541E-05
1100	1200	7	1.7057	0.8401	0.0526	0.0484	3.224E+00	1.588E+00	9.941E-02	9.148E-02	8.955E-04	4.411E-04	2.762E-05	2.541E-05
1200	1300	7	1.7057	0.8401	0.0526	0.0484	3.224E+00	1.588E+00	9.941E-02	9.148E-02	8.955E-04	4.411E-04	2.762E-05	2.541E-05
1300	1400	7	1.7057	0.8401	0.0526	0.0484	3.224E+00	1.588E+00	9.941E-02	9.148E-02	8.955E-04	4.411E-04	2.762E-05	2.541E-05
1400	1500	7	1.7057	0.8401	0.0526	0.0484	3.224E+00	1.588E+00	9.941E-02	9.148E-02	8.955E-04	4.411E-04	2.762E-05	2.541E-05
1500	1600	7	1.7057	0.8401	0.0526	0.0484	3.224E+00	1.588E+00	9.941E-02	9.148E-02	8.955E-04	4.411E-04	2.762E-05	2.541E-05
1600	1700	7	1.7057	0.8401	0.0526	0.0484	3.224E+00	1.588E+00	9.941E-02	9.148E-02	8.955E-04	4.411E-04	2.762E-05	2.541E-05
1700	1800	7	1.7057	0.8401	0.0526	0.0484	3.224E+00	1.588E+00	9.941E-02	9.148E-02	8.955E-04	4.411E-04	2.762E-05	2.541E-05
1800	1900	7	1.7057	0.8401	0.0526	0.0484	3.224E+00	1.588E+00	9.941E-02	9.148E-02	8.955E-04	4.411E-04	2.762E-05	2.541E-05
1900	2000	6	1.7057	0.8401	0.0526	0.0484	2.763E+00	1.361E+00	8.521E-02	7.841E-02	7.676E-04	3.780E-04	2.367E-05	2.178E-05
2000	2100	6	1.7057	0.8401	0.0526	0.0484	2.763E+00	1.361E+00	8.521E-02	7.841E-02	7.676E-04	3.780E-04	2.367E-05	2.178E-05
2100	2200	4	1.7057	0.8401	0.0526	0.0484	1.842E+00	9.073E-01	5.681E-02	5.227E-02	5.117E-04	2.520E-04	1.578E-05	1.452E-05
2200	2300	0	1.7057	0.8401	0.0526	0.0484	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0	1.7057	0.8401	0.0526	0.0484	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.0776	0.1397	0.1863	0.2639	0.3259	0.4346	0.6364	0.7917	1.1642	1.5212	1.7075	2.0180	2.2198	2.3285	2.3905	2.4526	2.4836	2.4836	
NO2	0.0382	0.0688	0.0917	0.1300	0.1606	0.2141	0.3135	0.3899	0.5734	0.7493	0.8410	0.9939	1.0933	1.1468	1.1774	1.2080	1.2233	1.2233	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Total #	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (g) NO	NO2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	0																			0.000E+00	0.000E+00	0	0
600	700	0																			0.000E+00	0.000E+00	0	0
700	800	7			4	2			1												1.909E+00	9.403E-01	0	0
800	900	7			4	2			1												1.909E+00	9.403E-01	0	0
900	1000	7			4	2			1												1.909E+00	9.403E-01	0	0
1000	1100	7			4	2			1												1.909E+00	9.403E-01	0	0
1100	1200	7			4	2			1												1.909E+00	9.403E-01	0	0
1200	1300	7			4	2			1												1.909E+00	9.403E-01	0	0
1300	1400	7			4	2			1												1.909E+00	9.403E-01	0	0
1400	1500	7			4	2			1												1.909E+00	9.403E-01	0	0
1500	1600	7			4	2			1												1.909E+00	9.403E-01	0	0
1600	1700	7			4	2			1												1.909E+00	9.403E-01	0	0
1700	1800	7			4	2			1												1.909E+00	9.403E-01	0	0
1800	1900	7			4	2			1												1.909E+00	9.403E-01	0	0
1900	2000	6			4	2															1.273E+00	6.268E-01	0	0
2000	2100	6			4	2															1.273E+00	6.268E-01	0	0
2100	2200	4			4																7.452E-01	3.668E-01	0	0
2200	2300	0																			0.000E+00	0.000E+00	0	0
2300	2400	0																			0.000E+00	0.000E+00	0	0

Remark: Number of trips were derived based on on-site observations at the PTI.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 2 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min. *Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Trips (60-720min)	Cold Idling Emission Factor (g/min) NO	NO2	RSP	FSP	Cold Idling Emission (g) NO	NO2	RSP	FSP	Trips (5-50min)	Hot Idling Emission Factor (g/min) NO	NO2	RSP	FSP	Hot Idling Emission (g) NO	NO2	RSP	FSP	Total Idling Emission within PTI (g) NO	NO2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO2	RSP	FSP
2400	100	0	5.310E-01	2.615E-01	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	5.310E-01	2.615E-01	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	5.310E-01	2.615E-01	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	5.310E-01	2.615E-01	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	5.310E-01	2.615E-01	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	5.310E-01	2.615E-01	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0	5.310E-01	2.615E-01	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	7	5.310E-01	2.615E-01	3.899E-04	3.899E-04	1.062E+00	5.230E-01	7.798E-04	7.798E-04	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.510E+00	7.436E-01	5.458E-03	5.458E-03	4.194E-04	2.065E-04	1.516E-06	1.516E-06
800	900	7	5.310E-01	2.615E-01	3.899E-04	3.899E-04	1.062E+00	5.230E-01	7.798E-04	7.798E-04	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.510E+00	7.436E-01	5.458E-03	5.458E-03	4.194E-04	2.065E-04	1.516E-06	1.516E-06
900	1000	7	5.310E-01	2.615E-01	3.899E-04	3.899E-04	1.062E+00	5.230E-01	7.798E-04	7.798E-04	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.510E+00	7.436E-01	5.458E-03	5.458E-03	4.194E-04	2.065E-04	1.516E-06	1.516E-06
1000	1100	7	5.310E-01	2.615E-01	3.899E-04	3.899E-04	1.062E+00	5.230E-01	7.798E-04	7.798E-04	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.510E+00	7.436E-01	5.458E-03	5.458E-03	4.194E-04	2.065E-04	1.516E-06	1.516E-06
1100	1200	7	5.310E-01	2.615E-01	3.899E-04	3.899E-04	1.062E+00	5.230E-01	7.798E-04	7.798E-04	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.510E+00	7.436E-01	5.458E-03	5.458E-03	4.194E-04	2.065E-04	1.516E-06	1.516E-06
1200	1300	7	5.310E-01	2.615E-01	3.899E-04	3.899E-04	1.062E+00	5.230E-01	7.798E-04	7.798E-04	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.510E+00	7.436E-01	5.458E-03	5.458E-03	4.194E-04	2.065E-04	1.516E-06	1.516E-06
1300	1400	7	5.310E-01	2.615E-01	3.899E-04	3.899E-04	1.062E+00	5.230E-01	7.798E-04	7.798E-04	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.510E+00	7.436E-01	5.458E-03	5.458E-03	4.194E-04	2.065E-04	1.516E-06	1.516E-06
1400	1500	7	5.310E-01	2.615E-01	3.899E-04	3.899E-04	1.062E+00	5.230E-01	7.798E-04	7.798E-04	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.510E+00	7.436E-01	5.458E-03	5.458E-03	4.194E-04	2.065E-04	1.516E-06	1.516E-06
1500	1600	7	5.310E-01	2.615E-01	3.899E-04	3.899E-04	1.062E+00	5.230E-01	7.798E-04	7.798E-04	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.510E+00	7.436E-01	5.458E-03	5.458E-03	4.194E-04	2.065E-04	1.516E-06	1.516E-06
1600	1700	7	5.310E-01	2.615E-01	3.899E-04	3.899E-04	1.062E+00	5.230E-01	7.798E-04	7.798E-04	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.510E+00	7.436E-01	5.458E-03	5.458E-03	4.194E-04	2.065E-04	1.516E-06	1.516E-06
1700	1800	7	5.310E-01	2.615E-01	3.899E-04	3.899E-04	1.062E+00	5.230E-01	7.798E-04	7.798E-04	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.510E+00	7.436E-01	5.458E-03	5.458E-03	4.194E-04	2.065E-04	1.516E-06	1.516E-06
1800	1900	7	5.310E-01	2.615E-01	3.899E-04	3.899E-04	1.062E+00	5.230E-01	7.798E-04	7.798E-04	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.510E+00	7.436E-01	5.458E-03	5.458E-03	4.194E-04	2.065E-04	1.516E-06	1.516E-06
1900	2000	0	5.310E-01	2.615E-01	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.244E-04	6.126E-05	1.300E-06	1.300E-06
2000	2100	0	5.310E-01	2.615E-01	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6	3.731E-02	1.838E-02	3.899E-04	3.899E-04	4.478E-01	2.205E-01	4.679E-03	4.679E-03	4.478E-01	2.205E-01	4.679E-03	4.679E-03	1.244E-04	6.126E-05	1.300E-06	1.300E-06
2100	2200	0	5.310E-01	2.615E-01	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4	3.731E-02	1.838E-02	3.899E-04	3.899E-04	2.985E-01	1.470E-01	3.119E-03	3.119E-03	2.985E-01	1.470E-01	3.119E-03	3.119E-03	8.292E-05	4.084E-05	8.664E-07	8.664E-07
2200	2300	0	5.310E-01	2.615E-01	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0	5.310E-01	2.615E-01	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	120	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	580	m	(Section 3)

* (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
700	800	7.548E-01	3.718E-01	2.729E-03	2.729E-03	1.979E-01	9.746E-02	0	0	5.498E-05	2.707E-05	0	0	9.566E-01	4.711E-01	0	0	2.657E-04	1.309E-04	0	0
800	900	7.548E-01	3.718E-01	2.729E-03	2.729E-03	1.979E-01	9.746E-02	0	0	5.498E-05	2.707E-05	0	0	9.566E-01	4.711E-01	0	0	2.657E-04	1.309E-04	0	0
900	1000	7.548E-01	3.718E-01	2.729E-03	2.729E-03	1.979E-01	9.746E-02	0	0	5.498E-05	2.707E-05	0	0	9.566E-01	4.711E-01	0	0	2.657E-04	1.309E-04	0	0
1000	1100	7.548E-01	3.718E-01	2.729E-03	2.729E-03	1.979E-01	9.746E-02	0	0	5.498E-05	2.707E-05	0	0	9.566E-01	4.711E-01	0	0	2.657E-04	1.309E-04	0	0
1100	1200	7.548E-01	3.718E-01	2.729E-03	2.729E-03	1.979E-01	9.746E-02	0	0	5.498E-05	2.707E-05	0	0	9.566E-01	4.711E-01	0	0	2.657E-04	1.309E-04	0	0
1200	1300	7.548E-01	3.718E-01	2.729E-03	2.729E-03	1.979E-01	9.746E-02	0	0	5.498E-05	2.707E-05	0	0	9.566E-01	4.711E-01	0	0	2.657E-04	1.309E-04	0	0
1300	1400	7.548E-01	3.718E-01	2.729E-03	2.729E-03	1.979E-01	9.746E-02	0	0	5.498E-05	2.707E-05	0	0	9.566E-01	4.711E-01	0	0	2.657E-04	1.309E-04	0	0
1400	1500	7.548E-01	3.718E-01	2.729E-03	2.729E-03	1.979E-01	9.746E-02	0	0	5.498E-05	2.707E-05	0	0	9.566E-01	4.711E-01	0	0	2.657E-04	1.309E-04	0	0
1500	1600	7.548E-01	3.718E-01	2.729E-03	2.729E-03	1.979E-01	9.746E-02	0	0	5.498E-05	2.707E-05	0	0	9.566E-01	4.711E-01	0	0	2.657E-04	1.309E-04	0	0
1600	1700	7.548E-01	3.718E-01	2.729E-03	2.729E-03	1.979E-01	9.746E-02	0	0	5.498E-05	2.707E-05	0	0	9.566E-01	4.711E-01	0	0	2.657E-04	1.309E-04	0	0
1700	1800	7.548E-01	3.718E-01	2.729E-03	2.729E-03	1.979E-01	9.746E-02	0	0	5.498E-05	2.707E-05	0	0	9.566E-01	4.711E-01	0	0	2.657E-04	1.309E-04	0	0
1800	1900	7.548E-01	3.718E-01	2.729E-03	2.729E-03	1.979E-01	9.746E-02	0	0	5.498E-05	2.707E-05	0	0	9.566E-01	4.711E-01	0	0	2.657E-04	1.309E-04	0	0
1900	2000	2.239E-01	1.103E-01	2.339E-03	2.339E-03	1.798E-01	8.855E-02	0	0	4.996E-05	2.460E-05	0	0	8.693E-01	4.280E-01	0	0	2.415E-04	1.189E-04	0	0
2000	2100	2.239E-01	1.103E-01	2.339E-03	2.339E-03	1.798E-01	8.855E-02	0	0	4.996E-05	2.460E-05	0	0	8.693E-01	4.280E-01	0	0	2.415E-04	1.189E-04	0	0
2100	2200	1.493E-01	7.351E-02	1.560E-03	1.560E-03	1.022E-01	5.028E-02	0	0	2.838E-05	1.397E-05	0	0	4.938E-01	2.430E-01	0	0	1.372E-04	6.750E-05	0	0
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 0 min(s)

***No Bypass Vehicles**

*As On-Site observations

Calculations (only applicable for Bypass Vehicles)

*Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
100	200	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
200	300	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
300	400	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
400	500	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
500	600	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
600	700	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
700	800	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
800	900	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
900	1000	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
1000	1100	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
1100	1200	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
1200	1300	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
1300	1400	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
1400	1500	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
1500	1600	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
1600	1700	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
1700	1800	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
1800	1900	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
1900	2000	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
2000	2100	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
2100	2200	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
2200	2300	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0
2300	2400	0	3.731E-02	1.838E-02	3.899E-04	3.899E-04	0	0	0	0	0	0	0	0

PART 5 - Sum up all above parts

Model ID: SSB_B7401-416_SSB_B7A1-2

Model ID: SSB_B7SS

Calculations

Start Hour	End Hour	Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)				Spread distance = E to San Wan Road EB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
700	800	1.370E-03	6.747E-04	2.913E-05	2.693E-05	2.657E-04	1.309E-04	0	0
800	**900**	**1.370E-03**	**6.747E-04**	**2.913E-05**	**2.693E-05**	**2.657E-04**	**1.309E-04**	**0**	**0**
900	1000	1.370E-03	6.747E-04	2.913E-05	2.693E-05	2.657E-04	1.309E-04	0	0
1000	1100	1.370E-03	6.747E-04	2.913E-05	2.693E-05	2.657E-04	1.309E-04	0	0
1100	1200	1.370E-03	6.747E-04	2.913E-05	2.693E-05	2.657E-04	1.309E-04	0	0
1200	1300	1.370E-03	6.747E-04	2.913E-05	2.693E-05	2.657E-04	1.309E-04	0	0
1300	1400	1.370E-03	6.747E-04	2.913E-05	2.693E-05	2.657E-04	1.309E-04	0	0
1400	1500	1.370E-03	6.747E-04	2.913E-05	2.693E-05	2.657E-04	1.309E-04	0	0
1500	1600	1.370E-03	6.747E-04	2.913E-05	2.693E-05	2.657E-04	1.309E-04	0	0
1600	1700	1.370E-03	6.747E-04	2.913E-05	2.693E-05	2.657E-04	1.309E-04	0	0
1700	1800	1.370E-03	6.747E-04	2.913E-05	2.693E-05	2.657E-04	1.309E-04	0	0
1800	1900	1.370E-03	6.747E-04	2.913E-05	2.693E-05	2.657E-04	1.309E-04	0	0
1900	2000	9.419E-04	4.639E-04	2.497E-05	2.308E-05	2.415E-04	1.189E-04	0	0
2000	2100	9.419E-04	4.639E-04	2.497E-05	2.308E-05	2.415E-04	1.189E-04	0	0
2100	2200	6.230E-04	3.068E-04	1.665E-05	1.539E-05	1.372E-04	6.750E-05	0	0
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0700-0800 as Baseline)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
100	200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
200	300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
300	400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
400	500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
500	600	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
600	700	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
700	800	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**0.0000**	**0.0000**
900	1000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000
1000	1100	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000
1100	1200	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000
1200	1300	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000
1300	1400	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000
1400	1500	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000
1500	1600	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000
1600	1700	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000
1700	1800	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000
1800	1900	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000
1900	2000	0.6876	0.6876	0.8571	0.8571	0.9087	0.9086	0.0000	0.0000
2000	2100	0.6876	0.6876	0.8571	0.8571	0.9087	0.9086	0.0000	0.0000
2100	2200	0.4548	0.4548	0.5714	0.5714	0.5162	0.5159	0.0000	0.0000
2200	2300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2300	2400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Sheung Shui Station Minibus Terminus

PTI Type: Open-area

Assessment Vehicle: PLB
Fuel: DIESEL

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	50	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	60	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.110	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Population Ratio Extracted from EMFAC

Diesel %	LPG %
76.13%	23.87%

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Total (adjusted with fuel %)	Running Emission Factor (g/km·vehicle)				Within PTI (Section 1)+(Section 2) Running Emission Within PTI (g)				A Running Emission Within PTI (g/s)			
				NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	0.00	0.7831	0.3046	0.0657	0.0604	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	0.00	0.7831	0.3046	0.0657	0.0604	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	0.00	0.7831	0.3046	0.0657	0.0604	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	0.00	0.7831	0.3046	0.0657	0.0604	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	8	6.09	0.7831	0.3046	0.0657	0.0604	5.246E-01	2.041E-01	4.401E-02	4.046E-02	1.457E-04	5.668E-05	1.223E-05	1.124E-05
500	600	26	19.79	0.7831	0.3046	0.0657	0.0604	1.705E+00	6.632E-01	1.430E-01	1.315E-01	4.736E-04	1.842E-04	3.974E-05	3.653E-05
600	700	47	35.78	0.7831	0.3046	0.0657	0.0604	3.082E+00	1.199E+00	2.586E-01	2.377E-01	8.562E-04	3.330E-04	7.183E-05	6.603E-05
700	800	115	87.55	0.7831	0.3046	0.0657	0.0604	7.541E+00	2.933E+00	6.327E-01	5.817E-01	2.095E-03	8.148E-04	1.758E-04	1.616E-04
800	900	106	80.70	0.7831	0.3046	0.0657	0.0604	6.951E+00	2.704E+00	5.832E-01	5.361E-01	1.931E-03	7.511E-04	1.620E-04	1.489E-04
900	1000	75	57.10	0.7831	0.3046	0.0657	0.0604	4.918E+00	1.913E+00	4.126E-01	3.793E-01	1.366E-03	5.314E-04	1.146E-04	1.054E-04
1000	1100	75	57.10	0.7831	0.3046	0.0657	0.0604	4.918E+00	1.913E+00	4.126E-01	3.793E-01	1.366E-03	5.314E-04	1.146E-04	1.054E-04
1100	1200	69	52.53	0.7831	0.3046	0.0657	0.0604	4.525E+00	1.760E+00	3.796E-01	3.490E-01	1.257E-03	4.889E-04	1.055E-04	9.694E-05
1200	1300	70	53.29	0.7831	0.3046	0.0657	0.0604	4.590E+00	1.786E+00	3.851E-01	3.541E-01	1.275E-03	4.960E-04	1.070E-04	9.835E-05
1300	1400	72	54.81	0.7831	0.3046	0.0657	0.0604	4.722E+00	1.837E+00	3.961E-01	3.642E-01	1.312E-03	5.102E-04	1.100E-04	1.012E-04
1400	1500	64	48.72	0.7831	0.3046	0.0657	0.0604	4.197E+00	1.632E+00	3.521E-01	3.237E-01	1.166E-03	4.535E-04	9.781E-05	8.992E-05
1500	1600	65	49.48	0.7831	0.3046	0.0657	0.0604	4.263E+00	1.658E+00	3.576E-01	3.288E-01	1.184E-03	4.606E-04	9.934E-05	9.132E-05
1600	1700	71	54.05	0.7831	0.3046	0.0657	0.0604	4.656E+00	1.811E+00	3.906E-01	3.591E-01	1.293E-03	5.031E-04	1.085E-04	9.975E-05
1700	1800	94	71.56	0.7831	0.3046	0.0657	0.0604	6.164E+00	2.398E+00	5.172E-01	4.754E-01	1.712E-03	6.660E-04	1.437E-04	1.321E-04
1800	1900	98	74.61	0.7831	0.3046	0.0657	0.0604	6.427E+00	2.500E+00	5.392E-01	4.957E-01	1.785E-03	6.944E-04	1.498E-04	1.377E-04
1900	2000	77	58.62	0.7831	0.3046	0.0657	0.0604	5.049E+00	1.964E+00	4.236E-01	3.895E-01	1.403E-03	5.456E-04	1.177E-04	1.082E-04
2000	2100	60	45.68	0.7831	0.3046	0.0657	0.0604	3.935E+00	1.530E+00	3.301E-01	3.035E-01	1.093E-03	4.251E-04	9.170E-05	8.430E-05
2100	2200	46	35.02	0.7831	0.3046	0.0657	0.0604	3.017E+00	1.173E+00	2.531E-01	2.327E-01	8.379E-04	3.259E-04	7.030E-05	6.463E-05
2200	2300	33	25.12	0.7831	0.3046	0.0657	0.0604	2.164E+00	8.417E-01	1.816E-01	1.669E-01	6.011E-04	2.338E-04	5.043E-05	4.636E-05
2300	2400	25	19.03	0.7831	0.3046	0.0657	0.0604	1.639E+00	6.377E-01	1.375E-01	1.264E-01	4.554E-04	1.771E-04	3.821E-05	3.512E-05

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.0425	0.0765	0.1020	0.1443	0.1783	0.2378	0.3483	0.4331	0.6370	0.8324	0.9343	1.1041	1.2146	1.2740	1.3080	1.3419	1.3589	1.3589	
NO2	0.0165	0.0297	0.0396	0.0562	0.0694	0.0925	0.1354	0.1685	0.2477	0.3237	0.3633	0.4294	0.4723	0.4955	0.5087	0.5219	0.5285	0.5285	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Terminating Vehicles	Number of Trips																		Start Emission (adjusted with fuel %) (g)			
			5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	7	1										6								4.300E+00	1.672E+00	0	0
500	600	13	4	1									1	7							6.783E+00	2.638E+00	0	0
600	700	3	3																		9.706E-02	3.768E-02	0	0
700	800	1		1																	5.824E-02	2.261E-02	0	0
800	900	2	1		1																1.100E-01	4.271E-02	0	0
900	1000	2	2																		6.471E-02	2.512E-02	0	0
1000	1100	0																			0.000E+00	0.000E+00	0	0
1100	1200	2	1			1															1.422E-01	5.535E-02	0	0
1200	1300	6	1	1		2	1			1											7.757E-01	3.018E-01	0	0
1300	1400	5			1				1	2					1						1.927E+00	7.493E-01	0	0
1400	1500	3					1				1	1									1.254E+00	4.878E-01	0	0
1500	1600	5	1	1	1					2											8.277E-01	3.219E-01	0	0
1600	1700	1								1											3.297E-01	1.283E-01	0	0
1700	1800	0																			0.000E+00	0.000E+00	0	0
1800	1900	1				1															1.099E-01	4.278E-02	0	0
1900	2000	0																			0.000E+00	0.000E+00	0	0
2000	2100	1								1											3.297E-01	1.283E-01	0	0
2100	2200	5		3	1		1														3.881E-01	1.508E-01	0	0
2200	2300	3		2				1													2.975E-01	1.156E-01	0	0
2300	2400	1	1																		3.235E-02	1.256E-02	0	0

Remark: Number of trips were derived based on on-site observations at the PTI.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 3 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min.

Start Hour	End Hour	Trips (adjusted with fuel %) (60-	Cold Idling Emission Factor (g/min)				Cold Idling Emission (g)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	4.57	4.320E-02	1.680E-02	4.333E-04	4.333E-04	5.919E-01	2.302E-01	5.938E-03	5.938E-03
500	600	6.09	4.320E-02	1.680E-02	4.333E-04	4.333E-04	7.893E-01	3.070E-01	7.917E-03	7.917E-03
600	700	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	1000	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1000	1100	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0.76	4.320E-02	1.680E-02	4.333E-04	4.333E-04	9.866E-02	3.837E-02	9.897E-04	9.897E-04
1300	1400	3.05	4.320E-02	1.680E-02	4.333E-04	4.333E-04	3.946E-01	1.535E-01	3.959E-03	3.959E-03
1400	1500	1.52	4.320E-02	1.680E-02	4.333E-04	4.333E-04	1.973E-01	7.675E-02	1.979E-03	1.979E-03
1500	1600	1.52	4.320E-02	1.680E-02	4.333E-04	4.333E-04	1.973E-01	7.675E-02	1.979E-03	1.979E-03
1600	1700	0.76	4.320E-02	1.680E-02	4.333E-04	4.333E-04	9.866E-02	3.837E-02	9.897E-04	9.897E-04
1700	1800	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0.76	4.320E-02	1.680E-02	4.333E-04	4.333E-04	9.866E-02	3.837E-02	9.897E-04	9.897E-04
2100	2200	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0.00	4.320E-02	1.680E-02	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Start Hour	End Hour	Trips (adjusted with fuel %)	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	5.709E-02	2.221E-02	9.897E-04	9.897E-04
500	600	3.81	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.854E-01	1.110E-01	4.948E-03	4.948E-03
600	700	2.28	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.713E-01	6.662E-02	2.969E-03	2.969E-03
700	800	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	5.709E-02	2.221E-02	9.897E-04	9.897E-04
800	900	1.52	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.142E-01	4.441E-02	1.979E-03	1.979E-03
900	1000	1.52	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.142E-01	4.441E-02	1.979E-03	1.979E-03
1000	1100	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	1.52	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.142E-01	4.441E-02	1.979E-03	1.979E-03
1200	1300	3.81	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.854E-01	1.110E-01	4.948E-03	4.948E-03
1300	1400	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	5.709E-02	2.221E-02	9.897E-04	9.897E-04
1400	1500	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	5.709E-02	2.221E-02	9.897E-04	9.897E-04
1500	1600	2.28	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.713E-01	6.662E-02	2.969E-03	2.969E-03
1600	1700	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	5.709E-02	2.221E-02	9.897E-04	9.897E-04
1900	2000	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	3.81	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.854E-01	1.110E-01	4.948E-03	4.948E-03
2200	2300	2.28	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.713E-01	6.662E-02	2.969E-03	2.969E-03
2300	2400	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	5.709E-02	2.221E-02	9.897E-04	9.897E-04

*Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Total Idling Emission within PTI (g)				B Total Idling Emission within PTI (g/s)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	6.490E-01	2.525E-01	6.928E-03	6.928E-03	1.803E-04	7.013E-05	1.924E-06	1.924E-06
500	600	1.075E+00	4.180E-01	1.287E-02	1.287E-02	2.985E-04	1.161E-04	3.574E-06	3.574E-06
600	700	1.713E-01	6.662E-02	2.969E-03	2.969E-03	4.757E-05	1.850E-05	8.247E-07	8.247E-07
700	800	5.709E-02	2.221E-02	9.897E-04	9.897E-04	1.586E-05	6.168E-06	2.749E-07	2.749E-07
800	900	1.142E-01	4.441E-02	1.979E-03	1.979E-03	3.172E-05	1.234E-05	5.498E-07	5.498E-07
900	1000	1.142E-01	4.441E-02	1.979E-03	1.979E-03	3.172E-05	1.234E-05	5.498E-07	5.498E-07
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	1.142E-01	4.441E-02	1.979E-03	1.979E-03	3.172E-05	1.234E-05	5.498E-07	5.498E-07
1200	1300	3.841E-01	1.494E-01	5.938E-03	5.938E-03	1.067E-04	4.150E-05	1.649E-06	1.649E-06
1300	1400	4.517E-01	1.757E-01	4.948E-03	4.948E-03	1.255E-04	4.881E-05	1.375E-06	1.375E-06
1400	1500	2.544E-01	9.895E-02	2.969E-03	2.969E-03	7.067E-05	2.749E-05	8.247E-07	8.247E-07
1500	1600	3.686E-01	1.434E-01	4.948E-03	4.948E-03	1.024E-04	3.982E-05	1.375E-06	1.375E-06
1600	1700	9.866E-02	3.837E-02	9.897E-04	9.897E-04	2.740E-05	1.066E-05	2.749E-07	2.749E-07
1700	1800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	5.709E-02	2.221E-02	9.897E-04	9.897E-04	1.586E-05	6.168E-06	2.749E-07	2.749E-07
1900	2000	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	9.866E-02	3.837E-02	9.897E-04	9.897E-04	2.740E-05	1.066E-05	2.749E-07	2.749E-07
2100	2200	2.854E-01	1.110E-01	4.948E-03	4.948E-03	7.929E-05	3.084E-05	1.375E-06	1.375E-06
2200	2300	1.713E-01	6.662E-02	2.969E-03	2.969E-03	4.757E-05	1.850E-05	8.247E-07	8.247E-07
2300	2400	5.709E-02	2.221E-02	9.897E-04	9.897E-04	1.586E-05	6.168E-06	2.749E-07	2.749E-07

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	60	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	640	m	(Section 3) * (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g)				Adjusted Start Emission Within PTI (Section 2) (g)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
400	500	2.163E-01	8.415E-02	2.309E-03	2.309E-03	3.500E-01	1.361E-01	0	0
500	600	3.582E-01	1.393E-01	4.289E-03	4.289E-03	5.507E-01	2.141E-01	0	0
600	700	5.709E-02	2.221E-02	9.897E-04	9.897E-04	3.427E-03	1.327E-03	0	0
700	800	1.903E-02	7.402E-03	3.299E-04	3.299E-04	3.361E-03	1.304E-03	0	0
800	900	3.806E-02	1.480E-02	6.598E-04	6.598E-04	6.167E-03	2.392E-03	0	0
900	1000	3.806E-02	1.480E-02	6.598E-04	6.598E-04	2.284E-03	8.845E-04	0	0
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
1100	1200	3.806E-02	1.480E-02	6.598E-04	6.598E-04	8.927E-03	3.475E-03	0	0
1200	1300	1.280E-01	4.980E-02	1.979E-03	1.979E-03	5.552E-02	2.160E-02	0	0
1300	1400	1.506E-01	5.857E-02	1.649E-03	1.649E-03	1.523E-01	5.921E-02	0	0
1400	1500	8.480E-02	3.298E-02	9.897E-04	9.897E-04	1.002E-01	3.899E-02	0	0
1500	1600	1.229E-01	4.779E-02	1.649E-03	1.649E-03	6.041E-02	2.349E-02	0	0
1600	1700	3.289E-02	1.279E-02	3.299E-04	3.299E-04	2.544E-02	9.899E-03	0	0
1700	1800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
1800	1900	1.903E-02	7.402E-03	3.299E-04	3.299E-04	7.785E-03	3.033E-03	0	0
1900	2000	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0
2000	2100	3.289E-02	1.279E-02	3.299E-04	3.299E-04	2.544E-02	9.899E-03	0	0
2100	2200	9.515E-02	3.701E-02	1.649E-03	1.649E-03	2.511E-02	9.754E-03	0	0
2200	2300	5.709E-02	2.221E-02	9.897E-04	9.897E-04	2.061E-02	8.009E-03	0	0
2300	2400	1.903E-02	7.402E-03	3.299E-04	3.299E-04	1.142E-03	4.422E-04	0	0

Start Hour	End Hour	C Adjusted Start Emission Within PTI (Section 2) (g/s)				Adjusted Start Emission Outside PTI (Section 3) (g)				E Adjusted Start Emission Outside PTI (Section 3) (g/s)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	9.723E-05	3.781E-05	0	0	3.734E+00	1.452E+00	0	0	1.037E-03	4.033E-04	0	0
500	600	1.530E-04	5.948E-05	0	0	5.874E+00	2.284E+00	0	0	1.632E-03	6.345E-04	0	0
600	700	9.518E-07	3.685E-07	0	0	3.655E-02	1.415E-02	0	0	1.015E-05	3.931E-06	0	0
700	800	9.335E-07	3.621E-07	0	0	3.585E-02	1.390E-02	0	0	9.958E-06	3.862E-06	0	0
800	900	1.713E-06	6.644E-07	0	0	6.578E-02	2.551E-02	0	0	1.827E-05	7.087E-06	0	0
900	1000	6.345E-07	2.457E-07	0	0	2.437E-02	9.434E-03	0	0	6.768E-06	2.621E-06	0	0
1000	1100	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1100	1200	2.480E-06	9.653E-07	0	0	9.522E-02	3.707E-02	0	0	2.645E-05	1.030E-05	0	0
1200	1300	1.542E-05	6.001E-06	0	0	5.922E-01	2.304E-01	0	0	1.645E-04	6.401E-05	0	0
1300	1400	4.229E-05	1.645E-05	0	0	1.624E+00	6.316E-01	0	0	4.511E-04	1.754E-04	0	0
1400	1500	2.785E-05	1.083E-05	0	0	1.069E+00	4.159E-01	0	0	2.970E-04	1.155E-04	0	0
1500	1600	1.678E-05	6.526E-06	0	0	6.444E-01	2.506E-01	0	0	1.790E-04	6.961E-05	0	0
1600	1700	7.067E-06	2.750E-06	0	0	2.714E-01	1.056E-01	0	0	7.538E-05	2.933E-05	0	0
1700	1800	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1800	1900	2.162E-06	8.424E-07	0	0	8.304E-02	3.235E-02	0	0	2.307E-05	8.986E-06	0	0
1900	2000	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2000	2100	7.067E-06	2.750E-06	0	0	2.714E-01	1.056E-01	0	0	7.538E-05	2.933E-05	0	0
2100	2200	6.975E-06	2.710E-06	0	0	2.678E-01	1.040E-01	0	0	7.440E-05	2.890E-05	0	0
2200	2300	5.724E-06	2.225E-06	0	0	2.198E-01	8.543E-02	0	0	6.106E-05	2.373E-05	0	0
2300	2400	3.173E-07	1.228E-07	0	0	1.218E-02	4.717E-03	0	0	3.384E-06	1.310E-06	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 3.5 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles)

*Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Bypass Vehicle (adjusted with	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
				NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	0.00	2.500E-02	9.723E-03	4.333E-04	4.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	1	0.76	2.500E-02	9.723E-03	4.333E-04	4.333E-04	6.660E-02	2.591E-02	1.155E-03	1.155E-03	1.850E-05	7.196E-06	3.207E-07	3.207E-07
500	600	13	9.90	2.500E-02	9.723E-03	4.333E-04	4.333E-04	8.658E-01	3.368E-01	1.501E-02	1.501E-02	2.405E-04	9.355E-05	4.169E-06	4.169E-06
600	700	44	33.50	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.930E+00	1.140E+00	5.080E-02	5.080E-02	8.140E-04	3.166E-04	1.411E-05	1.411E-05
700	800	114	86.79	2.500E-02	9.723E-03	4.333E-04	4.333E-04	7.593E+00	2.953E+00	1.316E-01	1.316E-01	2.109E-03	8.204E-04	3.656E-05	3.656E-05
800	900	104	79.17	2.500E-02	9.723E-03	4.333E-04	4.333E-04	6.927E+00	2.694E+00	1.201E-01	1.201E-01	1.924E-03	7.484E-04	3.336E-05	3.336E-05
900	1000	73	55.57	2.500E-02	9.723E-03	4.333E-04	4.333E-04	4.862E+00	1.891E+00	8.429E-02	8.429E-02	1.351E-03	5.253E-04	2.341E-05	2.341E-05
1000	1100	75	57.10	2.500E-02	9.723E-03	4.333E-04	4.333E-04	4.995E+00	1.943E+00	8.660E-02	8.660E-02	1.388E-03	5.397E-04	2.405E-05	2.405E-05
1100	1200	67	51.01	2.500E-02	9.723E-03	4.333E-04	4.333E-04	4.462E+00	1.736E+00	7.736E-02	7.736E-02	1.240E-03	4.821E-04	2.149E-05	2.149E-05
1200	1300	64	48.72	2.500E-02	9.723E-03	4.333E-04	4.333E-04	4.263E+00	1.658E+00	7.390E-02	7.390E-02	1.184E-03	4.606E-04	2.053E-05	2.053E-05
1300	1400	67	51.01	2.500E-02	9.723E-03	4.333E-04	4.333E-04	4.462E+00	1.736E+00	7.736E-02	7.736E-02	1.240E-03	4.821E-04	2.149E-05	2.149E-05
1400	1500	61	46.44	2.500E-02	9.723E-03	4.333E-04	4.333E-04	4.063E+00	1.580E+00	7.043E-02	7.043E-02	1.129E-03	4.390E-04	1.956E-05	1.956E-05
1500	1600	60	45.68	2.500E-02	9.723E-03	4.333E-04	4.333E-04	3.996E+00	1.554E+00	6.928E-02	6.928E-02	1.110E-03	4.318E-04	1.924E-05	1.924E-05
1600	1700	70	53.29	2.500E-02	9.723E-03	4.333E-04	4.333E-04	4.662E+00	1.813E+00	8.082E-02	8.082E-02	1.295E-03	5.037E-04	2.245E-05	2.245E-05
1700	1800	94	71.56	2.500E-02	9.723E-03	4.333E-04	4.333E-04	6.261E+00	2.435E+00	1.085E-01	1.085E-01	1.739E-03	6.764E-04	3.015E-05	3.015E-05
1800	1900	97	73.84	2.500E-02	9.723E-03	4.333E-04	4.333E-04	6.460E+00	2.513E+00	1.120E-01	1.120E-01	1.795E-03	6.980E-04	3.111E-05	3.111E-05
1900	2000	77	58.62	2.500E-02	9.723E-03	4.333E-04	4.333E-04	5.128E+00	1.995E+00	8.891E-02	8.891E-02	1.425E-03	5.541E-04	2.470E-05	2.470E-05
2000	2100	59	44.92	2.500E-02	9.723E-03	4.333E-04	4.333E-04	3.930E+00	1.528E+00	6.812E-02	6.812E-02	1.092E-03	4.246E-04	1.892E-05	1.892E-05
2100	2200	41	31.21	2.500E-02	9.723E-03	4.333E-04	4.333E-04	2.731E+00	1.062E+00	4.734E-02	4.734E-02	7.585E-04	2.950E-04	1.315E-05	1.315E-05
2200	2300	30	22.84	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.998E+00	7.772E-01	3.464E-02	3.464E-02	5.550E-04	2.159E-04	9.622E-06	9.622E-06
2300	2400	24	18.27	2.500E-02	9.723E-03	4.333E-04	4.333E-04	1.598E+00	6.217E-01	2.771E-02	2.771E-02	4.440E-04	1.727E-04	7.697E-06	7.697E-06

PART 5 - Sum up all above parts

Model ID: SSM_PDA1

Calculations		Emissions Within PTI = A+B+C+D			
		Within PTI (Section 1 + Section 2)			
Start Hour	End Hour	Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	4.417E-04	1.718E-04	1.447E-05	1.349E-05
500	600	1.166E-03	4.534E-04	4.748E-05	4.427E-05
600	700	1.719E-03	6.685E-04	8.677E-05	8.097E-05
700	800	4.221E-03	1.642E-03	2.126E-04	1.984E-04
800	**900**	**3.888E-03**	**1.512E-03**	**1.959E-04**	**1.828E-04**
900	1000	2.749E-03	1.069E-03	1.386E-04	1.293E-04
1000	1100	2.754E-03	1.071E-03	1.387E-04	1.294E-04
1100	1200	2.531E-03	9.843E-04	1.275E-04	1.190E-04
1200	1300	2.581E-03	1.004E-03	1.292E-04	1.205E-04
1300	1400	2.719E-03	1.058E-03	1.329E-04	1.240E-04
1400	1500	2.393E-03	9.307E-04	1.182E-04	1.103E-04
1500	1600	2.413E-03	9.387E-04	1.200E-04	1.119E-04
1600	1700	2.623E-03	1.020E-03	1.312E-04	1.225E-04
1700	1800	3.451E-03	1.342E-03	1.738E-04	1.622E-04
1800	1900	3.598E-03	1.399E-03	1.812E-04	1.691E-04
1900	2000	2.827E-03	1.100E-03	1.424E-04	1.329E-04
2000	2100	2.219E-03	8.631E-04	1.109E-04	1.035E-04
2100	2200	1.683E-03	6.545E-04	8.482E-05	7.915E-05
2200	2300	1.209E-03	4.704E-04	6.088E-05	5.681E-05
2300	2400	9.156E-04	3.561E-04	4.618E-05	4.310E-05

Model ID: SSM_PDSN

		Spread distance = E			
		to PSWRNB (Section 3)			
Start Hour	End Hour	Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	1.053E-04	4.094E-05	0	0
600	700	4.367E-07	1.691E-07	0	0
700	800	2.886E-07	1.120E-07	0	0
800	**900**	**5.335E-07**	**2.069E-07**	**0**	**0**
900	1000	3.185E-07	1.233E-07	0	0
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	1.411E-06	5.491E-07	0	0
1200	1300	8.545E-06	3.325E-06	0	0
1300	1400	2.406E-05	9.356E-06	0	0
1400	1500	1.504E-05	5.846E-06	0	0
1500	1600	9.299E-06	3.616E-06	0	0
1600	1700	3.817E-06	1.485E-06	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	7.152E-07	2.786E-07	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	2.094E-06	8.147E-07	0	0
2100	2200	1.200E-06	4.662E-07	0	0
2200	2300	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0	0

Model ID: SSM_PDSW

		Spread distance = E			
		to PSWRSB (Section 3)			
Start Hour	End Hour	Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	5.790E-04	2.251E-04	0	0
600	700	6.441E-06	2.494E-06	0	0
700	800	6.276E-06	2.433E-06	0	0
800	**900**	**1.120E-05**	**4.345E-06**	**0**	**0**
900	1000	4.141E-06	1.603E-06	0	0
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	1.763E-05	6.864E-06	0	0
1200	1300	1.111E-04	4.323E-05	0	0
1300	1400	3.008E-04	1.170E-04	0	0
1400	1500	2.030E-04	7.890E-05	0	0
1500	1600	1.209E-04	4.701E-05	0	0
1600	1700	5.153E-05	2.005E-05	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	1.430E-05	5.572E-06	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	5.130E-05	1.996E-05	0	0
2100	2200	4.800E-05	1.865E-05	0	0
2200	2300	3.895E-05	1.514E-05	0	0
2300	2400	1.963E-06	7.600E-07	0	0

Model ID: SSM_PDSE

		Spread distance = E			
		to LWSEB (Section 3)			
Start Hour	End Hour	Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	1.037E-03	4.033E-04	0	0
500	600	6.842E-04	2.661E-04	0	0
600	700	1.638E-06	6.340E-07	0	0
700	800	1.227E-06	4.758E-07	0	0
800	**900**	**2.534E-06**	**9.829E-07**	**0**	**0**
900	1000	1.115E-06	4.316E-07	0	0
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	2.116E-06	8.237E-07	0	0
1200	1300	1.282E-05	4.988E-06	0	0
1300	1400	3.609E-05	1.403E-05	0	0
1400	1500	2.256E-05	8.773E-06	0	0
1500	1600	1.395E-05	5.424E-06	0	0
1600	1700	5.725E-06	2.228E-06	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	2.682E-06	1.045E-06	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	6.282E-06	2.444E-06	0	0
2100	2200	7.200E-06	2.797E-06	0	0
2200	2300	6.317E-06	2.455E-06	0	0
2300	2400	4.061E-07	1.572E-07	0	0

Model ID: SSM_PDSS

		Spread distance = E			
		to SWREB (Section 3)			
Start Hour	End Hour	Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	2.632E-04	1.023E-04	0	0
600	700	1.638E-06	6.340E-07	0	0
700	800	2.165E-06	8.397E-07	0	0
800	**900**	**4.001E-06**	**1.552E-06**	**0**	**0**
900	1000	1.194E-06	4.625E-07	0	0
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	5.290E-06	2.058E-06	0	0
1200	1300	3.205E-05	1.247E-05	0	0
1300	1400	9.023E-05	3.509E-05	0	0
1400	1500	5.640E-05	2.193E-05	0	0
1500	1600	3.487E-05	1.356E-05	0	0
1600	1700	1.431E-05	5.569E-06	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	5.364E-06	2.090E-06	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	1.571E-05	6.110E-06	0	0
2100	2200	1.800E-05	6.992E-06	0	0
2200	2300	1.579E-05	6.137E-06	0	0
2300	2400	1.015E-06	3.931E-07	0	0

		Split Ratio		
		to PSWRNB	to PSWRSB	to LWSEB
		(%)	(%)	(%)
2400	100	0.00%	43.48%	23.91%
100	200	0.00%	0.00%	0.00%
200	300	0.00%	0.00%	0.00%
300	400	0.00%	0.00%	0.00%
400	500	0.00%	0.00%	100.00%
500	600	6.45%	35.48%	41.94%
600	700	4.30%	63.44%	16.13%
700	800	2.90%	63.04%	12.32%
800	**900**	**2.92%**	**61.31%**	**13.87%**
900	1000	4.71%	61.18%	16.47%
1000	1100	4.88%	64.63%	12.20%
1100	1200	5.33%	66.67%	8.00%
1200	1300	5.19%	67.53%	7.79%
1300	1400	5.33%	66.67%	8.00%
1400	1500	5.06%	68.35%	7.59%
1500	1600	5.19%	67.53%	7.79%
1600	1700	5.06%	68.35%	7.59%
1700	1800	4.21%	64.21%	15.79%
1800	1900	3.10%	62.02%	11.63%
1900	2000	3.33%	63.33%	8.33%
2000	2100	2.78%	68.06%	8.33%
2100	2200	1.61%	64.52%	9.68%
2200	2300	0.00%	63.79%	10.34%
2300	2400	0.00%	58.00%	12.00%

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
400	500	0.1136	0.1136	0.0739	0.0738	0.0000	0.0000	0	0	0.0000	0.0000	0	0	409.2589	410.3013	0	0	0.0000	0.0000	0	0
500	600	0.2998	0.2998	0.2424	0.2421	197.3102	197.8371	0	0	51.6765	51.8145	0	0	270.0034	270.7244	0	0	65.7701	65.9457	0	0
600	700	0.4420	0.4420	0.4429	0.4429	0.8185	0.8171	0	0	0.5749	0.5739	0	0	0.6462	0.6451	0	0	0.4093	0.4086	0	0
700	800	1.0855	1.0855	1.0852	1.0852	0.5410	0.5411	0	0	0.5603	0.5604	0	0	0.4841	0.4841	0	0	0.5410	0.5411	0	0
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**0**	**0**	**1.0000**	**1.0000**	**0**	**0**	**1.0000**	**1.0000**	**0**	**0**	**1.0000**	**1.0000**	**0**	**0**
900	1000	0.7070	0.7070	0.7074	0.7074	0.5970	0.5960	0	0	0.3696	0.3690	0	0	0.4399	0.4392	0	0	0.2985	0.2980	0	0
1000	1100	0.7082	0.7082	0.7079	0.7079	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1100	1200	0.6508	0.6508	0.6508	0.6508	2.6443	2.6539	0	0	1.5740	1.5797	0	0	0.8350	0.8381	0	0	1.3221	1.3270	0	0
1200	1300	0.6638	0.6638	0.6593	0.6592	16.0177	16.0709	0	0	9.9157	9.9486	0	0	5.0582	5.0750	0	0	8.0089	8.0354	0	0
1300	1400	0.6992	0.6992	0.6784	0.6783	45.0988	45.2182	0	0	26.8445	26.9156	0	0	14.2417	14.2794	0	0	22.5494	22.6091	0	0
1400	1500	0.6154	0.6154	0.6034	0.6033	28.1906	28.2672	0	0	18.1225	18.1718	0	0	8.9023	8.9265	0	0	14.0953	14.1336	0	0
1500	1600	0.6206	0.6206	0.6123	0.6123	17.4296	17.4758	0	0	10.7898	10.8183	0	0	5.5041	5.5187	0	0	8.7148	8.7379	0	0
1600	1700	0.6745	0.6745	0.6699	0.6699	7.1545	7.1770	0	0	4.5994	4.6138	0	0	2.2593	2.2664	0	0	3.5773	3.5885	0	0
1700	1800	0.8876	0.8876	0.8872	0.8872	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
1800	1900	0.9253	0.9253	0.9247	0.9247	1.3407	1.3466	0	0	1.2768	1.2825	0	0	1.0584	1.0631	0	0	1.3407	1.3466	0	0
1900	2000	0.7271	0.7271	0.7268	0.7268	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
2000	2100	0.5707	0.5707	0.5661	0.5661	3.9251	3.9374	0	0	4.5792	4.5936	0	0	2.4790	2.4868	0	0	3.9251	3.9374	0	0
2100	2200	0.4328	0.4328	0.4330	0.4329	2.2494	2.2529	0	0	4.2845	4.2912	0	0	2.8413	2.8458	0	0	4.4987	4.5058	0	0
2200	2300	0.3110	0.3110	0.3108	0.3107	0.0000	0.0000	0	0	3.4768	3.4837	0	0	2.4926	2.4976	0	0	3.9466	3.9545	0	0
2300	2400	0.2355	0.2355	0.2357	0.2357	0.0000	0.0000	0	0	0.1752	0.1749	0	0	0.1603	0.1600	0	0	0.2537	0.2533	0	0

Sheung Shui Station Minibus Terminus

PTI Type: Open-area

Assessment Vehicle: PLB
Fuel: LPG

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	50	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	60	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.110	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Population Ratio Extracted from EMFAC

Diesel %	LPG %
76.13%	23.87%

Calculations

*Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Total (adjusted with fuel %)	Within PTI (Section 1)+(Section 2) Running Emission Factor (g/km·vehicle) NO	NO_2	RSP	FSP	Running Emission Within PTI (g) NO	NO_2	RSP	FSP	A Running Emission Within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	0.00	1.9716	0.0099	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0	0.00	1.9716	0.0099	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0	0.00	1.9716	0.0099	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0	0.00	1.9716	0.0099	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	8	1.91	1.9716	0.0099	0	0	4.142E-01	2.080E-03	0	0	1.150E-04	5.777E-07	0	0
500	600	26	6.21	1.9716	0.0099	0	0	1.346E+00	6.759E-03	0	0	3.739E-04	1.878E-06	0	0
600	700	47	11.22	1.9716	0.0099	0	0	2.433E+00	1.222E-02	0	0	6.759E-04	3.394E-06	0	0
700	800	115	27.45	1.9716	0.0099	0	0	5.954E+00	2.990E-02	0	0	1.654E-03	8.304E-06	0	0
800	900	106	25.30	1.9716	0.0099	0	0	5.488E+00	2.756E-02	0	0	1.524E-03	7.654E-06	0	0
900	1000	75	17.90	1.9716	0.0099	0	0	3.883E+00	1.950E-02	0	0	1.079E-03	5.416E-06	0	0
1000	1100	75	17.90	1.9716	0.0099	0	0	3.883E+00	1.950E-02	0	0	1.079E-03	5.416E-06	0	0
1100	1200	69	16.47	1.9716	0.0099	0	0	3.572E+00	1.794E-02	0	0	9.923E-04	4.983E-06	0	0
1200	1300	70	16.71	1.9716	0.0099	0	0	3.624E+00	1.820E-02	0	0	1.007E-03	5.055E-06	0	0
1300	1400	72	17.19	1.9716	0.0099	0	0	3.728E+00	1.872E-02	0	0	1.035E-03	5.199E-06	0	0
1400	1500	64	15.28	1.9716	0.0099	0	0	3.313E+00	1.664E-02	0	0	9.204E-04	4.622E-06	0	0
1500	1600	65	15.52	1.9716	0.0099	0	0	3.365E+00	1.690E-02	0	0	9.348E-04	4.694E-06	0	0
1600	1700	71	16.95	1.9716	0.0099	0	0	3.676E+00	1.846E-02	0	0	1.021E-03	5.127E-06	0	0
1700	1800	94	22.44	1.9716	0.0099	0	0	4.867E+00	2.444E-02	0	0	1.352E-03	6.788E-06	0	0
1800	1900	98	23.39	1.9716	0.0099	0	0	5.074E+00	2.548E-02	0	0	1.409E-03	7.077E-06	0	0
1900	2000	77	18.38	1.9716	0.0099	0	0	3.986E+00	2.002E-02	0	0	1.107E-03	5.560E-06	0	0
2000	2100	60	14.32	1.9716	0.0099	0	0	3.106E+00	1.560E-02	0	0	8.629E-04	4.333E-06	0	0
2100	2200	46	10.98	1.9716	0.0099	0	0	2.382E+00	1.196E-02	0	0	6.615E-04	3.322E-06	0	0
2200	2300	33	7.88	1.9716	0.0099	0	0	1.708E+00	8.579E-03	0	0	4.746E-04	2.383E-06	0	0
2300	2400	25	5.97	1.9716	0.0099	0	0	1.294E+00	6.499E-03	0	0	3.595E-04	1.805E-06	0	0

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	1.7882	2.6944	4.2857	5.5824	6.5845	7.2919	7.7047	7.9231	7.8940	7.8496	7.7897	7.7145	7.6239	7.5179	7.3966	7.2598	7.1077	6.9403	
NO2	0.0090	0.0136	0.0216	0.0282	0.0332	0.0368	0.0389	0.0400	0.0399	0.0396	0.0393	0.0389	0.0385	0.0380	0.0373	0.0367	0.0359	0.0350	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Terminating Vehicles	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (adjusted with fuel %) (g) NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	7	1										6								1.158E+01	5.844E-02	0	0
500	600	13	4	1									1	7							1.710E+01	8.622E-02	0	0
600	700	3	3																		1.281E+00	6.445E-03	0	0
700	800	1		1																	6.432E-01	3.247E-03	0	0
800	900	2	1		1																1.450E+00	7.305E-03	0	0
900	1000	2	2																		8.537E-01	4.297E-03	0	0
1000	1100	0																			0.000E+00	0.000E+00	0	0
1100	1200	2	1			1															1.759E+00	8.880E-03	0	0
1200	1300	6	1	1		2	1			1											7.199E+00	3.633E-02	0	0
1300	1400	5			1				1	2					1						8.465E+00	4.273E-02	0	0
1400	1500	3					1				1	1									5.330E+00	2.690E-02	0	0
1500	1600	5	1	1	1					2											5.876E+00	2.965E-02	0	0
1600	1700	1								1											1.891E+00	9.549E-03	0	0
1700	1800	0																			0.000E+00	0.000E+00	0	0
1800	1900	1				1															1.333E+00	6.732E-03	0	0
1900	2000	0																			0.000E+00	0.000E+00	0	0
2000	2100	1								1											1.891E+00	9.549E-03	0	0
2100	2200	5		3	1		1														4.524E+00	2.282E-02	0	0
2200	2300	3		2				1													3.027E+00	1.528E-02	0	0
2300	2400	1	1																		4.269E-01	2.148E-03	0	0

Remark: Number of trips were derived based on on-site observations at the PTI.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 3 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles)

*Cold Idling = 240-720min; Hot idling = 5-180min.

*Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Trips (adjusted with fuel %) (240-	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (adjusted with fuel %)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	1.43	2.425E-01	1.217E-03	5.680E-04	5.680E-04	1.042E+00	5.231E-03	2.441E-03	2.441E-03	0.24	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	1.268E+00	6.365E-03	2.848E-03	2.848E-03	3.521E-04	1.768E-06	7.910E-07	7.910E-07
500	600	1.91	2.425E-01	1.217E-03	5.680E-04	5.680E-04	1.389E+00	6.975E-03	3.254E-03	3.254E-03	1.19	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.129E+00	5.667E-03	2.034E-03	2.034E-03	2.518E+00	1.264E-02	5.288E-03	5.288E-03	6.994E-04	3.512E-06	1.469E-06	1.469E-06
600	700	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.72	3.152E-01	1.583E-03	5.680E-04	5.680E-04	6.772E-01	3.400E-03	1.220E-03	1.220E-03	6.772E-01	3.400E-03	1.220E-03	1.220E-03	1.881E-04	9.446E-07	3.390E-07	3.390E-07
700	800	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.24	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	6.270E-05	3.149E-07	1.130E-07	1.130E-07
800	900	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.48	3.152E-01	1.583E-03	5.680E-04	5.680E-04	4.515E-01	2.267E-03	8.136E-04	8.136E-04	4.515E-01	2.267E-03	8.136E-04	8.136E-04	1.254E-04	6.297E-07	2.260E-07	2.260E-07
900	1000	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.48	3.152E-01	1.583E-03	5.680E-04	5.680E-04	4.515E-01	2.267E-03	8.136E-04	8.136E-04	4.515E-01	2.267E-03	8.136E-04	8.136E-04	1.254E-04	6.297E-07	2.260E-07	2.260E-07
1000	1100	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.48	3.152E-01	1.583E-03	5.680E-04	5.680E-04	4.515E-01	2.267E-03	8.136E-04	8.136E-04	4.515E-01	2.267E-03	8.136E-04	8.136E-04	1.254E-04	6.297E-07	2.260E-07	2.260E-07
1200	1300	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.43	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.354E+00	6.801E-03	2.441E-03	2.441E-03	1.354E+00	6.801E-03	2.441E-03	2.441E-03	3.762E-04	1.889E-06	6.780E-07	6.780E-07
1300	1400	0.24	2.425E-01	1.217E-03	5.680E-04	5.680E-04	1.736E-01	8.719E-04	4.068E-04	4.068E-04	0.95	3.152E-01	1.583E-03	5.680E-04	5.680E-04	9.029E-01	4.534E-03	1.627E-03	1.627E-03	1.077E+00	5.406E-03	2.034E-03	2.034E-03	2.991E-04	1.502E-06	5.650E-07	5.650E-07
1400	1500	0.24	2.425E-01	1.217E-03	5.680E-04	5.680E-04	1.736E-01	8.719E-04	4.068E-04	4.068E-04	0.48	3.152E-01	1.583E-03	5.680E-04	5.680E-04	4.515E-01	2.267E-03	8.136E-04	8.136E-04	6.251E-01	3.139E-03	1.220E-03	1.220E-03	1.736E-04	8.719E-07	3.390E-07	3.390E-07
1500	1600	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.19	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.129E+00	5.667E-03	2.034E-03	2.034E-03	1.129E+00	5.667E-03	2.034E-03	2.034E-03	3.135E-04	1.574E-06	5.650E-07	5.650E-07
1600	1700	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.24	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	6.270E-05	3.149E-07	1.130E-07	1.130E-07
1700	1800	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.24	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	6.270E-05	3.149E-07	1.130E-07	1.130E-07
1900	2000	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.00	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.24	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	6.270E-05	3.149E-07	1.130E-07	1.130E-07
2100	2200	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.19	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.129E+00	5.667E-03	2.034E-03	2.034E-03	1.129E+00	5.667E-03	2.034E-03	2.034E-03	3.135E-04	1.574E-06	5.650E-07	5.650E-07
2200	2300	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.72	3.152E-01	1.583E-03	5.680E-04	5.680E-04	6.772E-01	3.400E-03	1.220E-03	1.220E-03	6.772E-01	3.400E-03	1.220E-03	1.220E-03	1.881E-04	9.446E-07	3.390E-07	3.390E-07
2300	2400	0.00	2.425E-01	1.217E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.24	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	2.257E-01	1.133E-03	4.068E-04	4.068E-04	6.270E-05	3.149E-07	1.130E-07	1.130E-07

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	60	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	90	m	(Section 3)

* (Section 2)+(Section 3) = 150m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	4.225E-01	2.122E-03	9.492E-04	9.492E-04	4.465E+00	2.253E-02	0	0	1.240E-03	6.257E-06	0	0	1.435E+00	7.241E-03	0	0	3.986E-04	2.011E-06	0	0
500	600	8.393E-01	4.214E-03	1.763E-03	1.763E-03	6.505E+00	3.280E-02	0	0	1.807E-03	9.112E-06	0	0	2.091E+00	1.054E-02	0	0	5.808E-04	2.929E-06	0	0
600	700	2.257E-01	1.133E-03	4.068E-04	4.068E-04	4.220E-01	2.125E-03	0	0	1.172E-04	5.902E-07	0	0	1.356E-01	6.830E-04	0	0	3.767E-05	1.897E-07	0	0
700	800	7.525E-02	3.778E-04	1.356E-04	1.356E-04	2.272E-01	1.147E-03	0	0	6.311E-05	3.187E-07	0	0	7.302E-02	3.688E-04	0	0	2.028E-05	1.025E-07	0	0
800	900	1.505E-01	7.557E-04	2.712E-04	2.712E-04	5.198E-01	2.620E-03	0	0	1.444E-04	7.277E-07	0	0	1.67 1E-01	8.420E-04	0	0	4.641E-05	2.339E-07	0	0
900	1000	1.505E-01	7.557E-04	2.712E-04	2.712E-04	2.813E-01	1.416E-03	0	0	7.814E-05	3.935E-07	0	0	9.042E-02	4.553E-04	0	0	2.512E-05	1.265E-07	0	0
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1100	1200	1.505E-01	7.557E-04	2.712E-04	2.712E-04	6.436E-01	3.250E-03	0	0	1.788E-04	9.027E-07	0	0	2.069E-01	1.045E-03	0	0	5.746E-05	2.902E-07	0	0
1200	1300	4.515E-01	2.267E-03	8.136E-04	8.136E-04	2.699E+00	1.363E-02	0	0	7.497E-04	3.785E-06	0	0	8.675E-01	4.380E-03	0	0	2.410E-04	1.217E-06	0	0
1300	1400	3.589E-01	1.802E-03	6.780E-04	6.780E-04	3.242E+00	1.637E-02	0	0	9.007E-04	4.548E-06	0	0	1.042E+00	5.262E-03	0	0	2.895E-04	1.462E-06	0	0
1400	1500	2.084E-01	1.046E-03	4.068E-04	4.068E-04	2.049E+00	1.034E-02	0	0	5.691E-04	2.873E-06	0	0	6.585E-01	3.324E-03	0	0	1.829E-04	9.235E-07	0	0
1500	1600	3.762E-01	1.889E-03	6.780E-04	6.780E-04	2.200E+00	1.110E-02	0	0	6.111E-04	3.084E-06	0	0	7.071E-01	3.569E-03	0	0	1.964E-04	9.914E-07	0	0
1600	1700	7.525E-02	3.778E-04	1.356E-04	1.356E-04	7.265E-01	3.668E-03	0	0	2.018E-04	1.019E-06	0	0	2.335E-01	1.179E-03	0	0	6.486E-05	3.275E-07	0	0
1700	1800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1800	1900	7.525E-02	3.778E-04	1.356E-04	1.356E-04	5.029E-01	2.542E-03	0	0	1.397E-04	7.060E-07	0	0	1.617E-01	8.169E-04	0	0	4.491E-05	2.269E-07	0	0
1900	2000	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2000	2100	7.525E-02	3.778E-04	1.356E-04	1.356E-04	7.265E-01	3.668E-03	0	0	2.018E-04	1.019E-06	0	0	2.335E-01	1.179E-03	0	0	6.486E-05	3.275E-07	0	0
2100	2200	3.762E-01	1.889E-03	6.780E-04	6.780E-04	1.659E+00	8.373E-03	0	0	4.609E-04	2.326E-06	0	0	5.333E-01	2.691E-03	0	0	1.482E-04	7.476E-07	0	0
2200	2300	2.257E-01	1.133E-03	4.068E-04	4.068E-04	1.121E+00	5.658E-03	0	0	3.113E-04	1.572E-06	0	0	3.602E-01	1.819E-03	0	0	1.000E-04	5.052E-07	0	0
2300	2400	7.525E-02	3.778E-04	1.356E-04	1.356E-04	1.407E-01	7.082E-04	0	0	3.907E-05	1.967E-07	0	0	4.521E-02	2.277E-04	0	0	1.256E-05	6.324E-08	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 3.5 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Bypass Vehicle (adjusted with	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
				NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	*0*	*0.00*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	*0*	*0.00*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	*0*	*0.00*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	*0*	*0.00*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	*1*	*0.24*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.634E-01	1.322E-03	1.746E-04	4.746E-04	7.315E-05	3.673E-07	1.318E-07	1.318E-07
500	600	*13*	*3.10*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	3.424E+00	1.719E-02	6.170E-03	6.170E-03	9.510E-04	4.775E-06	1.714E-06	1.714E-06
600	700	*44*	*10.50*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.159E+01	5.819E-02	2.088E-02	2.088E-02	3.219E-03	1.616E-05	5.801E-06	5.801E-06
700	800	*114*	*27.21*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	3.002E+01	1.508E-01	5.410E-02	5.410E-02	8.340E-03	4.188E-05	1.503E-05	1.503E-05
800	900	*104*	*24.83*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.739E+01	1.375E-01	4.936E-02	4.936E-02	7.608E-03	3.820E-05	1.371E-05	1.371E-05
900	1000	*73*	*17.43*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.923E+01	9.654E-02	3.465E-02	3.465E-02	5.340E-03	2.682E-05	9.624E-06	9.624E-06
1000	1100	*75*	*17.90*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.975E+01	9.918E-02	3.559E-02	3.559E-02	5.487E-03	2.755E-05	9.887E-06	9.887E-06
1100	1200	*67*	*15.99*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.764E+01	8.860E-02	3.180E-02	3.180E-02	4.901E-03	2.461E-05	8.833E-06	8.833E-06
1200	1300	*64*	*15.28*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.685E+01	8.463E-02	3.037E-02	3.037E-02	4.682E-03	2.351E-05	8.437E-06	8.437E-06
1300	1400	*67*	*15.99*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.764E+01	8.860E-02	3.180E-02	3.180E-02	4.901E-03	2.461E-05	8.833E-06	8.833E-06
1400	1500	*61*	*14.56*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.606E+01	8.067E-02	2.895E-02	2.895E-02	4.462E-03	2.241E-05	8.042E-06	8.042E-06
1500	1600	*60*	*14.32*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.580E+01	7.934E-02	2.848E-02	2.848E-02	4.389E-03	2.204E-05	7.910E-06	7.910E-06
1600	1700	*70*	*16.71*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.844E+01	9.257E-02	3.322E-02	3.322E-02	5.121E-03	2.571E-05	9.228E-06	9.228E-06
1700	1800	*94*	*22.44*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.476E+01	1.243E-01	4.461E-02	4.461E-02	6.877E-03	3.453E-05	1.239E-05	1.239E-05
1800	1900	*97*	*23.16*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.555E+01	1.283E-01	4.604E-02	4.604E-02	7.096E-03	3.563E-05	1.279E-05	1.279E-05
1900	2000	*77*	*18.38*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	2.028E+01	1.018E-01	3.654E-02	3.654E-02	5.633E-03	2.828E-05	1.015E-05	1.015E-05
2000	2100	*59*	*14.08*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.554E+01	7.802E-02	2.800E-02	2.800E-02	4.316E-03	2.167E-05	7.778E-06	7.778E-06
2100	2200	*41*	*9.79*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	1.080E+01	5.422E-02	1.946E-02	1.946E-02	2.999E-03	1.506E-05	5.405E-06	5.405E-06
2200	2300	*30*	*7.16*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	7.901E+00	3.967E-02	1.424E-02	1.424E-02	2.195E-03	1.102E-05	3.955E-06	3.955E-06
2300	2400	*24*	*5.73*	3.152E-01	1.583E-03	5.680E-04	5.680E-04	6.321E+00	3.174E-02	1.139E-02	1.139E-02	1.756E-03	8.816E-06	3.164E-06	3.164E-06

PART 5 - Sum up all above parts

Model ID: SSM_PLA1

Calculations

Start Hour	End Hour	Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	1.780E-03	8.970E-06	9.228E-07	9.228E-07
500	600	3.831E-03	1.928E-05	3.183E-06	3.183E-06
600	700	4.200E-03	2.109E-05	6.140E-06	6.140E-06
700	800	1.012E-02	5.081E-05	1.514E-05	1.514E-05
800	**900**	**9.402E-03**	**4.721E-05**	**1.394E-05**	**1.394E-05**
900	1000	6.622E-03	3.325E-05	9.850E-06	9.850E-06
1000	1100	6.565E-03	3.297E-05	9.887E-06	9.887E-06
1100	1200	6.198E-03	3.113E-05	9.059E-06	9.059E-06
1200	1300	6.814E-03	3.424E-05	9.115E-06	9.115E-06
1300	1400	7.137E-03	3.586E-05	9.398E-06	9.398E-06
1400	1500	6.126E-03	3.077E-05	8.381E-06	8.381E-06
1500	1600	6.249E-03	3.139E-05	8.475E-06	8.475E-06
1600	1700	6.406E-03	3.217E-05	9.341E-06	9.341E-06
1700	1800	8.228E-03	4.132E-05	1.239E-05	1.239E-05
1800	1900	8.708E-03	4.373E-05	1.290E-05	1.290E-05
1900	2000	6.740E-03	3.384E-05	1.015E-05	1.015E-05
2000	2100	5.444E-03	2.734E-05	7.891E-06	7.891E-06
2100	2200	4.435E-03	2.228E-05	5.970E-06	5.970E-06
2200	2300	3.169E-03	1.592E-05	4.294E-06	4.294E-06
2300	2400	2.217E-03	1.113E-05	3.277E-06	3.277E-06

Model ID: SSM_PLSA

Start Hour	End Hour	Spread distance = E to San Wan Road Westbound Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	3.986E-04	2.011E-06	0	0
500	600	5.808E-04	2.929E-06	0	0
600	700	3.767E-05	1.897E-07	0	0
700	800	2.028E-05	1.022E-07	0	0
800	**900**	**4.641E-05**	**2.339E-07**	**0**	**0**
900	1000	2.512E-05	1.265E-07	0	0
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	5.746E-05	2.902E-07	0	0
1200	1300	2.410E-04	1.217E-06	0	0
1300	1400	2.895E-04	1.462E-06	0	0
1400	1500	1.829E-04	9.235E-07	0	0
1500	1600	1.964E-04	9.914E-07	0	0
1600	1700	6.486E-05	3.275E-07	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	4.491E-05	2.269E-07	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	6.488E-05	3.275E-07	0	0
2100	2200	1.482E-04	7.476E-07	0	0
2200	2300	1.000E-04	5.052E-07	0	0
2300	2400	1.256E-05	6.324E-08	0	0

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000
100	200	0.0000	0.0000	0.0000	0.0000
200	300	0.0000	0.0000	0.0000	0.0000
300	400	0.0000	0.0000	0.0000	0.0000
400	500	0.1894	0.1900	0.0662	0.0662
500	600	0.4075	0.4083	0.2284	0.2284
600	700	0.4467	0.4467	0.4405	0.4405
700	800	1.0763	1.0762	1.0865	1.0865
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**
900	1000	0.7043	0.7043	0.7068	0.7068
1000	1100	0.6983	0.6982	0.7095	0.7095
1100	1200	0.6592	0.6593	0.6500	0.6500
1200	1300	0.7248	0.7252	0.6541	0.6541
1300	1400	0.7590	0.7595	0.6743	0.6743
1400	1500	0.6515	0.6518	0.6014	0.6014
1500	1600	0.6646	0.6649	0.6081	0.6081
1600	1700	0.6814	0.6814	0.6703	0.6703
1700	1800	0.8751	0.8751	0.8892	0.8892
1800	1900	0.9261	0.9262	0.9257	0.9257
1900	2000	0.7169	0.7168	0.7284	0.7284
2000	2100	0.5790	0.5790	0.5662	0.5662
2100	2200	0.4717	0.4719	0.4284	0.4284
2200	2300	0.3370	0.3372	0.3081	0.3081
2300	2400	0.2358	0.2358	0.2351	0.2351

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	8.5894	8.5991	0	0
500	600	12.5145	12.5224	0	0
600	700	0.8118	0.8111	0	0
700	800	0.4371	0.4380	0	0
800	**900**	**1.0000**	**1.0000**	**0**	**0**
900	1000	0.5412	0.5407	0	0
1000	1100	0.0000	0.0000	0	0
1100	1200	1.2382	1.2406	0	0
1200	1300	5.1922	5.2016	0	0
1300	1400	6.2381	6.2495	0	0
1400	1500	3.9414	3.9482	0	0
1500	1600	4.2323	4.2387	0	0
1600	1700	1.3976	1.4003	0	0
1700	1800	0.0000	0.0000	0	0
1800	1900	0.9676	0.9702	0	0
1900	2000	0.0000	0.0000	0	0
2000	2100	1.3976	1.4003	0	0
2100	2200	3.1923	3.1962	0	0
2200	2300	2.1558	2.1598	0	0
2300	2400	0.2706	0.2704	0	0

Sheung Shui Station Minibus Terminus

PTI Type: Open-area

Assessment Vehicle: TAXI
Fuel: LPG

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	50	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	60	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.110	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Population Ratio Extracted from EMFAC

LPG %	Petrol %
99.99%	0.01%

Calculations

*Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Total (adjusted with fuel %)	Within PTI (Section 1)+(Section 2) Running Emission Factor (g/km·vehicle) NO	NO_2	RSP	FSP	Running Emission Within PTI (g) NO	NO_2	RSP	FSP	A Running Emission Within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	0.00	1.0081	0.0282	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0	0.00	1.0081	0.0282	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0	0.00	1.0081	0.0282	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0	0.00	1.0081	0.0282	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0	0.00	1.0081	0.0282	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0	0.00	1.0081	0.0282	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	6	6.00	1.0081	0.0282	0	0	6.653E-01	1.861E-02	0	0	1.848E-04	5.170E-06	0	0
700	800	74	73.99	1.0081	0.0282	0	0	8.205E+00	2.295E-01	0	0	2.279E-03	6.376E-05	0	0
800	900	99	98.99	1.0081	0.0282	0	0	1.098E+01	3.071E-01	0	0	3.049E-03	8.530E-05	0	0
900	1000	60	60.00	1.0081	0.0282	0	0	6.653E+00	1.861E-01	0	0	1.848E-03	5.170E-05	0	0
1000	1100	54	54.00	1.0081	0.0282	0	0	5.988E+00	1.675E-01	0	0	1.663E-03	4.653E-05	0	0
1100	1200	47	47.00	1.0081	0.0282	0	0	5.211E+00	1.458E-01	0	0	1.448E-03	4.050E-05	0	0
1200	1300	43	43.00	1.0081	0.0282	0	0	4.768E+00	1.334E-01	0	0	1.324E-03	3.705E-05	0	0
1300	1400	52	52.00	1.0081	0.0282	0	0	5.766E+00	1.613E-01	0	0	1.602E-03	4.480E-05	0	0
1400	1500	48	48.00	1.0081	0.0282	0	0	5.322E+00	1.489E-01	0	0	1.478E-03	4.136E-05	0	0
1500	1600	50	50.00	1.0081	0.0282	0	0	5.544E+00	1.551E-01	0	0	1.540E-03	4.308E-05	0	0
1600	1700	58	58.00	1.0081	0.0282	0	0	6.431E+00	1.799E-01	0	0	1.786E-03	4.997E-05	0	0
1700	1800	70	69.99	1.0081	0.0282	0	0	7.762E+00	2.171E-01	0	0	2.156E-03	6.031E-05	0	0
1800	1900	53	53.00	1.0081	0.0282	0	0	5.877E+00	1.644E-01	0	0	1.632E-03	4.566E-05	0	0
1900	2000	60	60.00	1.0081	0.0282	0	0	6.653E+00	1.861E-01	0	0	1.848E-03	5.170E-05	0	0
2000	2100	50	50.00	1.0081	0.0282	0	0	5.544E+00	1.551E-01	0	0	1.540E-03	4.308E-05	0	0
2100	2200	45	45.00	1.0081	0.0282	0	0	4.990E+00	1.396E-01	0	0	1.386E-03	3.877E-05	0	0
2200	2300	45	45.00	1.0081	0.0282	0	0	4.990E+00	1.396E-01	0	0	1.386E-03	3.877E-05	0	0
2300	2400	40	40.00	1.0081	0.0282	0	0	4.435E+00	1.241E-01	0	0	1.232E-03	3.446E-05	0	0

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	1.0087	1.0253	1.0579	1.0895	1.1200	1.1495	1.1779	1.3109	1.4527	1.4407	1.4206	1.3922	1.3555	1.3106	1.2576	1.1963	1.1268	1.0491	
NO2	0.0283	0.0288	0.0297	0.0306	0.0314	0.0322	0.0330	0.0368	0.0407	0.0404	0.0398	0.0390	0.0380	0.0368	0.0353	0.0336	0.0316	0.0294	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Terminating Vehicles	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (adjusted with fuel %) (g) NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	0																			0.000E+00	0.000E+00	0	0
600	700	0																			0.000E+00	0.000E+00	0	0
700	800	0																			0.000E+00	0.000E+00	0	0
800	900	1	1																		1.009E+00	2.830E-02	0	0
900	1000	4	3				1														4.146E+00	1.163E-01	0	0
1000	1100	0																			0.000E+00	0.000E+00	0	0
1100	1200	0																			0.000E+00	0.000E+00	0	0
1200	1300	0																			0.000E+00	0.000E+00	0	0
1300	1400	0																			0.000E+00	0.000E+00	0	0
1400	1500	0																			0.000E+00	0.000E+00	0	0
1500	1600	0																			0.000E+00	0.000E+00	0	0
1600	1700	0																			0.000E+00	0.000E+00	0	0
1700	1800	2			1				1												2.236E+00	6.270E-02	0	0
1800	1900	1						1													1.149E+00	3.220E-02	0	0
1900	2000	1									1										1.453E+00	4.070E-02	0	0
2000	2100	0																			0.000E+00	0.000E+00	0	0
2100	2200	1	1																		1.009E+00	2.830E-02	0	0
2200	2300	0																			0.000E+00	0.000E+00	0	0
2300	2400	2	1		1																2.066E+00	5.800E-02	0	0

Remark: Number of trips were derived based on on-site observations at the PTI.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 1.5 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles)

*Cold Idling = 240-720min; Hot idling = 5-180min.

Start Hour	End Hour	Trips (adjusted with fuel %) (240-	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (adjusted with fuel %)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP
2400	100	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	1.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.190E-01	8.925E-03	1.472E-03	1.472E-03
900	1000	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	4.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	1.276E+00	3.570E-02	5.887E-03	5.887E-03
1000	1100	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	2.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	6.381E-01	1.785E-02	2.943E-03	2.943E-03
1800	1900	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	1.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.190E-01	8.925E-03	1.472E-03	1.472E-03
1900	2000	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	1.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.190E-01	8.925E-03	1.472E-03	1.472E-03
2000	2100	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	1.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.190E-01	8.925E-03	1.472E-03	1.472E-03
2200	2300	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0.00	1.636E-01	4.577E-03	9.812E-04	9.812E-04	0	0	0	0	2.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	6.381E-01	1.785E-02	2.943E-03	2.943E-03

*Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	3.190E-01	8.925E-03	1.472E-03	1.472E-03	8.862E-05	2.479E-06	4.088E-07	4.088E-07
900	1000	1.276E+00	3.570E-02	5.887E-03	5.887E-03	3.545E-04	9.916E-06	1.635E-06	1.635E-06
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	6.381E-01	1.785E-02	2.943E-03	2.943E-03	1.772E-04	4.958E-06	8.176E-07	8.176E-07
1800	1900	3.190E-01	8.925E-03	1.472E-03	1.472E-03	8.862E-05	2.479E-06	4.088E-07	4.088E-07
1900	2000	3.190E-01	8.925E-03	1.472E-03	1.472E-03	8.862E-05	2.479E-06	4.088E-07	4.088E-07
2000	2100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	3.190E-01	8.925E-03	1.472E-03	1.472E-03	8.862E-05	2.479E-06	4.088E-07	4.088E-07
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	6.381E-01	1.785E-02	2.943E-03	2.943E-03	1.772E-04	4.958E-06	8.176E-07	8.176E-07

Parameters

Maximum Duration for adjusting Start Emission =	0.5	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	60	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	90	m	(Section 3)

* (Section 2)+(Section 3) = 150m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
800	900	1.063E-01	2.975E-03	4.906E-04	4.906E-04	3.609E-01	1.013E-02	0	0	1.003E-04	2.814E-06	0	0	5.414E-01	1.519E-02	0	0	1.504E-04	4.220E-06	0	0
900	1000	4.254E-01	1.190E-02	1.962E-03	1.962E-03	1.488E+00	4.176E-02	0	0	4.134E-04	1.160E-05	0	0	2.232E+00	6.263E-02	0	0	6.201E-04	1.740E-05	0	0
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1700	1800	2.127E-01	5.950E-03	9.811E-04	9.811E-04	8.092E-01	2.270E-02	0	0	2.248E-04	6.305E-06	0	0	1.214E+00	3.405E-02	0	0	3.372E-04	9.458E-06	0	0
1800	1900	1.063E-01	2.975E-03	4.906E-04	4.906E-04	4.172E-01	1.169E-02	0	0	1.159E-04	3.247E-06	0	0	6.258E-01	1.753E-02	0	0	1.738E-04	4.870E-06	0	0
1900	2000	1.063E-01	2.975E-03	4.906E-04	4.906E-04	5.385E-01	1.509E-02	0	0	1.496E-04	4.191E-06	0	0	8.077E-01	2.263E-02	0	0	2.244E-04	6.287E-06	0	0
2000	2100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2100	2200	1.063E-01	2.975E-03	4.906E-04	4.906E-04	3.609E-01	1.013E-02	0	0	1.003E-04	2.814E-06	0	0	5.414E-01	1.519E-02	0	0	1.504E-04	4.220E-06	0	0
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2300	2400	2.127E-01	5.950E-03	9.811E-04	9.811E-04	7.415E-01	2.082E-02	0	0	2.060E-04	5.783E-06	0	0	1.112E+00	3.123E-02	0	0	3.090E-04	8.674E-06	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 2.5 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Bypass Vehicle (adjusted with	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
				NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	0.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	6	6.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.190E+00	8.925E-02	1.472E-02	1.472E-02	8.862E-04	2.479E-05	4.088E-06	4.088E-06
700	800	74	73.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.935E+01	1.101E+00	1.815E-01	1.815E-01	1.093E-02	3.058E-04	5.042E-05	5.042E-05
800	900	98	97.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	5.211E+01	1.458E+00	2.404E-01	2.404E-01	1.448E-02	4.049E-04	6.677E-05	6.677E-05
900	1000	56	56.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.978E+01	8.330E-01	1.374E-01	1.374E-01	8.272E-03	2.314E-04	3.816E-05	3.816E-05
1000	1100	54	54.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.871E+01	8.032E-01	1.325E-01	1.325E-01	7.976E-03	2.231E-04	3.679E-05	3.679E-05
1100	1200	47	47.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.499E+01	6.991E-01	1.153E-01	1.153E-01	6.942E-03	1.942E-04	3.202E-05	3.202E-05
1200	1300	43	43.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.286E+01	6.396E-01	1.055E-01	1.055E-01	6.351E-03	1.777E-04	2.930E-05	2.930E-05
1300	1400	52	52.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.765E+01	7.735E-01	1.275E-01	1.275E-01	7.681E-03	2.149E-04	3.543E-05	3.543E-05
1400	1500	48	48.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.552E+01	7.140E-01	1.177E-01	1.177E-01	7.090E-03	1.983E-04	3.270E-05	3.270E-05
1500	1600	50	50.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.659E+01	7.437E-01	1.226E-01	1.226E-01	7.385E-03	2.066E-04	3.407E-05	3.407E-05
1600	1700	58	58.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.084E+01	8.627E-01	1.423E-01	1.423E-01	8.567E-03	2.396E-04	3.952E-05	3.952E-05
1700	1800	68	67.99	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.616E+01	1.011E+00	1.668E-01	1.668E-01	1.004E-02	2.810E-04	4.633E-05	4.633E-05
1800	1900	52	52.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.765E+01	7.735E-01	1.275E-01	1.275E-01	7.681E-03	2.149E-04	3.543E-05	3.543E-05
1900	2000	59	59.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	3.137E+01	8.776E-01	1.447E-01	1.447E-01	8.715E-03	2.438E-04	4.020E-05	4.020E-05
2000	2100	50	50.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.659E+01	7.437E-01	1.226E-01	1.226E-01	7.385E-03	2.066E-04	3.407E-05	3.407E-05
2100	2200	44	44.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.340E+01	6.545E-01	1.079E-01	1.079E-01	6.499E-03	1.818E-04	2.998E-05	2.998E-05
2200	2300	45	45.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.393E+01	6.694E-01	1.104E-01	1.104E-01	6.647E-03	1.859E-04	3.066E-05	3.066E-05
2300	2400	38	38.00	2.127E-01	5.950E-03	9.812E-04	9.812E-04	2.021E+01	5.652E-01	9.321E-02	9.321E-02	5.613E-03	1.570E-04	2.589E-05	2.589E-05

PART 5 - Sum up all above parts

Model ID: SSM_TLA1

Calculations

Start Hour	End Hour	Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	1.071E-03	2.996E-05	4.088E-06	4.088E-06
700	800	1.321E-02	3.695E-04	5.042E-05	5.042E-05
800	**900**	**1.771E-02**	**4.955E-04**	**6.718E-05**	**6.718E-05**
900	1000	1.089E-02	3.046E-04	3.979E-05	3.979E-05
1000	1100	9.639E-03	2.696E-04	3.679E-05	3.679E-05
1100	1200	8.390E-03	2.347E-04	3.202E-05	3.202E-05
1200	1300	7.676E-03	2.147E-04	2.930E-05	2.930E-05
1300	1400	9.282E-03	2.597E-04	3.543E-05	3.543E-05
1400	1500	8.568E-03	2.397E-04	3.270E-05	3.270E-05
1500	1600	8.925E-03	2.497E-04	3.407E-05	3.407E-05
1600	1700	1.035E-02	2.896E-04	3.952E-05	3.952E-05
1700	1800	1.260E-02	3.525E-04	4.715E-05	4.715E-05
1800	1900	9.518E-03	2.662E-04	3.584E-05	3.584E-05
1900	2000	1.080E-02	3.021E-04	4.061E-05	4.061E-05
2000	2100	8.925E-03	2.497E-04	3.407E-05	3.407E-05
2100	2200	8.074E-03	2.259E-04	3.039E-05	3.039E-05
2200	2300	8.033E-03	2.247E-04	3.066E-05	3.066E-05
2300	2400	7.228E-03	2.022E-04	2.671E-05	2.671E-05

Model ID: SSM_TLSA

Start Hour	End Hour	Spread distance = E to San Wan Road Westbound Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0	0
700	800	0.000E+00	0.000E+00	0	0
800	**900**	**1.504E-04**	**4.220E-06**	**0**	**0**
900	1000	6.201E-04	1.740E-05	0	0
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0	0
1700	1800	3.372E-04	9.458E-06	0	0
1800	1900	1.738E-04	4.870E-06	0	0
1900	2000	2.244E-04	6.287E-06	0	0
2000	2100	0.000E+00	0.000E+00	0	0
2100	2200	1.504E-04	4.220E-06	0	0
2200	2300	0.000E+00	0.000E+00	0	0
2300	2400	3.090E-04	8.674E-06	0	0

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000
100	200	0.0000	0.0000	0.0000	0.0000
200	300	0.0000	0.0000	0.0000	0.0000
300	400	0.0000	0.0000	0.0000	0.0000
400	500	0.0000	0.0000	0.0000	0.0000
500	600	0.0000	0.0000	0.0000	0.0000
600	700	0.0605	0.0605	0.0609	0.0609
700	800	0.7457	0.7457	0.7505	0.7505
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**
900	1000	0.6146	0.6147	0.5923	0.5923
1000	1100	0.5442	0.5442	0.5477	0.5477
1100	1200	0.4736	0.4736	0.4767	0.4767
1200	1300	0.4333	0.4333	0.4361	0.4361
1300	1400	0.5240	0.5240	0.5274	0.5274
1400	1500	0.4837	0.4837	0.4868	0.4868
1500	1600	0.5039	0.5039	0.5071	0.5071
1600	1700	0.5845	0.5845	0.5882	0.5882
1700	1800	0.7114	0.7115	0.7018	0.7018
1800	1900	0.5373	0.5373	0.5335	0.5335
1900	2000	0.6098	0.6098	0.6045	0.6045
2000	2100	0.5039	0.5039	0.5071	0.5071
2100	2200	0.4558	0.4558	0.4523	0.4523
2200	2300	0.4535	0.4535	0.4564	0.4564
2300	2400	0.4081	0.4081	0.3976	0.3976

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0	0
600	700	0.0000	0.0000	0	0
700	800	0.0000	0.0000	0	0
800	**900**	**1.0000**	**1.0000**	**0**	**0**
900	1000	4.1233	4.1224	0	0
1000	1100	0.0000	0.0000	0	0
1100	1200	0.0000	0.0000	0	0
1200	1300	0.0000	0.0000	0	0
1300	1400	0.0000	0.0000	0	0
1400	1500	0.0000	0.0000	0	0
1500	1600	0.0000	0.0000	0	0
1600	1700	0.0000	0.0000	0	0
1700	1800	2.2420	2.2409	0	0
1800	1900	1.1560	1.1540	0	0
1900	2000	1.4921	1.4896	0	0
2000	2100	0.0000	0.0000	0	0
2100	2200	1.0000	1.0000	0	0
2200	2300	0.0000	0.0000	0	0
2300	2400	2.0545	2.0553	0	0

Sheung Shui Station Minibus Terminus

PTI Type: Open-area

Assessment Vehicle: TAXI
Fuel: PETROL

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	50	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	60	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.110	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Population Ratio Extracted from EMFAC

LPG %	Petrol %
99.99%	0.01%

Calculations

*Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Total (adjusted with fuel %)	Within PTI (Section 1)+(Section 2) Running Emission Factor (g/km·vehicle) NO	NO_2	RSP	FSP	Running Emission Within PTI (g) NO	NO_2	RSP	FSP	A Running Emission Within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	0.00	0.0596	0.0031	0.0096	0.0089	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0	0.00	0.0596	0.0031	0.0096	0.0089	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0	0.00	0.0596	0.0031	0.0096	0.0089	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0	0.00	0.0596	0.0031	0.0096	0.0089	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0	0.00	0.0596	0.0031	0.0096	0.0089	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0	0.00	0.0596	0.0031	0.0096	0.0089	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	6	0.00	0.0596	0.0031	0.0096	0.0089	2.941E-06	1.530E-07	4.737E-07	4.392E-07	8.170E-10	4.249E-11	1.316E-10	1.220E-10
700	800	74	0.01	0.0596	0.0031	0.0096	0.0089	3.627E-05	1.887E-06	5.843E-06	5.417E-06	1.008E-08	5.241E-10	1.623E-09	1.505E-09
800	900	99	0.01	0.0596	0.0031	0.0096	0.0089	4.853E-05	2.524E-06	7.817E-06	7.247E-06	1.348E-08	7.011E-10	2.171E-09	2.013E-09
900	1000	60	0.00	0.0596	0.0031	0.0096	0.0089	2.941E-05	1.530E-06	4.737E-06	4.392E-06	8.170E-09	4.249E-10	1.316E-09	1.220E-09
1000	1100	54	0.00	0.0596	0.0031	0.0096	0.0089	2.647E-05	1.377E-06	4.264E-06	3.953E-06	7.353E-09	3.824E-10	1.184E-09	1.098E-09
1100	1200	47	0.00	0.0596	0.0031	0.0096	0.0089	2.304E-05	1.198E-06	3.711E-06	3.440E-06	6.400E-09	3.329E-10	1.031E-09	9.557E-10
1200	1300	43	0.00	0.0596	0.0031	0.0096	0.0089	2.108E-05	1.096E-06	3.395E-06	3.148E-06	5.855E-09	3.045E-10	9.431E-10	8.743E-10
1300	1400	52	0.00	0.0596	0.0031	0.0096	0.0089	2.549E-05	1.326E-06	4.106E-06	3.806E-06	7.080E-09	3.683E-10	1.140E-09	1.057E-09
1400	1500	48	0.00	0.0596	0.0031	0.0096	0.0089	2.353E-05	1.224E-06	3.790E-06	3.514E-06	6.536E-09	3.400E-10	1.053E-09	9.760E-10
1500	1600	50	0.00	0.0596	0.0031	0.0096	0.0089	2.451E-05	1.275E-06	3.948E-06	3.660E-06	6.808E-09	3.541E-10	1.097E-09	1.017E-09
1600	1700	58	0.00	0.0596	0.0031	0.0096	0.0089	2.843E-05	1.479E-06	4.579E-06	4.246E-06	7.897E-09	4.108E-10	1.272E-09	1.179E-09
1700	1800	70	0.01	0.0596	0.0031	0.0096	0.0089	3.431E-05	1.785E-06	5.527E-06	5.124E-06	9.531E-09	4.958E-10	1.535E-09	1.423E-09
1800	1900	53	0.00	0.0596	0.0031	0.0096	0.0089	2.598E-05	1.351E-06	4.185E-06	3.880E-06	7.217E-09	3.754E-10	1.162E-09	1.078E-09
1900	2000	60	0.00	0.0596	0.0031	0.0096	0.0089	2.941E-05	1.530E-06	4.737E-06	4.392E-06	8.170E-09	4.249E-10	1.316E-09	1.220E-09
2000	2100	50	0.00	0.0596	0.0031	0.0096	0.0089	2.451E-05	1.275E-06	3.948E-06	3.660E-06	6.808E-09	3.541E-10	1.097E-09	1.017E-09
2100	2200	45	0.00	0.0596	0.0031	0.0096	0.0089	2.206E-05	1.147E-06	3.553E-06	3.294E-06	6.127E-09	3.187E-10	9.870E-10	9.150E-10
2200	2300	45	0.00	0.0596	0.0031	0.0096	0.0089	2.206E-05	1.147E-06	3.553E-06	3.294E-06	6.127E-09	3.187E-10	9.870E-10	9.150E-10
2300	2400	40	0.00	0.0596	0.0031	0.0096	0.0089	1.961E-05	1.020E-06	3.158E-06	2.928E-06	5.447E-09	2.833E-10	8.773E-10	8.133E-10

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.0754	0.0767	0.0791	0.0814	0.0837	0.0860	0.0881	0.0980	0.1086	0.1077	0.1062	0.1040	0.1014	0.0979	0.0941	0.0894	0.0843	0.0785	
NO2	0.0040	0.0040	0.0042	0.0043	0.0044	0.0045	0.0046	0.0052	0.0057	0.0057	0.0056	0.0055	0.0053	0.0052	0.0049	0.0047	0.0044	0.0041	
RSP	0.0004	0.0008	0.0015	0.0023	0.0030	0.0036	0.0042	0.0070	0.0079	0.0087	0.0093	0.0099	0.0104	0.0107	0.0110	0.0112	0.0113	0.0113	
FSP	0.0004	0.0007	0.0014	0.0021	0.0027	0.0034	0.0039	0.0065	0.0073	0.0080	0.0087	0.0092	0.0096	0.0100	0.0102	0.0104	0.0105	0.0105	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Terminating Vehicles	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (adjusted with fuel %) (g) NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	1	1																		5.638E-06	2.991E-07	2.991E-08	2.991E-08
900	1000	4	3				1														2.317E-05	1.226E-06	3.140E-07	2.916E-07
1000	1100	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	2			1				1												1.250E-05	6.580E-07	4.262E-07	3.963E-07
1800	1900	1						1													6.430E-06	3.365E-07	2.692E-07	2.542E-07
1900	2000	1									1										8.120E-06	4.262E-07	5.907E-07	5.458E-07
2000	2100	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	1	1																		5.638E-06	2.991E-07	2.991E-08	2.991E-08
2200	2300	0																			0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	2	1		1																1.155E-05	6.131E-07	1.421E-07	1.346E-07

Remark: Number of trips were derived based on on-site observations at the PTI.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 1.5 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles)

*Cold Idling = 240-720min; Hot idling = 5-180min.

*Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Trips (adjusted with fuel %) (240-	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (adjusted with fuel %)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.848E-07	9.611E-09	2.430E-08	2.430E-08	1.848E-07	9.611E-09	2.430E-08	2.430E-08	5.133E-11	2.670E-12	6.750E-12	6.750E-12
900	1000	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	7.392E-07	3.845E-08	9.720E-08	9.720E-08	7.392E-07	3.845E-08	9.720E-08	9.720E-08	2.053E-10	1.068E-11	2.700E-11	2.700E-11
1000	1100	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	3.696E-07	1.922E-08	4.860E-08	4.860E-08	3.696E-07	1.922E-08	4.860E-08	4.860E-08	1.027E-10	5.340E-12	1.350E-11	1.350E-11
1800	1900	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.848E-07	9.611E-09	2.430E-08	2.430E-08	1.848E-07	9.611E-09	2.430E-08	2.430E-08	5.133E-11	2.670E-12	6.750E-12	6.750E-12
1900	2000	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.848E-07	9.611E-09	2.430E-08	2.430E-08	1.848E-07	9.611E-09	2.430E-08	2.430E-08	5.133E-11	2.670E-12	6.750E-12	6.750E-12
2000	2100	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.848E-07	9.611E-09	2.430E-08	2.430E-08	1.848E-07	9.611E-09	2.430E-08	2.430E-08	5.133E-11	2.670E-12	6.750E-12	6.750E-12
2200	2300	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0.00	1.267E-03	6.592E-05	2.167E-04	2.167E-04	0	0	0	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	3.696E-07	1.922E-08	4.860E-08	4.860E-08	3.696E-07	1.922E-08	4.860E-08	4.860E-08	1.027E-10	5.340E-12	1.350E-11	1.350E-11

Parameters

Maximum Duration for adjusting Start Emission =	0	min(s)	*No adjustment
Travelling Distance from Start Point to PTI Egress =	60	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	n/a	m	(Section 3) *Not Applicable

Adjusted Calculations for Idling Emission

*No adjustment, direct equal to Start Emission

*No Spread Distance, emit right at Start point

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
100	200	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
200	300	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
300	400	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
400	500	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
500	600	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
600	700	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
700	800	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
800	900	0	0	0	0	5.638E-06	2.991E-07	2.991E-08	2.991E-08	1.566E-09	8.308E-11	8.308E-12	8.308E-12	0	0	0	0	0	0	0	0
900	1000	0	0	0	0	2.317E-05	1.226E-06	3.140E-07	2.916E-07	6.436E-09	3.406E-10	8.723E-11	8.100E-11	0	0	0	0	0	0	0	0
1000	1100	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
1100	1200	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
1200	1300	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
1300	1400	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
1400	1500	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
1500	1600	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
1600	1700	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
1700	1800	0	0	0	0	1.250E-05	6.580E-07	4.262E-07	3.963E-07	3.473E-09	1.828E-10	1.184E-10	1.101E-10	0	0	0	0	0	0	0	0
1800	1900	0	0	0	0	6.430E-06	3.365E-07	2.692E-07	2.542E-07	1.786E-09	9.346E-11	7.477E-11	7.062E-11	0	0	0	0	0	0	0	0
1900	2000	0	0	0	0	8.120E-06	4.262E-07	5.907E-07	5.458E-07	2.256E-09	1.184E-10	1.641E-10	1.516E-10	0	0	0	0	0	0	0	0
2000	2100	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
2100	2200	0	0	0	0	5.638E-06	2.991E-07	2.991E-08	2.991E-08	1.566E-09	8.308E-11	8.308E-12	8.308E-12	0	0	0	0	0	0	0	0
2200	2300	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0	0	0	0	0
2300	2400	0	0	0	0	1.155E-05	6.131E-07	1.421E-07	1.346E-07	3.209E-09	1.703E-10	3.946E-11	3.738E-11	0	0	0	0	0	0	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 2.5 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Bypass Vehicle (adjusted with	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
				NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	6	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.848E-06	9.611E-08	2.430E-07	2.430E-07	5.133E-10	2.670E-11	6.750E-11	6.750E-11
700	800	74	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.279E-05	1.185E-06	2.997E-06	2.997E-06	6.331E-09	3.293E-10	8.325E-10	8.325E-10
800	900	98	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	3.018E-05	1.570E-06	3.969E-06	3.969E-06	8.384E-09	4.361E-10	1.103E-09	1.103E-09
900	1000	56	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.725E-05	8.971E-07	2.268E-06	2.268E-06	4.791E-09	2.492E-10	6.300E-10	6.300E-10
1000	1100	54	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.663E-05	8.650E-07	2.187E-06	2.187E-06	4.620E-09	2.403E-10	6.075E-10	6.075E-10
1100	1200	47	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.448E-05	7.529E-07	1.904E-06	1.904E-06	4.021E-09	2.091E-10	5.288E-10	5.288E-10
1200	1300	43	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.324E-05	6.888E-07	1.742E-06	1.742E-06	3.679E-09	1.913E-10	4.838E-10	4.838E-10
1300	1400	52	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.602E-05	8.330E-07	2.106E-06	2.106E-06	4.449E-09	2.314E-10	5.850E-10	5.850E-10
1400	1500	48	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.478E-05	7.689E-07	1.944E-06	1.944E-06	4.106E-09	2.136E-10	5.400E-10	5.400E-10
1500	1600	50	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.540E-05	8.010E-07	2.025E-06	2.025E-06	4.278E-09	2.225E-10	5.625E-10	5.625E-10
1600	1700	58	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.786E-05	9.291E-07	2.349E-06	2.349E-06	4.962E-09	2.581E-10	6.525E-10	6.525E-10
1700	1800	68	0.01	1.648E-03	8.570E-05	2.167E-04	2.167E-04	2.094E-05	1.089E-06	2.754E-06	2.754E-06	5.817E-09	3.026E-10	7.650E-10	7.650E-10
1800	1900	52	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.602E-05	8.330E-07	2.106E-06	2.106E-06	4.449E-09	2.314E-10	5.850E-10	5.850E-10
1900	2000	59	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.817E-05	9.451E-07	2.390E-06	2.390E-06	5.047E-09	2.625E-10	6.638E-10	6.638E-10
2000	2100	50	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.540E-05	8.010E-07	2.025E-06	2.025E-06	4.278E-09	2.225E-10	5.625E-10	5.625E-10
2100	2200	44	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.355E-05	7.048E-07	1.782E-06	1.782E-06	3.764E-09	1.958E-10	4.950E-10	4.950E-10
2200	2300	45	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.386E-05	7.209E-07	1.823E-06	1.823E-06	3.850E-09	2.002E-10	5.063E-10	5.063E-10
2300	2400	38	0.00	1.648E-03	8.570E-05	2.167E-04	2.167E-04	1.170E-05	6.087E-07	1.539E-06	1.539E-06	3.251E-09	1.691E-10	4.275E-10	4.275E-10

PART 5 - Sum up all above parts

Model ID: SSM_TPA1 *No Spread Distance, emit right at Start point

Calculations

Start Hour	End Hour	Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)				Spread distance = E to San Wan Road Westbound Total Emission (g/s)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0	0
600	700	1.330E-09	6.919E-11	1.991E-10	1.895E-10	0	0	0	0
700	800	1.641E-08	8.534E-10	2.455E-09	2.337E-09	0	0	0	0
800	**900**	**2.348E-08**	**1.223E-09**	**3.289E-09**	**3.131E-09**	**0**	**0**	**0**	**0**
900	1000	1.960E-08	1.025E-09	2.060E-09	1.958E-09	0	0	0	0
1000	1100	1.197E-08	6.227E-10	1.792E-09	1.705E-09	0	0	0	0
1100	1200	1.042E-08	5.420E-10	1.560E-09	1.484E-09	0	0	0	0
1200	1300	9.534E-09	4.959E-10	1.427E-09	1.358E-09	0	0	0	0
1300	1400	1.153E-08	5.997E-10	1.725E-09	1.642E-09	0	0	0	0
1400	1500	1.064E-08	5.535E-10	1.593E-09	1.516E-09	0	0	0	0
1500	1600	1.109E-08	5.766E-10	1.659E-09	1.579E-09	0	0	0	0
1600	1700	1.286E-08	6.689E-10	1.925E-09	1.832E-09	0	0	0	0
1700	1800	1.892E-08	9.865E-10	2.432E-09	2.312E-09	0	0	0	0
1800	1900	1.350E-08	7.029E-10	1.829E-09	1.740E-09	0	0	0	0
1900	2000	1.552E-08	8.085E-10	2.151E-09	2.042E-09	0	0	0	0
2000	2100	1.109E-08	5.766E-10	1.659E-09	1.579E-09	0	0	0	0
2100	2200	1.151E-08	6.002E-10	1.497E-09	1.425E-09	0	0	0	0
2200	2300	9.977E-09	5.189E-10	1.493E-09	1.421E-09	0	0	0	0
2300	2400	1.201E-08	6.280E-10	1.358E-09	1.292E-09	0	0	0	0

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000	0	0	0	0
100	200	0.0000	0.0000	0.0000	0.0000	0	0	0	0
200	300	0.0000	0.0000	0.0000	0.0000	0	0	0	0
300	400	0.0000	0.0000	0.0000	0.0000	0	0	0	0
400	500	0.0000	0.0000	0.0000	0.0000	0	0	0	0
500	600	0.0000	0.0000	0.0000	0.0000	0	0	0	0
600	700	0.0567	0.0566	0.0605	0.0605	0	0	0	0
700	800	0.6987	0.6978	0.7466	0.7466	0	0	0	0
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	**0**	**0**	**0**	**0**
900	1000	0.8348	0.8385	0.6264	0.6254	0	0	0	0
1000	1100	0.5099	0.5092	0.5448	0.5448	0	0	0	0
1100	1200	0.4438	0.4432	0.4742	0.4742	0	0	0	0
1200	1300	0.4060	0.4055	0.4338	0.4338	0	0	0	0
1300	1400	0.4910	0.4903	0.5246	0.5246	0	0	0	0
1400	1500	0.4532	0.4526	0.4843	0.4843	0	0	0	0
1500	1600	0.4721	0.4715	0.5045	0.5044	0	0	0	0
1600	1700	0.5476	0.5469	0.5852	0.5851	0	0	0	0
1700	1800	0.8059	0.8066	0.7395	0.7385	0	0	0	0
1800	1900	0.5750	0.5747	0.5561	0.5558	0	0	0	0
1900	2000	0.6611	0.6611	0.6539	0.6523	0	0	0	0
2000	2100	0.4721	0.4715	0.5045	0.5044	0	0	0	0
2100	2200	0.4901	0.4908	0.4552	0.4552	0	0	0	0
2200	2300	0.4249	0.4243	0.4540	0.4540	0	0	0	0
2300	2400	0.5114	0.5135	0.4128	0.4126	0	0	0	0

Tin Ping Estate Bus Terminus PTI Type: Open-area Assessment Vehicle: FBDD

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	50	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	50	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.100	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Running Emission Factor (g/km·vehicle) NO	NO_2	RSP	FSP	Within PTI (Section 1)+(Section 2) Running Emission Within PTI (g) NO	NO_2	RSP	FSP	A Running Emission Within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	11	10.62	0.7139	0.3809	0.3504	1.168E+01	7.853E-01	4.190E-01	3.854E-01	3.245E-03	2.181E-04	1.164E-04	1.071E-04
100	200	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	10.62	0.7139	0.3809	0.3504	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	1	10.62	0.7139	0.3809	0.3504	1.062E+00	7.139E-02	3.809E-02	3.504E-02	2.950E-04	1.983E-05	1.058E-05	9.733E-06
400	500	1	10.62	0.7139	0.3809	0.3504	1.062E+00	7.139E-02	3.809E-02	3.504E-02	2.950E-04	1.983E-05	1.058E-05	9.733E-06
500	600	3	10.62	0.7139	0.3809	0.3504	3.186E+00	2.142E-01	1.143E-01	1.051E-01	8.850E-04	5.949E-05	3.174E-05	2.920E-05
600	700	17	10.62	0.7139	0.3809	0.3504	1.805E+01	1.214E+00	6.475E-01	5.957E-01	5.015E-03	3.371E-04	1.799E-04	1.655E-04
700	800	24	10.62	0.7139	0.3809	0.3504	2.549E+01	1.713E+00	9.142E-01	8.410E-01	7.080E-03	4.759E-04	2.539E-04	2.336E-04
800	900	15	10.62	0.7139	0.3809	0.3504	1.593E+01	1.071E+00	5.714E-01	5.256E-01	4.425E-03	2.975E-04	1.587E-04	1.460E-04
900	1000	15	10.62	0.7139	0.3809	0.3504	1.593E+01	1.071E+00	5.714E-01	5.256E-01	4.425E-03	2.975E-04	1.587E-04	1.460E-04
1000	1100	14	10.62	0.7139	0.3809	0.3504	1.487E+01	9.995E-01	5.333E-01	4.906E-01	4.130E-03	2.776E-04	1.481E-04	1.363E-04
1100	1200	16	10.62	0.7139	0.3809	0.3504	1.698E+01	1.142E+00	6.094E-01	5.606E-01	4.720E-03	3.173E-04	1.693E-04	1.557E-04
1200	1300	14	10.62	0.7139	0.3809	0.3504	1.487E+01	9.995E-01	5.333E-01	4.906E-01	4.130E-03	2.776E-04	1.481E-04	1.363E-04
1300	1400	22	10.62	0.7139	0.3809	0.3504	2.336E+01	1.571E+00	8.380E-01	7.709E-01	6.490E-03	4.363E-04	2.328E-04	2.141E-04
1400	1500	15	10.62	0.7139	0.3809	0.3504	1.593E+01	1.071E+00	5.714E-01	5.256E-01	4.425E-03	2.975E-04	1.587E-04	1.460E-04
1500	1600	15	10.62	0.7139	0.3809	0.3504	1.593E+01	1.071E+00	5.714E-01	5.256E-01	4.425E-03	2.975E-04	1.587E-04	1.460E-04
1600	1700	21	10.62	0.7139	0.3809	0.3504	2.230E+01	1.499E+00	7.999E-01	7.358E-01	6.195E-03	4.164E-04	2.222E-04	2.044E-04
1700	1800	16	10.62	0.7139	0.3809	0.3504	1.698E+01	1.142E+00	6.094E-01	5.606E-01	4.720E-03	3.173E-04	1.693E-04	1.557E-04
1800	1900	15	10.62	0.7139	0.3809	0.3504	1.593E+01	1.071E+00	5.714E-01	5.256E-01	4.425E-03	2.975E-04	1.587E-04	1.460E-04
1900	2000	24	10.62	0.7139	0.3809	0.3504	2.549E+01	1.713E+00	9.142E-01	8.410E-01	7.080E-03	4.759E-04	2.539E-04	2.336E-04
2000	2100	19	10.62	0.7139	0.3809	0.3504	2.018E+01	1.356E+00	7.237E-01	6.658E-01	5.605E-03	3.768E-04	2.010E-04	1.849E-04
2100	2200	24	10.62	0.7139	0.3809	0.3504	2.549E+01	1.713E+00	9.142E-01	8.410E-01	7.080E-03	4.759E-04	2.539E-04	2.336E-04
2200	2300	13	10.62	0.7139	0.3809	0.3504	1.381E+01	9.281E-01	4.952E-01	4.555E-01	3.835E-03	2.578E-04	1.375E-04	1.265E-04
2300	2400	17	10.62	0.7139	0.3809	0.3504	1.805E+01	1.214E+00	6.475E-01	5.957E-01	5.015E-03	3.371E-04	1.799E-04	1.655E-04

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.6686	1.2035	1.6047	2.2733	2.8082	3.7444	5.4828	6.8200	10.0295	13.1053	14.7100	17.3846	19.1230	20.0591	20.5940	21.1289	21.3964	21.3964	
NO2	0.0503	0.0905	0.1206	0.1709	0.2111	0.2814	0.4121	0.5126	0.7538	0.9849	1.1055	1.3065	1.4372	1.5075	1.5477	1.5879	1.6080	1.6080	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Total #	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (g) NO	NO_2	RSP	FSP
2400	100	1	1																		6.686E-01	5.030E-02	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	1							1												5.483E+00	4.121E-01	0	0
400	500	1											1								1.471E+01	1.106E+00	0	0
500	600	3											2	1							4.680E+01	3.518E+00	0	0
600	700	7			3	1	1							1	1						4.640E+01	3.488E+00	0	0
700	800	7		3	4																1.003E+01	7.539E-01	0	0
800	900	6		2	2	2															1.016E+01	7.640E-01	0	0
900	1000	3	1		1		1														5.082E+00	3.820E-01	0	0
1000	1100	3			1				1	1											1.391E+01	1.045E+00	0	0
1100	1200	3		1						2											1.484E+01	1.116E+00	0	0
1200	1300	3			1					2											1.524E+01	1.146E+00	0	0
1300	1400	4				1	1			2											1.872E+01	1.407E+00	0	0
1400	1500	4			2					2											1.685E+01	1.266E+00	0	0
1500	1600	3	1	1	1																3.477E+00	2.614E-01	0	0
1600	1700	5		2	1	2															8.558E+00	6.434E-01	0	0
1700	1800	5		1			3		1												1.511E+01	1.136E+00	0	0
1800	1900	2				1	1														5.082E+00	3.820E-01	0	0
1900	2000	5			1	2	1	1													1.270E+01	9.549E-01	0	0
2000	2100	2			1	1															3.878E+00	2.915E-01	0	0
2100	2200	5				1	1			3											2.554E+01	1.920E+00	0	0
2200	2300	2	1		1																2.273E+00	1.709E-01	0	0
2300	2400	0																			0.000E+00	0.000E+00	0	0

Remark: Number of trips were derived based on on-site observations at the PTI.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 1.5 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min. *Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Trips (60-720min)	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (5-50min)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.486E-01	1.671E-02	2.209E-03	2.209E-03	2.486E-01	1.671E-02	2.209E-03	2.209E-03	6.900E-05	4.643E-06	6.135E-07	6.135E-07
100	200	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	9.012E+00	6.058E-01	2.209E-03	2.209E-03	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.012E+00	6.058E-01	2.209E-03	2.209E-03	2.503E-03	1.683E-04	6.135E-07	6.135E-07
400	500	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	9.012E+00	6.058E-01	2.209E-03	2.209E-03	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.012E+00	6.058E-01	2.209E-03	2.209E-03	2.503E-03	1.683E-04	6.135E-07	6.135E-07
500	600	3	6.008E+00	4.039E-01	1.473E-03	1.473E-03	2.704E+01	1.817E+00	6.626E-03	6.626E-03	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.704E+01	1.817E+00	6.626E-03	6.626E-03	7.510E-03	5.048E-04	1.841E-06	1.841E-06
600	700	2	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.802E+01	1.212E+00	4.418E-03	4.418E-03	5	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.243E+00	8.357E-02	1.104E-02	1.104E-02	1.927E+01	1.295E+00	1.546E-02	1.546E-02	5.352E-03	3.598E-04	4.295E-06	4.295E-06
700	800	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.740E+00	1.170E-01	1.546E-02	1.546E-02	1.740E+00	1.170E-01	1.546E-02	1.546E-02	4.834E-04	3.250E-05	4.295E-06	4.295E-06
800	900	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
900	1000	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3	1.658E-01	1.114E-02	1.473E-03	1.473E-03	7.459E-01	5.014E-02	6.626E-03	6.626E-03	7.459E-01	5.014E-02	6.626E-03	6.626E-03	2.072E-04	1.393E-05	1.841E-06	1.841E-06
1000	1100	2	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.802E+01	1.212E+00	4.418E-03	4.418E-03	1	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.486E-01	1.671E-02	2.209E-03	2.209E-03	1.827E+01	1.228E+00	6.626E-03	6.626E-03	5.076E-03	3.412E-04	1.841E-06	1.841E-06
1100	1200	2	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.802E+01	1.212E+00	4.418E-03	4.418E-03	1	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.486E-01	1.671E-02	2.209E-03	2.209E-03	1.827E+01	1.228E+00	6.626E-03	6.626E-03	5.076E-03	3.412E-04	1.841E-06	1.841E-06
1200	1300	2	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.802E+01	1.212E+00	4.418E-03	4.418E-03	1	1.658E-01	1.114E-02	1.473E-03	1.473E-03	2.486E-01	1.671E-02	2.209E-03	2.209E-03	1.827E+01	1.228E+00	6.626E-03	6.626E-03	5.076E-03	3.412E-04	1.841E-06	1.841E-06
1300	1400	2	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.802E+01	1.212E+00	4.418E-03	4.418E-03	2	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.973E-01	3.343E-02	4.418E-03	4.418E-03	1.852E+01	1.245E+00	8.835E-03	8.835E-03	5.145E-03	3.459E-04	2.454E-06	2.454E-06
1400	1500	2	6.008E+00	4.039E-01	1.473E-03	1.473E-03	1.802E+01	1.212E+00	4.418E-03	4.418E-03	2	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.973E-01	3.343E-02	4.418E-03	4.418E-03	1.852E+01	1.245E+00	8.835E-03	8.835E-03	5.145E-03	3.459E-04	2.454E-06	2.454E-06
1500	1600	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3	1.658E-01	1.114E-02	1.473E-03	1.473E-03	7.459E-01	5.014E-02	6.626E-03	6.626E-03	7.459E-01	5.014E-02	6.626E-03	6.626E-03	2.072E-04	1.393E-05	1.841E-06	1.841E-06
1600	1700	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.243E+00	8.357E-02	1.104E-02	1.104E-02	1.243E+00	8.357E-02	1.104E-02	1.104E-02	3.453E-04	2.321E-05	3.068E-06	3.068E-06
1700	1800	1	6.008E+00	4.039E-01	1.473E-03	1.473E-03	9.012E+00	6.058E-01	2.209E-03	2.209E-03	4	1.658E-01	1.114E-02	1.473E-03	1.473E-03	9.945E-01	6.685E-02	8.835E-03	8.835E-03	1.001E+01	6.727E-01	1.104E-02	1.104E-02	2.780E-03	1.869E-04	3.068E-06	3.068E-06
1800	1900	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.973E-01	3.343E-02	4.418E-03	4.418E-03	4.973E-01	3.343E-02	4.418E-03	4.418E-03	1.381E-04	9.285E-06	1.227E-06	1.227E-06
1900	2000	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.243E+00	8.357E-02	1.104E-02	1.104E-02	1.243E+00	8.357E-02	1.104E-02	1.104E-02	3.453E-04	2.321E-05	3.068E-06	3.068E-06
2000	2100	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.973E-01	3.343E-02	4.418E-03	4.418E-03	4.973E-01	3.343E-02	4.418E-03	4.418E-03	1.381E-04	9.285E-06	1.227E-06	1.227E-06
2100	2200	3	6.008E+00	4.039E-01	1.473E-03	1.473E-03	2.704E+01	1.817E+00	6.626E-03	6.626E-03	2	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.973E-01	3.343E-02	4.418E-03	4.418E-03	2.753E+01	1.851E+00	1.104E-02	1.104E-02	7.648E-03	5.141E-04	3.068E-06	3.068E-06
2200	2300	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2	1.658E-01	1.114E-02	1.473E-03	1.473E-03	4.973E-01	3.343E-02	4.418E-03	4.418E-03	4.973E-01	3.343E-02	4.418E-03	4.418E-03	1.381E-04	9.285E-06	1.227E-06	1.227E-06
2300	2400	0	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	50	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	650	m	(Section 3)

* (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	1.658E-01	1.114E-02	1.473E-03	1.473E-03	3.592E-02	2.797E-03	0	0	9.977E-06	7.769E-07	0	0	4.669E-01	3.636E-02	0	0	1.297E-04	1.010E-05	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	6.008E+00	4.039E-01	1.473E-03	1.473E-03	0.000E+00	5.872E-04	0	0	0.000E+00	1.631E-07	0	0	0.000E+00	7.633E-03	0	0	0.000E+00	2.120E-06	0	0
400	500	6.008E+00	4.039E-01	1.473E-03	1.473E-03	6.216E-01	5.012E-02	0	0	1.727E-04	1.392E-05	0	0	8.080E+00	6.515E-01	0	0	2.245E-03	1.810E-04	0	0
500	600	1.802E+01	1.212E+00	4.418E-03	4.418E-03	2.056E+00	1.647E-01	0	0	5.710E-04	4.575E-05	0	0	2.672E+01	2.141E+00	0	0	7.423E-03	5.948E-04	0	0
600	700	1.285E+01	8.635E-01	1.031E-02	1.031E-02	2.397E+00	1.874E-01	0	0	6.658E-04	5.206E-05	0	0	3.116E+01	2.437E+00	0	0	8.656E-03	6.768E-04	0	0
700	800	1.160E+00	7.800E-02	1.031E-02	1.031E-02	6.335E-01	4.828E-02	0	0	1.760E-04	1.341E-05	0	0	8.236E+00	6.276E-01	0	0	2.288E-03	1.743E-04	0	0
800	900	9.945E-01	6.685E-02	8.835E-03	8.835E-03	6.549E-01	4.980E-02	0	0	1.819E-04	1.383E-05	0	0	8.514E+00	6.473E-01	0	0	2.365E-03	1.798E-04	0	0
900	1000	4.973E-01	3.343E-02	4.418E-03	4.418E-03	3.274E-01	2.490E-02	0	0	9.096E-05	6.916E-06	0	0	4.257E+00	3.237E-01	0	0	1.182E-03	8.991E-05	0	0
1000	1100	1.218E+01	8.189E-01	4.418E-03	4.418E-03	1.232E-01	1.617E-02	0	0	3.424E-05	4.492E-06	0	0	1.602E+00	2.102E-01	0	0	4.451E-04	5.840E-05	0	0
1100	1200	1.218E+01	8.189E-01	4.418E-03	4.418E-03	1.901E-01	2.120E-02	0	0	5.281E-05	5.889E-06	0	0	2.471E+00	2.755E-01	0	0	6.865E-04	7.656E-05	0	0
1200	1300	1.218E+01	8.189E-01	4.418E-03	4.418E-03	2.188E-01	2.335E-02	0	0	6.077E-05	6.486E-06	0	0	2.844E+00	3.035E-01	0	0	7.900E-04	8.432E-05	0	0
1300	1400	1.235E+01	8.300E-01	5.890E-03	5.890E-03	4.553E-01	4.123E-02	0	0	1.265E-04	1.145E-05	0	0	5.918E+00	5.359E-01	0	0	1.644E-03	1.489E-04	0	0
1400	1500	1.235E+01	8.300E-01	5.890E-03	5.890E-03	3.215E-01	3.117E-02	0	0	8.932E-05	8.658E-06	0	0	4.180E+00	4.052E-01	0	0	1.161E-03	1.126E-04	0	0
1500	1600	4.973E-01	3.343E-02	4.418E-03	4.418E-03	2.128E-01	1.628E-02	0	0	5.912E-05	4.523E-06	0	0	2.767E+00	2.117E-01	0	0	7.685E-04	5.880E-05	0	0
1600	1700	8.288E-01	5.571E-02	7.363E-03	7.363E-03	5.521E-01	4.198E-02	0	0	1.534E-04	1.166E-05	0	0	7.177E+00	5.457E-01	0	0	1.994E-03	1.516E-04	0	0
1700	1800	6.671E+00	4.484E-01	7.363E-03	7.363E-03	6.028E-01	4.910E-02	0	0	1.675E-04	1.364E-05	0	0	7.837E+00	6.383E-01	0	0	2.177E-03	1.773E-04	0	0
1800	1900	3.315E-01	2.228E-02	2.945E-03	2.945E-03	3.393E-01	2.569E-02	0	0	9.425E-05	7.137E-06	0	0	4.411E+00	3.340E-01	0	0	1.225E-03	9.278E-05	0	0
1900	2000	8.288E-01	5.571E-02	7.363E-03	7.363E-03	8.482E-01	6.423E-02	0	0	2.356E-04	1.784E-05	0	0	1.103E+01	8.350E-01	0	0	3.063E-03	2.319E-04	0	0
2000	2100	3.315E-01	2.228E-02	2.945E-03	2.945E-03	2.533E-01	1.923E-02	0	0	7.037E-05	5.342E-06	0	0	3.293E+00	2.500E-01	0	0	9.148E-04	6.944E-05	0	0
2100	2200	1.836E+01	1.234E+00	7.363E-03	7.363E-03	5.133E-01	4.899E-02	0	0	1.426E-04	1.361E-05	0	0	6.672E+00	6.369E-01	0	0	1.853E-03	1.769E-04	0	0
2200	2300	3.315E-01	2.228E-02	2.945E-03	2.945E-03	1.387E-01	1.062E-02	0	0	3.853E-05	2.949E-06	0	0	1.803E+00	1.380E-01	0	0	5.009E-04	3.833E-05	0	0
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 0.5 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PT1 (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	*10*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	8.288E-01	5.571E-02	7.363E-03	7.363E-03	2.302E-04	1.548E-05	2.045E-06	2.045E-06
100	200	*0*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	*0*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	*0*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	*0*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	*0*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	*10*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	8.288E-01	5.571E-02	7.363E-03	7.363E-03	2.302E-04	1.548E-05	2.045E-06	2.045E-06
700	800	*17*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.409E+00	9.471E-02	1.252E-02	1.252E-02	3.914E-04	2.631E-05	3.477E-06	3.477E-06
800	900	*9*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	7.459E-01	5.014E-02	6.626E-03	6.626E-03	2.072E-04	1.393E-05	1.841E-06	1.841E-06
900	1000	*12*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	9.945E-01	6.685E-02	8.835E-03	8.835E-03	2.763E-04	1.857E-05	2.454E-06	2.454E-06
1000	1100	*11*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	9.116E-01	6.128E-02	8.099E-03	8.099E-03	2.532E-04	1.702E-05	2.250E-06	2.250E-06
1100	1200	*13*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.077E+00	7.243E-02	9.571E-03	9.571E-03	2.993E-04	2.012E-05	2.659E-06	2.659E-06
1200	1300	*11*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	9.116E-01	6.128E-02	8.099E-03	8.099E-03	2.532E-04	1.702E-05	2.250E-06	2.250E-06
1300	1400	*18*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.492E+00	1.003E-01	1.325E-02	1.325E-02	4.144E-04	2.786E-05	3.681E-06	3.681E-06
1400	1500	*11*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	9.116E-01	6.128E-02	8.099E-03	8.099E-03	2.532E-04	1.702E-05	2.250E-06	2.250E-06
1500	1600	*12*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	9.945E-01	6.685E-02	8.835E-03	8.835E-03	2.763E-04	1.857E-05	2.454E-06	2.454E-06
1600	1700	*16*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.326E+00	8.914E-02	1.178E-02	1.178E-02	3.683E-04	2.476E-05	3.272E-06	3.272E-06
1700	1800	*11*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	9.116E-01	6.128E-02	8.099E-03	8.099E-03	2.532E-04	1.702E-05	2.250E-06	2.250E-06
1800	1900	*13*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.077E+00	7.243E-02	9.571E-03	9.571E-03	2.993E-04	2.012E-05	2.659E-06	2.659E-06
1900	2000	*19*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.575E+00	1.059E-01	1.399E-02	1.399E-02	4.374E-04	2.940E-05	3.886E-06	3.886E-06
2000	2100	*17*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.409E+00	9.471E-02	1.252E-02	1.252E-02	3.914E-04	2.631E-05	3.477E-06	3.477E-06
2100	2200	*19*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.575E+00	1.059E-01	1.399E-02	1.399E-02	4.374E-04	2.940E-05	3.886E-06	3.886E-06
2200	2300	*11*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	9.116E-01	6.128E-02	8.099E-03	8.099E-03	2.532E-04	1.702E-05	2.250E-06	2.250E-06
2300	2400	*17*	1.658E-01	1.114E-02	1.473E-03	1.473E-03	1.409E+00	9.471E-02	1.252E-02	1.252E-02	3.914E-04	2.631E-05	3.477E-06	3.477E-06

PART 5 - Sum up all above parts

Calculations

Model ID: TIN_BDA1 — Spread distance = E — Within PT1 (Section 1 + Section 2) — Total Emission (g/s)

Model ID: TIN_BDSS — Spread distance = E — to LSASB (Section 3) — Total Emission (g/s)

Model ID: TIN_BDSW — Spread distance = E — to JCRWB (Section 3) — Total Emission (g/s)

Model ID: TIN_BDSN — Spread distance = E — to TPRWB (Section 3) — Total Emission (g/s)

Start Hour	End Hour	Within PT1 (Section 1 + Section 2)				to LSASB (Section 3)				to JCRWB (Section 3)				to TPRWB (Section 3)				Spill Ratio		
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	to LSASB (%)	to JCRWB (%)	to TPRWB (%)
2400	100	3.554E-03	2.390E-04	1.190E-04	1.097E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%
300	400	2.798E-03	1.883E-04	1.119E-05	1.035E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%
400	500	2.971E-03	2.020E-04	1.119E-05	1.035E-05	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%
500	**600**	8.966E-03	6.101E-04	3.358E-05	3.104E-05	**7.423E-03**	**5.948E-04**	**0**	**0**	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	**100.00%**	**0.00%**	**0.00%**
600	**700**	1.126E-02	7.644E-04	1.862E-04	1.718E-04	0.000E+00	0.000E+00	0	0	**2.164E-03**	**1.692E-04**	**0**	**0**	6.492E-03	5.076E-04	0	0	**0.00%**	**25.00%**	**75.00%**
700	800	8.131E-03	5.482E-04	2.617E-04	2.414E-04	0.000E+00	0.000E+00	0	0	8.579E-04	6.538E-05	0	0	1.432E-03	1.090E-04	0	0	0.00%	37.50%	62.50%
800	**900**	**5.228E-03**	**3.531E-04**	**1.642E-04**	**1.515E-04**	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	**2.365E-03**	**1.798E-04**	**0**	**0**	**0.00%**	**0.00%**	**100.00%**
900	1000	4.999E-03	3.369E-04	1.630E-04	1.503E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	1.182E-03	8.991E-05	0	0	0.00%	0.00%	100.00%
1000	1100	9.493E-03	6.404E-04	1.522E-04	1.404E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	4.451E-04	5.840E-05	0	0	0.00%	0.00%	100.00%
1100	1200	1.015E-02	6.845E-04	1.738E-04	1.602E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	6.865E-04	7.656E-05	0	0	0.00%	0.00%	100.00%
1200	1300	9.520E-03	6.423E-04	1.522E-04	1.404E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	7.900E-04	8.432E-05	0	0	0.00%	0.00%	100.00%
1300	1400	1.218E-02	8.214E-04	2.389E-04	2.203E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	1.644E-03	1.489E-04	0	0	0.00%	0.00%	100.00%
1400	1500	9.912E-03	6.690E-04	1.634E-04	1.507E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	1.161E-03	1.126E-04	0	0	0.00%	0.00%	100.00%
1500	1600	4.968E-03	3.345E-04	1.630E-04	1.503E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	7.685E-04	5.880E-05	0	0	0.00%	0.00%	100.00%
1600	1700	7.062E-03	4.761E-04	2.285E-04	2.107E-04	4.984E-04	3.790E-05	0	0	0.000E+00	0.000E+00	0	0	1.495E-03	1.137E-04	0	0	25.00%	0.00%	75.00%
1700	1800	7.920E-03	5.348E-04	1.746E-04	1.611E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	2.177E-03	1.773E-04	0	0	0.00%	0.00%	100.00%
1800	1900	4.957E-03	3.346E-04	1.626E-04	1.499E-04	3.063E-04	2.320E-05	0	0	0.000E+00	0.000E+00	0	0	9.189E-04	6.959E-05	0	0	25.00%	0.00%	75.00%
1900	2000	8.098E-03	5.464E-04	2.609E-04	2.406E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	3.063E-03	2.319E-04	0	0	0.00%	0.00%	100.00%
2000	2100	6.205E-03	4.177E-04	2.057E-04	1.896E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	9.148E-04	6.944E-05	0	0	0.00%	0.00%	100.00%
2100	2200	1.531E-02	1.033E-03	2.609E-04	2.406E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	1.853E-03	1.769E-04	0	0	0.00%	0.00%	100.00%
2200	2300	4.265E-03	2.871E-04	1.410E-04	1.300E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	5.009E-04	3.833E-05	0	0	0.00%	0.00%	100.00%
2300	2400	5.406E-03	3.634E-04	1.833E-04	1.689E-04	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.00%	0.00%	0.00%

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)				Hourly Profile Ratio (0500-0600 as Baseline)				Hourly Profile Ratio (0600-0700 as Baseline)				Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0.6798	0.6770	0.7249	0.7242	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
300	400	0.5352	0.5332	0.0682	0.0683	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
400	500	0.5682	0.5722	0.0682	0.0683	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0
500	**600**	1.7149	1.7279	0.2045	0.2049	**1.0000**	**1.0000**	**0**	**0**	0.0000	0.0000	0	0	0.0000	0.0000	0	0
600	**700**	2.1542	2.1651	1.1338	1.1339	0.0000	0.0000	0	0	**1.0000**	**1.0000**	**0**	**0**	2.7451	2.8230	0	0
700	800	1.5551	1.5525	1.5935	1.5930	0.0000	0.0000	0	0	0.3964	0.3864	0	0	0.6046	0.6080	0	0
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**	0.0000	0.0000	0	0	0.0000	0.0000	0	0	**1.0000**	**1.0000**	**0**	**0**
900	1000	0.9562	0.9541	0.9925	0.9919	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.5000	0.5000	0	0
1000	1100	1.8157	1.8136	0.9269	0.9263	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.1882	0.3247	0	0
1100	1200	1.9409	1.9387	1.0582	1.0575	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.2903	0.4257	0	0
1200	1300	1.8208	1.8193	0.9269	0.9263	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.3340	0.4689	0	0
1300	1400	2.3287	2.3265	1.4547	1.4537	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.6952	0.8279	0	0
1400	1500	1.8959	1.8949	0.9950	0.9946	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.4910	0.6259	0	0
1500	1600	0.9501	0.9473	0.9925	0.9919	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.3250	0.3270	0	0
1600	1700	1.3507	1.3484	1.3915	1.3908	0.0671	0.0637	0	0	0.0000	0.0000	0	0	0.6323	0.6322	0	0
1700	1800	1.5148	1.5147	1.0632	1.0629	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.9205	0.9861	0	0
1800	1900	0.9480	0.9460	0.9900	0.9892	0.0413	0.0390	0	0	0.0000	0.0000	0	0	0.3886	0.3870	0	0
1900	2000	1.5489	1.5475	1.5885	1.5876	0.0000	0.0000	0	0	0.0000	0.0000	0	0	1.2952	1.2898	0	0
2000	2100	1.1867	1.1831	1.2527	1.2515	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.3868	0.3862	0	0
2100	2200	2.9279	2.9260	1.5885	1.5876	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.7837	0.9838	0	0
2200	2300	0.8157	0.8130	0.8587	0.8580	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.2118	0.2132	0	0
2300	2400	1.0340	1.0293	1.1164	1.1150	0.0000	0.0000	0	0	0.0000	0.0000	0	0	0.0000	0.0000	0	0

Tin Ping Estate Bus Terminus PTI Type: Open-area Assessment Vehicle: FBSD

PART 1 - Running Emission

Parameters

Average Travelling Distance from PTI Ingress to Start Point =	50	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to PTI Egress =	50	m	(Section 2 - Egress)
Total Travelling Distance in PTI	0.100	km	(1km = 1000m)
Travelling Speed =	10	km/h	

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Running Emission Factor (g/km·vehicle) NO	NO_2	RSP	FSP	Within PTI (Section 1)+(Section 2) Running Emission Within PTI (g) NO	NO_2	RSP	FSP	A Running Emission Within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	2	2.9636	0.5374	0.0834	0.0768	5.927E-01	1.075E-01	1.668E-02	1.536E-02	1.646E-04	2.986E-05	4.633E-06	4.267E-06
100	200	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	2.9636	0.5374	0.0834	0.0768	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	5	2.9636	0.5374	0.0834	0.0768	1.482E+00	2.687E-01	4.170E-02	3.840E-02	4.116E-04	7.464E-05	1.158E-05	1.067E-05
600	700	4	2.9636	0.5374	0.0834	0.0768	1.185E+00	2.150E-01	3.336E-02	3.072E-02	3.293E-04	5.971E-05	9.267E-06	8.533E-06
700	800	8	2.9636	0.5374	0.0834	0.0768	2.371E+00	4.299E-01	6.672E-02	6.144E-02	6.586E-04	1.194E-04	1.853E-05	1.707E-05
800	900	10	2.9636	0.5374	0.0834	0.0768	2.964E+00	5.374E-01	8.340E-02	7.680E-02	8.232E-04	1.493E-04	2.317E-05	2.133E-05
900	1000	6	2.9636	0.5374	0.0834	0.0768	1.778E+00	3.224E-01	5.004E-02	4.608E-02	4.939E-04	8.957E-05	1.390E-05	1.280E-05
1000	1100	5	2.9636	0.5374	0.0834	0.0768	1.482E+00	2.687E-01	4.170E-02	3.840E-02	4.116E-04	7.464E-05	1.158E-05	1.067E-05
1100	1200	5	2.9636	0.5374	0.0834	0.0768	1.482E+00	2.687E-01	4.170E-02	3.840E-02	4.116E-04	7.464E-05	1.158E-05	1.067E-05
1200	1300	5	2.9636	0.5374	0.0834	0.0768	1.482E+00	2.687E-01	4.170E-02	3.840E-02	4.116E-04	7.464E-05	1.158E-05	1.067E-05
1300	1400	6	2.9636	0.5374	0.0834	0.0768	1.778E+00	3.224E-01	5.004E-02	4.608E-02	4.939E-04	8.957E-05	1.390E-05	1.280E-05
1400	1500	5	2.9636	0.5374	0.0834	0.0768	1.482E+00	2.687E-01	4.170E-02	3.840E-02	4.116E-04	7.464E-05	1.158E-05	1.067E-05
1500	1600	4	2.9636	0.5374	0.0834	0.0768	1.185E+00	2.150E-01	3.336E-02	3.072E-02	3.293E-04	5.971E-05	9.267E-06	8.533E-06
1600	1700	5	2.9636	0.5374	0.0834	0.0768	1.482E+00	2.687E-01	4.170E-02	3.840E-02	4.116E-04	7.464E-05	1.158E-05	1.067E-05
1700	1800	7	2.9636	0.5374	0.0834	0.0768	2.075E+00	3.762E-01	5.838E-02	5.376E-02	5.763E-04	1.045E-04	1.622E-05	1.493E-05
1800	1900	7	2.9636	0.5374	0.0834	0.0768	2.075E+00	3.762E-01	5.838E-02	5.376E-02	5.763E-04	1.045E-04	1.622E-05	1.493E-05
1900	2000	5	2.9636	0.5374	0.0834	0.0768	1.482E+00	2.687E-01	4.170E-02	3.840E-02	4.116E-04	7.464E-05	1.158E-05	1.067E-05
2000	2100	4	2.9636	0.5374	0.0834	0.0768	1.185E+00	2.150E-01	3.336E-02	3.072E-02	3.293E-04	5.971E-05	9.267E-06	8.533E-06
2100	2200	2	2.9636	0.5374	0.0834	0.0768	5.927E-01	1.075E-01	1.668E-02	1.536E-02	1.646E-04	2.986E-05	4.633E-06	4.267E-06
2200	2300	2	2.9636	0.5374	0.0834	0.0768	5.927E-01	1.075E-01	1.668E-02	1.536E-02	1.646E-04	2.986E-05	4.633E-06	4.267E-06
2300	2400	3	2.9636	0.5374	0.0834	0.0768	8.891E-01	1.612E-01	2.502E-02	2.304E-02	2.470E-04	4.478E-05	6.950E-06	6.400E-06

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.1693	0.3048	0.4064	0.5757	0.7112	0.9482	1.3885	1.7272	2.5400	3.3189	3.7253	4.4026	4.8429	5.0800	5.2154	5.3510	5.4186	5.4186	
NO2	0.0316	0.0569	0.0758	0.1074	0.1327	0.1769	0.2590	0.3222	0.4738	0.6191	0.6949	0.8213	0.9034	0.9476	0.9729	0.9981	1.0108	1.0108	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Total #	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (g) NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	1											1								3.725E+00	6.949E-01	0	0
600	700	0																			0.000E+00	0.000E+00	0	0
700	800	0																			0.000E+00	0.000E+00	0	0
800	900	0																			0.000E+00	0.000E+00	0	0
900	1000	0																			0.000E+00	0.000E+00	0	0
1000	1100	0																			0.000E+00	0.000E+00	0	0
1100	1200	0																			0.000E+00	0.000E+00	0	0
1200	1300	0																			0.000E+00	0.000E+00	0	0
1300	1400	0																			0.000E+00	0.000E+00	0	0
1400	1500	0																			0.000E+00	0.000E+00	0	0
1500	1600	0																			0.000E+00	0.000E+00	0	0
1600	1700	0																			0.000E+00	0.000E+00	0	0
1700	1800	0																			0.000E+00	0.000E+00	0	0
1800	1900	0																			0.000E+00	0.000E+00	0	0
1900	2000	0																			0.000E+00	0.000E+00	0	0
2000	2100	0																			0.000E+00	0.000E+00	0	0
2100	2200	0																			0.000E+00	0.000E+00	0	0
2200	2300	0																			0.000E+00	0.000E+00	0	0
2300	2400	0																			0.000E+00	0.000E+00	0	0

Remark: Number of trips were derived based on on-site observations at the PTIs and operators' published schedules.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 2.5 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min. *Total Idling Emission = Cold Idling + Hot Idling

Start Hour	End Hour	Trips (60-720min)	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (5-50min)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within PTI (g) NO	NO_2	RSP	FSP	B Total Idling Emission within PTI (g/s) NO	NO_2	RSP	FSP
2400	100	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	1	7.797E-01	1.414E-01	5.333E-04	5.333E-04	1.949E+00	3.535E-01	1.333E-03	1.333E-03	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.949E+00	3.535E-01	1.333E-03	1.333E-03	5.415E-04	9.819E-05	3.703E-07	3.703E-07
600	700	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	1000	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1000	1100	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0	7.797E-01	1.414E-01	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to PTI Egress =	50	m	(Section 2)
Travelling Distance from PTI Egress to Open Road =	650	m	(Section 3) * (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within PTI (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within PTI (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside PTI (Section 3) (g) NO	NO_2	RSP	FSP	E Adjusted Start Emission Outside PTI (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	7.797E-01	1.414E-01	5.333E-04	5.333E-04	2.104E-01	3.954E-02	0	0	5.844E-05	1.098E-05	0	0	2.735E+00	5.140E-01	0	0	7.598E-04	1.428E-04	0	0
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
800	900	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
900	1000	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1700	1800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1800	1900	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1900	2000	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2000	2100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0

PART 4 - Idling Emission (Bypass Vehicles)

Parameters

Idling Time for Bypass Vehicles = 1 min(s) *As On-Site observations

Calculations (only applicable for Bypass Vehicles) *Only Hot idling occur

Start Hour	End Hour	Bypass Vehicle	Hot Idling Emission Factor (g/min)				Hot Idling Emission (g)				D Hot Idling Emission within PTI (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.212E-01	2.197E-02	1.067E-03	1.067E-03	3.365E-05	6.102E-06	2.963E-07	2.963E-07
100	200	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	6.058E-02	1.098E-02	5.333E-04	5.333E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	4	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	6.731E-05	1.220E-05	5.925E-07	5.925E-07
600	700	4	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	6.731E-05	1.220E-05	5.925E-07	5.925E-07
700	800	8	6.058E-02	1.098E-02	5.333E-04	5.333E-04	4.846E-01	8.788E-02	4.266E-03	4.266E-03	1.346E-04	2.441E-05	1.185E-06	1.185E-06
800	900	10	6.058E-02	1.098E-02	5.333E-04	5.333E-04	6.058E-01	1.098E-01	5.333E-03	5.333E-03	1.683E-04	3.051E-05	1.481E-06	1.481E-06
900	1000	6	6.058E-02	1.098E-02	5.333E-04	5.333E-04	3.635E-01	6.591E-02	3.200E-03	3.200E-03	1.010E-04	1.831E-05	8.888E-07	8.888E-07
1000	1100	5	6.058E-02	1.098E-02	5.333E-04	5.333E-04	3.029E-01	5.492E-02	2.666E-03	2.666E-03	8.413E-05	1.526E-05	7.407E-07	7.407E-07
1100	1200	5	6.058E-02	1.098E-02	5.333E-04	5.333E-04	3.029E-01	5.492E-02	2.666E-03	2.666E-03	8.413E-05	1.526E-05	7.407E-07	7.407E-07
1200	1300	5	6.058E-02	1.098E-02	5.333E-04	5.333E-04	3.029E-01	5.492E-02	2.666E-03	2.666E-03	8.413E-05	1.526E-05	7.407E-07	7.407E-07
1300	1400	6	6.058E-02	1.098E-02	5.333E-04	5.333E-04	3.635E-01	6.591E-02	3.200E-03	3.200E-03	1.010E-04	1.831E-05	8.888E-07	8.888E-07
1400	1500	5	6.058E-02	1.098E-02	5.333E-04	5.333E-04	3.029E-01	5.492E-02	2.666E-03	2.666E-03	8.413E-05	1.526E-05	7.407E-07	7.407E-07
1500	1600	4	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	6.731E-05	1.220E-05	5.925E-07	5.925E-07
1600	1700	5	6.058E-02	1.098E-02	5.333E-04	5.333E-04	3.029E-01	5.492E-02	2.666E-03	2.666E-03	8.413E-05	1.526E-05	7.407E-07	7.407E-07
1700	1800	7	6.058E-02	1.098E-02	5.333E-04	5.333E-04	4.240E-01	7.689E-02	3.733E-03	3.733E-03	1.178E-04	2.136E-05	1.037E-06	1.037E-06
1800	1900	7	6.058E-02	1.098E-02	5.333E-04	5.333E-04	4.240E-01	7.689E-02	3.733E-03	3.733E-03	1.178E-04	2.136E-05	1.037E-06	1.037E-06
1900	2000	5	6.058E-02	1.098E-02	5.333E-04	5.333E-04	3.029E-01	5.492E-02	2.666E-03	2.666E-03	8.413E-05	1.526E-05	7.407E-07	7.407E-07
2000	2100	4	6.058E-02	1.098E-02	5.333E-04	5.333E-04	2.423E-01	4.394E-02	2.133E-03	2.133E-03	6.731E-05	1.220E-05	5.925E-07	5.925E-07
2100	2200	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.212E-01	2.197E-02	1.067E-03	1.067E-03	3.365E-05	6.102E-06	2.963E-07	2.963E-07
2200	2300	2	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.212E-01	2.197E-02	1.067E-03	1.067E-03	3.365E-05	6.102E-06	2.963E-07	2.963E-07
2300	2400	3	6.058E-02	1.098E-02	5.333E-04	5.333E-04	1.817E-01	3.295E-02	1.600E-03	1.600E-03	5.048E-05	9.154E-06	4.444E-07	4.444E-07

PART 5 - Sum up all above parts

Model ID: TIN_BSA1

Start Hour	End Hour	Calculations: Emissions Within PTI = A+B+C+D Within PTI (Section 1 + Section 2) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	1.983E-04	3.596E-05	4.930E-06	4.563E-06
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	1.079E-03	1.960E-04	1.255E-05	1.163E-05
600	700	3.966E-04	7.192E-05	9.859E-06	9.126E-06
700	800	7.932E-04	1.438E-04	1.972E-05	1.825E-05
800	**900**	**9.915E-04**	**1.798E-04**	**2.465E-05**	**2.281E-05**
900	1000	5.949E-04	1.079E-04	1.479E-05	1.369E-05
1000	1100	4.957E-04	8.990E-05	1.232E-05	1.141E-05
1100	1200	4.957E-04	8.990E-05	1.232E-05	1.141E-05
1200	1300	4.957E-04	8.990E-05	1.232E-05	1.141E-05
1300	1400	5.949E-04	1.079E-04	1.479E-05	1.369E-05
1400	1500	4.957E-04	8.990E-05	1.232E-05	1.141E-05
1500	1600	3.966E-04	7.192E-05	9.859E-06	9.126E-06
1600	1700	4.957E-04	8.990E-05	1.232E-05	1.141E-05
1700	1800	6.940E-04	1.259E-04	1.725E-05	1.597E-05
1800	1900	6.940E-04	1.259E-04	1.725E-05	1.597E-05
1900	2000	4.957E-04	8.990E-05	1.232E-05	1.141E-05
2000	2100	3.966E-04	7.192E-05	9.859E-06	9.126E-06
2100	2200	1.983E-04	3.596E-05	4.930E-06	4.563E-06
2200	2300	1.983E-04	3.596E-05	4.930E-06	4.563E-06
2300	2400	2.974E-04	5.394E-05	7.394E-06	6.844E-06

Model ID: TIN_BSSS

Start Hour	End Hour	Spread distance = E to LSASB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	**7.598E-04**	**1.428E-04**	**0**	**0**
600	700	0.000E+00	0.000E+00	0	0
700	800	0.000E+00	0.000E+00	0	0
800	**900**	0.000E+00	0.000E+00	0	0
900	1000	0.000E+00	0.000E+00	0	0
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	0.000E+00	0.000E+00	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0	0

*No model in this section as no spread emission will be emitted.

Start Hour	End Hour	Spread distance = E to JCRWB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0	0	0	0
100	200	0	0	0	0
200	300	0	0	0	0
300	400	0	0	0	0
400	500	0	0	0	0
500	600	0	0	0	0
600	700	0	0	0	0
700	800	0	0	0	0
800	**900**	0	0	0	0
900	1000	0	0	0	0
1000	1100	0	0	0	0
1100	1200	0	0	0	0
1200	1300	0	0	0	0
1300	1400	0	0	0	0
1400	1500	0	0	0	0
1500	1600	0	0	0	0
1600	1700	0	0	0	0
1700	1800	0	0	0	0
1800	1900	0	0	0	0
1900	2000	0	0	0	0
2000	2100	0	0	0	0
2100	2200	0	0	0	0
2200	2300	0	0	0	0
2300	2400	0	0	0	0

*No model in this section as no spread emission will be emitted.

Start Hour	End Hour	Spread distance = E to TPRWB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0	0	0	0
100	200	0	0	0	0
200	300	0	0	0	0
300	400	0	0	0	0
400	500	0	0	0	0
500	600	0	0	0	0
600	700	0	0	0	0
700	800	0	0	0	0
800	**900**	0	0	0	0
900	1000	0	0	0	0
1000	1100	0	0	0	0
1100	1200	0	0	0	0
1200	1300	0	0	0	0
1300	1400	0	0	0	0
1400	1500	0	0	0	0
1500	1600	0	0	0	0
1600	1700	0	0	0	0
1700	1800	0	0	0	0
1800	1900	0	0	0	0
1900	2000	0	0	0	0
2000	2100	0	0	0	0
2100	2200	0	0	0	0
2200	2300	0	0	0	0
2300	2400	0	0	0	0

Start Hour	End Hour	Spill Ratio to LSASB (%)	to JCRWB (%)	to TPRWB (%)
2400	100	0.00%	0.00%	0.00%
100	200	0.00%	0.00%	0.00%
200	300	0.00%	0.00%	0.00%
300	400	0.00%	0.00%	0.00%
400	500	0.00%	0.00%	0.00%
500	600	**100.00%**	**0.00%**	**0.00%**
600	700	0.00%	0.00%	0.00%
700	800	0.00%	0.00%	0.00%
800	**900**	0.00%	0.00%	0.00%
900	1000	0.00%	0.00%	0.00%
1000	1100	0.00%	0.00%	0.00%
1100	1200	0.00%	0.00%	0.00%
1200	1300	0.00%	0.00%	0.00%
1300	1400	0.00%	0.00%	0.00%
1400	1500	0.00%	0.00%	0.00%
1500	1600	0.00%	0.00%	0.00%
1600	1700	0.00%	0.00%	0.00%
1700	1800	0.00%	0.00%	0.00%
1800	1900	0.00%	0.00%	0.00%
1900	2000	0.00%	0.00%	0.00%
2000	2100	0.00%	0.00%	0.00%
2100	2200	0.00%	0.00%	0.00%
2200	2300	0.00%	0.00%	0.00%
2300	2400	0.00%	0.00%	0.00%

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.2000	0.2000	0.2000	0.2000
100	200	0.0000	0.0000	0.0000	0.0000
200	300	0.0000	0.0000	0.0000	0.0000
300	400	0.0000	0.0000	0.0000	0.0000
400	500	0.0000	0.0000	0.0000	0.0000
500	600	1.0881	1.0902	0.5090	0.5097
600	700	0.4000	0.4000	0.4000	0.4000
700	800	0.8000	0.8000	0.8000	0.8000
800	**900**	**1.0000**	**1.0000**	**1.0000**	**1.0000**
900	1000	0.6000	0.6000	0.6000	0.6000
1000	1100	0.5000	0.5000	0.5000	0.5000
1100	1200	0.5000	0.5000	0.5000	0.5000
1200	1300	0.5000	0.5000	0.5000	0.5000
1300	1400	0.6000	0.6000	0.6000	0.6000
1400	1500	0.5000	0.5000	0.5000	0.5000
1500	1600	0.4000	0.4000	0.4000	0.4000
1600	1700	0.5000	0.5000	0.5000	0.5000
1700	1800	0.7000	0.7000	0.7000	0.7000
1800	1900	0.7000	0.7000	0.7000	0.7000
1900	2000	0.5000	0.5000	0.5000	0.5000
2000	2100	0.4000	0.4000	0.4000	0.4000
2100	2200	0.2000	0.2000	0.2000	0.2000
2200	2300	0.2000	0.2000	0.2000	0.2000
2300	2400	0.3000	0.3000	0.3000	0.3000

Start Hour	End Hour	Hourly Profile Ratio (0500-0600 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	**1.0000**	**1.0000**	**0**	**0**
600	700	0.0000	0.0000	0	0
700	800	0.0000	0.0000	0	0
800	**900**	0.0000	0.0000	0	0
900	1000	0.0000	0.0000	0	0
1000	1100	0.0000	0.0000	0	0
1100	1200	0.0000	0.0000	0	0
1200	1300	0.0000	0.0000	0	0
1300	1400	0.0000	0.0000	0	0
1400	1500	0.0000	0.0000	0	0
1500	1600	0.0000	0.0000	0	0
1600	1700	0.0000	0.0000	0	0
1700	1800	0.0000	0.0000	0	0
1800	1900	0.0000	0.0000	0	0
1900	2000	0.0000	0.0000	0	0
2000	2100	0.0000	0.0000	0	0
2100	2200	0.0000	0.0000	0	0
2200	2300	0.0000	0.0000	0	0
2300	2400	0.0000	0.0000	0	0

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0	0	0	0
100	200	0	0	0	0
200	300	0	0	0	0
300	400	0	0	0	0
400	500	0	0	0	0
500	600	0	0	0	0
600	700	0	0	0	0
700	800	0	0	0	0
800	**900**	0	0	0	0
900	1000	0	0	0	0
1000	1100	0	0	0	0
1100	1200	0	0	0	0
1200	1300	0	0	0	0
1300	1400	0	0	0	0
1400	1500	0	0	0	0
1500	1600	0	0	0	0
1600	1700	0	0	0	0
1700	1800	0	0	0	0
1800	1900	0	0	0	0
1900	2000	0	0	0	0
2000	2100	0	0	0	0
2100	2200	0	0	0	0
2200	2300	0	0	0	0
2300	2400	0	0	0	0

Start Hour	End Hour	Hourly Profile Ratio (0800-0900 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0	0	0	0
100	200	0	0	0	0
200	300	0	0	0	0
300	400	0	0	0	0
400	500	0	0	0	0
500	600	0	0	0	0
600	700	0	0	0	0
700	800	0	0	0	0
800	**900**	0	0	0	0
900	1000	0	0	0	0
1000	1100	0	0	0	0
1100	1200	0	0	0	0
1200	1300	0	0	0	0
1300	1400	0	0	0	0
1400	1500	0	0	0	0
1500	1600	0	0	0	0
1600	1700	0	0	0	0
1700	1800	0	0	0	0
1800	1900	0	0	0	0
1900	2000	0	0	0	0
2000	2100	0	0	0	0
2100	2200	0	0	0	0
2200	2300	0	0	0	0
2300	2400	0	0	0	0

Ma Sik Road Carpark | **Carpark Type:** Open-area | **Assessment Vehicle:** HGV7

PART 1 - Running Emission

Parameters

Average Travelling Distance from Carpark Ingress to Start Point =	45	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to Carpark Egress =	45	m	(Section 2 - Egress)
Total Travelling Distance in Carpark	0.090	km	(1km=1000m)
Travelling Speed =	10	km/h	

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Running Emission Factor (g/km·vehicle)				Within Carpark (Section 1)+(Section 2) Running Emission Within Carpark (g)				A Running Emission Within Carpark (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	1	1.8387	0.8327	0.0766	0.0705	1.655E-01	7.494E-02	6.894E-03	6.345E-03	4.597E-05	2.082E-05	1.915E-06	1.763E-06
200	300	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	1	1.8387	0.8327	0.0766	0.0705	1.655E-01	7.494E-02	6.894E-03	6.345E-03	4.597E-05	2.082E-05	1.915E-06	1.763E-06
700	800	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	1	1.8387	0.8327	0.0766	0.0705	1.655E-01	7.494E-02	6.894E-03	6.345E-03	4.597E-05	2.082E-05	1.915E-06	1.763E-06
900	1000	1	1.8387	0.8327	0.0766	0.0705	1.655E-01	7.494E-02	6.894E-03	6.345E-03	4.597E-05	2.082E-05	1.915E-06	1.763E-06
1000	1100	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	1	1.8387	0.8327	0.0766	0.0705	1.655E-01	7.494E-02	6.894E-03	6.345E-03	4.597E-05	2.082E-05	1.915E-06	1.763E-06
1700	1800	1	1.8387	0.8327	0.0766	0.0705	1.655E-01	7.494E-02	6.894E-03	6.345E-03	4.597E-05	2.082E-05	1.915E-06	1.763E-06
1800	1900	1	1.8387	0.8327	0.0766	0.0705	1.655E-01	7.494E-02	6.894E-03	6.345E-03	4.597E-05	2.082E-05	1.915E-06	1.763E-06
1900	2000	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0	1.8387	0.8327	0.0766	0.0705	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.0724	0.1304	0.1738	0.2462	0.3041	0.4055	0.5938	0.7385	1.0861	1.4191	1.5929	1.8826	2.0708	2.1722	2.2301	2.2880	2.3171	2.3171	
NO2	0.0340	0.0611	0.0815	0.1155	0.1427	0.1902	0.2785	0.3465	0.5095	0.6658	0.7473	0.8831	0.9715	1.0190	1.0462	1.0734	1.0869	1.0869	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Total #	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (g) NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	1								1											7.385E-01	3.465E-01	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	0																			0.000E+00	0.000E+00	0	0
600	700	1													1						2.071E+00	9.715E-01	0	0
700	800	0																			0.000E+00	0.000E+00	0	0
800	900	1															1				2.230E+00	1.046E+00	0	0
900	1000	1																1			2.288E+00	1.073E+00	0	0
1000	1100	0																			0.000E+00	0.000E+00	0	0
1100	1200	0																			0.000E+00	0.000E+00	0	0
1200	1300	0																			0.000E+00	0.000E+00	0	0
1300	1400	0																			0.000E+00	0.000E+00	0	0
1400	1500	0																			0.000E+00	0.000E+00	0	0
1500	1600	0																			0.000E+00	0.000E+00	0	0
1600	1700	1										1									1.419E+00	6.658E-01	0	0
1700	1800	1								1											7.385E-01	3.465E-01	0	0
1800	1900	1															1				2.230E+00	1.046E+00	0	0
1900	2000	0																			0.000E+00	0.000E+00	0	0
2000	2100	0																			0.000E+00	0.000E+00	0	0
2100	2200	0																			0.000E+00	0.000E+00	0	0
2200	2300	0																			0.000E+00	0.000E+00	0	0
2300	2400	0																			0.000E+00	0.000E+00	0	0

Remark: Number of trips were derived based on on-site observations at the carpark.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 1 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min. *Total Idling Emission = Cold Idling + Hot Idling

Start Hour	End Hour	Trips (60-720min)	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (5-50min)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within Carpark (g) NO	NO_2	RSP	FSP	B Total Idling Emission within Carpark (g/s) NO	NO_2	RSP	FSP
2400	100	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	1	2.437E-01	1.103E-01	6.177E-04	6.177E-04	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.437E-01	1.103E-01	6.177E-04	6.177E-04	6.768E-05	3.065E-05	1.716E-07	1.716E-07
200	300	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	1	2.437E-01	1.103E-01	6.177E-04	6.177E-04	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.437E-01	1.103E-01	6.177E-04	6.177E-04	6.768E-05	3.065E-05	1.716E-07	1.716E-07
700	800	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	1	2.437E-01	1.103E-01	6.177E-04	6.177E-04	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.437E-01	1.103E-01	6.177E-04	6.177E-04	6.768E-05	3.065E-05	1.716E-07	1.716E-07
900	1000	1	2.437E-01	1.103E-01	6.177E-04	6.177E-04	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.437E-01	1.103E-01	6.177E-04	6.177E-04	6.768E-05	3.065E-05	1.716E-07	1.716E-07
1000	1100	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	1	2.437E-01	1.103E-01	6.177E-04	6.177E-04	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.437E-01	1.103E-01	6.177E-04	6.177E-04	6.768E-05	3.065E-05	1.716E-07	1.716E-07
1700	1800	1	2.437E-01	1.103E-01	6.177E-04	6.177E-04	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.437E-01	1.103E-01	6.177E-04	6.177E-04	6.768E-05	3.065E-05	1.716E-07	1.716E-07
1800	1900	1	2.437E-01	1.103E-01	6.177E-04	6.177E-04	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.437E-01	1.103E-01	6.177E-04	6.177E-04	6.768E-05	3.065E-05	1.716E-07	1.716E-07
1900	2000	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0	2.437E-01	1.103E-01	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.569E-02	2.522E-02	6.177E-04	6.177E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to Carpark Egress =	45	m	(Section 2)
Travelling Distance from Carpark Egress to Open Road =	655	m	(Section 3)

* (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within Carpark (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within Carpark (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside Carpark (Section 3) (g) NO	NO_2	RSP	FSP	D Adjusted Start Emission Outside Carpark (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	2.437E-01	1.103E-01	6.177E-04	6.177E-04	3.181E-02	1.518E-02	0	0	8.837E-06	4.217E-06	0	0	4.630E-01	2.210E-01	0	0	1.286E-04	6.138E-05	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	2.437E-01	1.103E-01	6.177E-04	6.177E-04	1.175E-01	5.536E-02	0	0	3.263E-05	1.538E-05	0	0	1.710E+00	8.058E-01	0	0	4.749E-04	2.238E-04	0	0
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
800	900	2.437E-01	1.103E-01	6.177E-04	6.177E-04	1.277E-01	6.016E-02	0	0	3.547E-05	1.671E-05	0	0	1.859E+00	8.757E-01	0	0	5.163E-04	2.432E-04	0	0
900	1000	2.437E-01	1.103E-01	6.177E-04	6.177E-04	1.314E-01	6.191E-02	0	0	3.651E-05	1.720E-05	0	0	1.913E+00	9.011E-01	0	0	5.314E-04	2.503E-04	0	0
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1600	1700	2.437E-01	1.103E-01	6.177E-04	6.177E-04	7.556E-02	3.571E-02	0	0	2.099E-05	9.919E-06	0	0	1.100E+00	5.197E-01	0	0	3.055E-04	1.444E-04	0	0
1700	1800	2.437E-01	1.103E-01	6.177E-04	6.177E-04	3.181E-02	1.518E-02	0	0	8.837E-06	4.217E-06	0	0	4.630E-01	2.210E-01	0	0	1.286E-04	6.138E-05	0	0
1800	1900	2.437E-01	1.103E-01	6.177E-04	6.177E-04	1.277E-01	6.016E-02	0	0	3.547E-05	1.671E-05	0	0	1.859E+00	8.757E-01	0	0	5.163E-04	2.432E-04	0	0
1900	2000	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2000	2100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0

PART 4 - Sum up all above parts

Calculations

Model ID: MSR_H7A1

Start Hour	End Hour	Emissions Within Carpark = A+B+C Within Carpark (Section 1 + Section 2) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	1.225E-04	5.569E-05	2.087E-06	1.934E-06
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	1.463E-04	6.685E-05	2.087E-06	1.934E-06
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	1.491E-04	6.818E-05	2.087E-06	1.934E-06
900	**1000**	**1.502E-04**	**6.867E-05**	**2.087E-06**	**1.934E-06**
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	1.346E-04	6.139E-05	2.087E-06	1.934E-06
1700	1800	1.225E-04	5.569E-05	2.087E-06	1.934E-06
1800	1900	1.491E-04	6.818E-05	2.087E-06	1.934E-06
1900	2000	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Model ID: MSR_H7SE

Start Hour	End Hour	Spread distance = D to Ma Sik Road EB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	6.431E-05	3.069E-05	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0	0
600	700	2.375E-04	1.119E-04	0	0
700	800	0.000E+00	0.000E+00	0	0
800	900	2.582E-04	1.216E-04	0	0
900	**1000**	**2.657E-04**	**1.252E-04**	**0**	**0**
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0	0
1600	1700	1.528E-04	7.219E-05	0	0
1700	1800	6.431E-05	3.069E-05	0	0
1800	1900	2.582E-04	1.216E-04	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0	0

Model ID: MSR_H7SS

Start Hour	End Hour	Spread distance = D to Fan Leng Lau Road SB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	6.431E-05	3.069E-05	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0	0
600	700	2.375E-04	1.119E-04	0	0
700	800	0.000E+00	0.000E+00	0	0
800	900	2.582E-04	1.216E-04	0	0
900	**1000**	**2.657E-04**	**1.252E-04**	**0**	**0**
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0	0
1600	1700	1.528E-04	7.219E-05	0	0
1700	1800	6.431E-05	3.069E-05	0	0
1800	1900	2.582E-04	1.216E-04	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0	0

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000
100	200	0.8157	0.8110	1.0000	1.0000
200	300	0.0000	0.0000	0.0000	0.0000
300	400	0.0000	0.0000	0.0000	0.0000
400	500	0.0000	0.0000	0.0000	0.0000
500	600	0.0000	0.0000	0.0000	0.0000
600	700	0.9742	0.9735	1.0000	1.0000
700	800	0.0000	0.0000	0.0000	0.0000
800	900	0.9931	0.9929	1.0000	1.0000
900	**1000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**
1000	1100	0.0000	0.0000	0.0000	0.0000
1100	1200	0.0000	0.0000	0.0000	0.0000
1200	1300	0.0000	0.0000	0.0000	0.0000
1300	1400	0.0000	0.0000	0.0000	0.0000
1400	1500	0.0000	0.0000	0.0000	0.0000
1500	1600	0.0000	0.0000	0.0000	0.0000
1600	1700	0.8967	0.8940	1.0000	1.0000
1700	1800	0.8157	0.8110	1.0000	1.0000
1800	1900	0.9931	0.9929	1.0000	1.0000
1900	2000	0.0000	0.0000	0.0000	0.0000
2000	2100	0.0000	0.0000	0.0000	0.0000
2100	2200	0.0000	0.0000	0.0000	0.0000
2200	2300	0.0000	0.0000	0.0000	0.0000
2300	2400	0.0000	0.0000	0.0000	0.0000

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.2421	0.2452	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0	0
600	700	0.8938	0.8942	0	0
700	800	0.0000	0.0000	0	0
800	900	0.9717	0.9718	0	0
900	**1000**	**1.0000**	**1.0000**	**0**	**0**
1000	1100	0.0000	0.0000	0	0
1100	1200	0.0000	0.0000	0	0
1200	1300	0.0000	0.0000	0	0
1300	1400	0.0000	0.0000	0	0
1400	1500	0.0000	0.0000	0	0
1500	1600	0.0000	0.0000	0	0
1600	1700	0.5750	0.5768	0	0
1700	1800	0.2421	0.2452	0	0
1800	1900	0.9717	0.9718	0	0
1900	2000	0.0000	0.0000	0	0
2000	2100	0.0000	0.0000	0	0
2100	2200	0.0000	0.0000	0	0
2200	2300	0.0000	0.0000	0	0
2300	2400	0.0000	0.0000	0	0

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.2421	0.2452	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0	0
600	700	0.8938	0.8942	0	0
700	800	0.0000	0.0000	0	0
800	900	0.9717	0.9718	0	0
900	**1000**	**1.0000**	**1.0000**	**0**	**0**
1000	1100	0.0000	0.0000	0	0
1100	1200	0.0000	0.0000	0	0
1200	1300	0.0000	0.0000	0	0
1300	1400	0.0000	0.0000	0	0
1400	1500	0.0000	0.0000	0	0
1500	1600	0.0000	0.0000	0	0
1600	1700	0.5750	0.5768	0	0
1700	1800	0.2421	0.2452	0	0
1800	1900	0.9717	0.9718	0	0
1900	2000	0.0000	0.0000	0	0
2000	2100	0.0000	0.0000	0	0
2100	2200	0.0000	0.0000	0	0
2200	2300	0.0000	0.0000	0	0
2300	2400	0.0000	0.0000	0	0

Ma Sik Road Carpark **Carpark Type:** Open-area **Assessment Vehicle:** HGV8

PART 1 - Running Emission

Parameters

Average Travelling Distance from Carpark Ingress to Start Point =	45	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to Carpark Egress =	45	m	(Section 2 - Egress)
Total Travelling Distance in Carpark	0.090	km	(1km=1000m)
Travelling Speed =	10	km/h	

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Running Emission Factor (g/km·vehicle)				Within Carpark (Section 1)+(Section 2) Running Emission Within Carpark (g)				A Running Emission Within Carpark (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	2	3.7029	1.2746	0.1502	0.1382	6.665E-01	2.294E-01	2.704E-02	2.488E-02	1.851E-04	6.373E-05	7.510E-06	6.910E-06
800	900	2	3.7029	1.2746	0.1502	0.1382	6.665E-01	2.294E-01	2.704E-02	2.488E-02	1.851E-04	6.373E-05	7.510E-06	6.910E-06
900	1000	5	3.7029	1.2746	0.1502	0.1382	1.666E+00	5.736E-01	6.759E-02	6.219E-02	4.629E-04	1.593E-04	1.878E-05	1.728E-05
1000	1100	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0	3.7029	1.2746	0.1502	0.1382	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.1220	0.2196	0.2929	0.4148	0.5125	0.6833	1.0006	1.2446	1.8303	2.3917	2.6846	3.1727	3.4899	3.6608	3.7584	3.8560	3.9048	3.9048	
NO2	0.0347	0.0625	0.0833	0.1181	0.1458	0.1945	0.2847	0.3542	0.5209	0.6806	0.7639	0.9028	0.9931	1.0417	1.0695	1.0973	1.1112	1.1112	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Total #	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (g) NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	0																			0.000E+00	0.000E+00	0	0
600	700	0																			0.000E+00	0.000E+00	0	0
700	800	2														2					7.322E+00	2.083E+00	0	0
800	900	2															2				7.517E+00	2.139E+00	0	0
900	1000	5																5			1.928E+01	5.487E+00	0	0
1000	1100	0																			0.000E+00	0.000E+00	0	0
1100	1200	0																			0.000E+00	0.000E+00	0	0
1200	1300	0																			0.000E+00	0.000E+00	0	0
1300	1400	0																			0.000E+00	0.000E+00	0	0
1400	1500	0																			0.000E+00	0.000E+00	0	0
1500	1600	0																			0.000E+00	0.000E+00	0	0
1600	1700	0																			0.000E+00	0.000E+00	0	0
1700	1800	0																			0.000E+00	0.000E+00	0	0
1800	1900	0																			0.000E+00	0.000E+00	0	0
1900	2000	0																			0.000E+00	0.000E+00	0	0
2000	2100	0																			0.000E+00	0.000E+00	0	0
2100	2200	0																			0.000E+00	0.000E+00	0	0
2200	2300	0																			0.000E+00	0.000E+00	0	0
2300	2400	0																			0.000E+00	0.000E+00	0	0

Remark: Number of trips were derived based on on-site observations at the carpark.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 1 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min. *Total Idling Emission = Cold Idling + Hot idling

Start Hour	End Hour	Trips (60-720min)	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (5-50min)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within Carpark (g) NO	NO_2	RSP	FSP	B Total Idling Emission within Carpark (g/s) NO	NO_2	RSP	FSP
2400	100	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	2	3.292E-01	1.133E-01	5.880E-04	5.880E-04	6.584E-01	2.266E-01	1.176E-03	1.176E-03	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.584E-01	2.266E-01	1.176E-03	1.176E-03	1.829E-04	6.295E-05	3.267E-07	3.267E-07
800	900	2	3.292E-01	1.133E-01	5.880E-04	5.880E-04	6.584E-01	2.266E-01	1.176E-03	1.176E-03	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.584E-01	2.266E-01	1.176E-03	1.176E-03	1.829E-04	6.295E-05	3.267E-07	3.267E-07
900	1000	5	3.292E-01	1.133E-01	5.880E-04	5.880E-04	1.646E+00	5.666E-01	2.940E-03	2.940E-03	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.646E+00	5.666E-01	2.940E-03	2.940E-03	4.572E-04	1.574E-04	8.166E-07	8.166E-07
1000	1100	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0	3.292E-01	1.133E-01	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	5.878E-02	2.023E-02	5.880E-04	5.880E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to Carpark Egress =	45	m	(Section 2)
Travelling Distance from Carpark Egress to Open Road =	655	m	(Section 3) * (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within Carpark (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within Carpark (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside Carpark (Section 3) (g) NO	NO_2	RSP	FSP	D Adjusted Start Emission Outside Carpark (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
700	800	6.584E-01	2.266E-01	1.176E-03	1.176E-03	4.284E-01	1.194E-01	0	0	1.190E-04	3.316E-05	0	0	6.235E+00	1.737E+00	0	0	1.732E-03	4.826E-04	0	0
800	900	6.584E-01	2.266E-01	1.176E-03	1.176E-03	4.409E-01	1.229E-01	0	0	1.225E-04	3.415E-05	0	0	6.418E+00	1.789E+00	0	0	1.783E-03	4.971E-04	0	0
900	1000	1.646E+00	5.666E-01	2.940E-03	2.940E-03	1.134E+00	3.163E-01	0	0	3.149E-04	8.786E-05	0	0	1.650E+01	4.604E+00	0	0	4.583E-03	1.279E-03	0	0
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1700	1800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1800	1900	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1900	2000	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2000	2100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0

PART 4 - Sum up all above parts

Calculations

Model ID: MSR_H8A1

Start Hour	End Hour	Emissions Within Carpark = A+B+C Within Carpark (Section 1 + Section 2) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	4.870E-04	1.598E-04	7.837E-06	7.237E-06
800	900	4.905E-04	1.608E-04	7.837E-06	7.237E-06
900	**1000**	**1.235E-03**	**4.046E-04**	**1.959E-05**	**1.809E-05**
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Model ID: MSR_H8SE

Start Hour	End Hour	Spread distance = D to Ma Sik Road EB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0	0
700	800	8.660E-04	2.413E-04	0	0
800	900	8.913E-04	2.485E-04	0	0
900	**1000**	**2.292E-03**	**6.394E-04**	**0**	**0**
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	0.000E+00	0.000E+00	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0	0

Model ID: MSR_H8SS

Start Hour	End Hour	Spread distance = D to Fan Leng Lau Road SB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0	0
700	800	8.660E-04	2.413E-04	0	0
800	900	8.913E-04	2.485E-04	0	0
900	**1000**	**2.292E-03**	**6.394E-04**	**0**	**0**
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0	0
1200	1300	0.000E+00	0.000E+00	0	0
1300	1400	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	0.000E+00	0.000E+00	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0	0

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000
100	200	0.0000	0.0000	0.0000	0.0000
200	300	0.0000	0.0000	0.0000	0.0000
300	400	0.0000	0.0000	0.0000	0.0000
400	500	0.0000	0.0000	0.0000	0.0000
500	600	0.0000	0.0000	0.0000	0.0000
600	700	0.0000	0.0000	0.0000	0.0000
700	800	0.3944	0.3951	0.4000	0.4000
800	900	0.3972	0.3975	0.4000	0.4000
900	**1000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**
1000	1100	0.0000	0.0000	0.0000	0.0000
1100	1200	0.0000	0.0000	0.0000	0.0000
1200	1300	0.0000	0.0000	0.0000	0.0000
1300	1400	0.0000	0.0000	0.0000	0.0000
1400	1500	0.0000	0.0000	0.0000	0.0000
1500	1600	0.0000	0.0000	0.0000	0.0000
1600	1700	0.0000	0.0000	0.0000	0.0000
1700	1800	0.0000	0.0000	0.0000	0.0000
1800	1900	0.0000	0.0000	0.0000	0.0000
1900	2000	0.0000	0.0000	0.0000	0.0000
2000	2100	0.0000	0.0000	0.0000	0.0000
2100	2200	0.0000	0.0000	0.0000	0.0000
2200	2300	0.0000	0.0000	0.0000	0.0000
2300	2400	0.0000	0.0000	0.0000	0.0000

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0	0
600	700	0.0000	0.0000	0	0
700	800	0.3779	0.3774	0	0
800	900	0.3889	0.3887	0	0
900	**1000**	**1.0000**	**1.0000**	**0**	**0**
1000	1100	0.0000	0.0000	0	0
1100	1200	0.0000	0.0000	0	0
1200	1300	0.0000	0.0000	0	0
1300	1400	0.0000	0.0000	0	0
1400	1500	0.0000	0.0000	0	0
1500	1600	0.0000	0.0000	0	0
1600	1700	0.0000	0.0000	0	0
1700	1800	0.0000	0.0000	0	0
1800	1900	0.0000	0.0000	0	0
1900	2000	0.0000	0.0000	0	0
2000	2100	0.0000	0.0000	0	0
2100	2200	0.0000	0.0000	0	0
2200	2300	0.0000	0.0000	0	0
2300	2400	0.0000	0.0000	0	0

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0	0
600	700	0.0000	0.0000	0	0
700	800	0.3779	0.3774	0	0
800	900	0.3889	0.3887	0	0
900	**1000**	**1.0000**	**1.0000**	**0**	**0**
1000	1100	0.0000	0.0000	0	0
1100	1200	0.0000	0.0000	0	0
1200	1300	0.0000	0.0000	0	0
1300	1400	0.0000	0.0000	0	0
1400	1500	0.0000	0.0000	0	0
1500	1600	0.0000	0.0000	0	0
1600	1700	0.0000	0.0000	0	0
1700	1800	0.0000	0.0000	0	0
1800	1900	0.0000	0.0000	0	0
1900	2000	0.0000	0.0000	0	0
2000	2100	0.0000	0.0000	0	0
2100	2200	0.0000	0.0000	0	0
2200	2300	0.0000	0.0000	0	0
2300	2400	0.0000	0.0000	0	0

Ma Sik Road Carpark **Carpark Type:** Open-area **Assessment Vehicle:** NFB6

PART 1 - Running Emission

Parameters

Average Travelling Distance from Carpark Ingress to Start Point =	45	m	(Section 1 - Ingress)
Average Travelling Distance from Start Point to Carpark Egress =	45	m	(Section 2 - Egress)
Total Travelling Distance in Carpark	0.090	km	(1km=1000m)
Travelling Speed =	10	km/h	

Calculations *Total Flow calculated from traffic survey

Start Hour	End Hour	Total Flow	Running Emission Factor (g/km·vehicle)				Within Carpark (Section 1)+(Section 2) Running Emission Within Carpark (g)				A Running Emission Within Carpark (g/s)			
			NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP	NO	NO_2	RSP	FSP
2400	100	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	1000	2	1.2828	0.4988	0.0768	0.0706	2.309E-01	8.978E-02	1.382E-02	1.271E-02	6.414E-05	2.494E-05	3.840E-06	3.530E-06
1000	1100	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	1	1.2828	0.4988	0.0768	0.0706	1.155E-01	4.489E-02	6.912E-03	6.354E-03	3.207E-05	1.247E-05	1.920E-06	1.765E-06
1300	1400	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0	1.2828	0.4988	0.0768	0.0706	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PART 2 - Start Emission (only for Terminating Vehicles)

Start Emission Factor Extracted from EMFAC (g/trip)

Pollutant	5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	minutes
NO	0.0428	0.0770	0.1027	0.1456	0.1799	0.2398	0.3511	0.4368	0.6422	0.8392	0.9419	1.1132	1.2245	1.2845	1.3187	1.3529	1.3701	1.3701	
NO2	0.0167	0.0300	0.0400	0.0566	0.0699	0.0932	0.1365	0.1698	0.2498	0.3263	0.3663	0.4329	0.4762	0.4995	0.5128	0.5282	0.5328	0.5328	
RSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FSP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Calculations (only applicable for Terminating Vehicles)

Start Hour	End Hour	Total #	Number of Trips 5	10	20	30	40	50	60	120	180	240	300	360	420	480	540	600	660	720	Start Emission (g) NO	NO_2	RSP	FSP
2400	100	0																			0.000E+00	0.000E+00	0	0
100	200	0																			0.000E+00	0.000E+00	0	0
200	300	0																			0.000E+00	0.000E+00	0	0
300	400	0																			0.000E+00	0.000E+00	0	0
400	500	0																			0.000E+00	0.000E+00	0	0
500	600	0																			0.000E+00	0.000E+00	0	0
600	700	0																			0.000E+00	0.000E+00	0	0
700	800	0																			0.000E+00	0.000E+00	0	0
800	900	0																			0.000E+00	0.000E+00	0	0
900	1000	2																2			2.706E+00	1.052E+00	0	0
1000	1100	0																			0.000E+00	0.000E+00	0	0
1100	1200	0																			0.000E+00	0.000E+00	0	0
1200	1300	1										1									8.392E-01	3.263E-01	0	0
1300	1400	0																			0.000E+00	0.000E+00	0	0
1400	1500	0																			0.000E+00	0.000E+00	0	0
1500	1600	0																			0.000E+00	0.000E+00	0	0
1600	1700	0																			0.000E+00	0.000E+00	0	0
1700	1800	0																			0.000E+00	0.000E+00	0	0
1800	1900	0																			0.000E+00	0.000E+00	0	0
1900	2000	0																			0.000E+00	0.000E+00	0	0
2000	2100	0																			0.000E+00	0.000E+00	0	0
2100	2200	0																			0.000E+00	0.000E+00	0	0
2200	2300	0																			0.000E+00	0.000E+00	0	0
2300	2400	0																			0.000E+00	0.000E+00	0	0

Remark: Number of trips were derived based on on-site observations at the carpark.

PART 3 - Idling Emission (Terminating Vehicles)

Parameters

Idling Time for Terminating Vehicles = 1 min(s) *As On-Site observations

Calculations (only applicable for Terminating Vehicles) *Cold Idling = 60-720min; Hot idling = 5-50min. *Total Idling Emission = Cold Idling + Hot Idling

Start Hour	End Hour	Trips (60-720min)	Cold Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Cold Idling Emission (g) NO	NO_2	RSP	FSP	Trips (5-50min)	Hot Idling Emission Factor (g/min) NO	NO_2	RSP	FSP	Hot Idling Emission (g) NO	NO_2	RSP	FSP	Total Idling Emission within Carpark (g) NO	NO_2	RSP	FSP	B Total Idling Emission within Carpark (g/s) NO	NO_2	RSP	FSP
2400	100	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	1000	2	5.604E-02	2.179E-02	4.265E-04	4.265E-04	1.121E-01	4.358E-02	8.530E-04	8.530E-04	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.121E-01	4.358E-02	8.530E-04	8.530E-04	3.113E-05	1.211E-05	2.369E-07	2.369E-07
1000	1100	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	1	5.604E-02	2.179E-02	4.265E-04	4.265E-04	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.604E-02	2.179E-02	4.265E-04	4.265E-04	1.557E-05	6.053E-06	1.185E-07	1.185E-07
1300	1400	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0	5.604E-02	2.179E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	4.302E-02	1.673E-02	4.265E-04	4.265E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Parameters

Maximum Duration for adjusting Start Emission =	1	min(s)	*As per EPD Guidleine
Travelling Distance from Start Point to Carpark Egress =	45	m	(Section 2)
Travelling Distance from Carpark Egress to Open Road =	655	m	(Section 3) * (Section 2)+(Section 3) = 700m Spread Distance as per EPD Guideline

Adjusted Calculations for Idling Emission

Start Hour	End Hour	Emission for Adjusting Start Emission (g) NO	NO_2	RSP	FSP	Adjusted Start Emission Within Carpark (Section 2) (g) NO	NO_2	RSP	FSP	C Adjusted Start Emission Within Carpark (Section 2) (g/s) NO	NO_2	RSP	FSP	Adjusted Start Emission Outside Carpark (Section 3) (g) NO	NO_2	RSP	FSP	D Adjusted Start Emission Outside Carpark (Section 3) (g/s) NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
800	900	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
900	1000	1.121E-01	4.358E-02	8.530E-04	8.530E-04	1.667E-01	6.485E-02	0	0	4.632E-05	1.801E-05	0	0	2.427E+00	9.440E-01	0	0	6.742E-04	2.622E-04	0	0
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1200	1300	5.604E-02	2.179E-02	4.265E-04	4.265E-04	5.035E-02	1.958E-02	0	0	1.399E-05	5.438E-06	0	0	7.328E-01	2.849E-01	0	0	2.036E-04	7.915E-05	0	0
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1700	1800	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1800	1900	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
1900	2000	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2000	2100	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0	0.000E+00	0.000E+00	0	0

PART 4 - Sum up all above parts

Calculations

Model ID: MSR_B6A1

Start Hour	End Hour	Emissions Within Carpark = A+B+C Within Carpark (Section 1 + Section 2) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
100	200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
200	300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
300	400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
400	500	0.000E+00	0.000E+00	0.000E+00	0.000E+00
500	600	0.000E+00	0.000E+00	0.000E+00	0.000E+00
600	700	0.000E+00	0.000E+00	0.000E+00	0.000E+00
700	800	0.000E+00	0.000E+00	0.000E+00	0.000E+00
800	900	0.000E+00	0.000E+00	0.000E+00	0.000E+00
900	**1000**	**1.416E-04**	**5.506E-05**	**4.077E-06**	**3.767E-06**
1000	1100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1100	1200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1200	1300	6.162E-05	2.396E-05	2.038E-06	1.883E-06
1300	1400	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1400	1500	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1500	1600	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1600	1700	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1700	1800	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1800	1900	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1900	2000	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2000	2100	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2100	2200	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2200	2300	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2300	2400	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Model ID: MSR_B6SE

Start Hour	End Hour	Spread distance = D to Ma Sik Road EB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0	0
700	800	0.000E+00	0.000E+00	0	0
800	900	0.000E+00	0.000E+00	0	0
900	**1000**	**3.371E-04**	**1.311E-04**	**0**	**0**
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0	0
1200	1300	1.018E-04	3.957E-05	0	0
1300	1400	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	0.000E+00	0.000E+00	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0	0

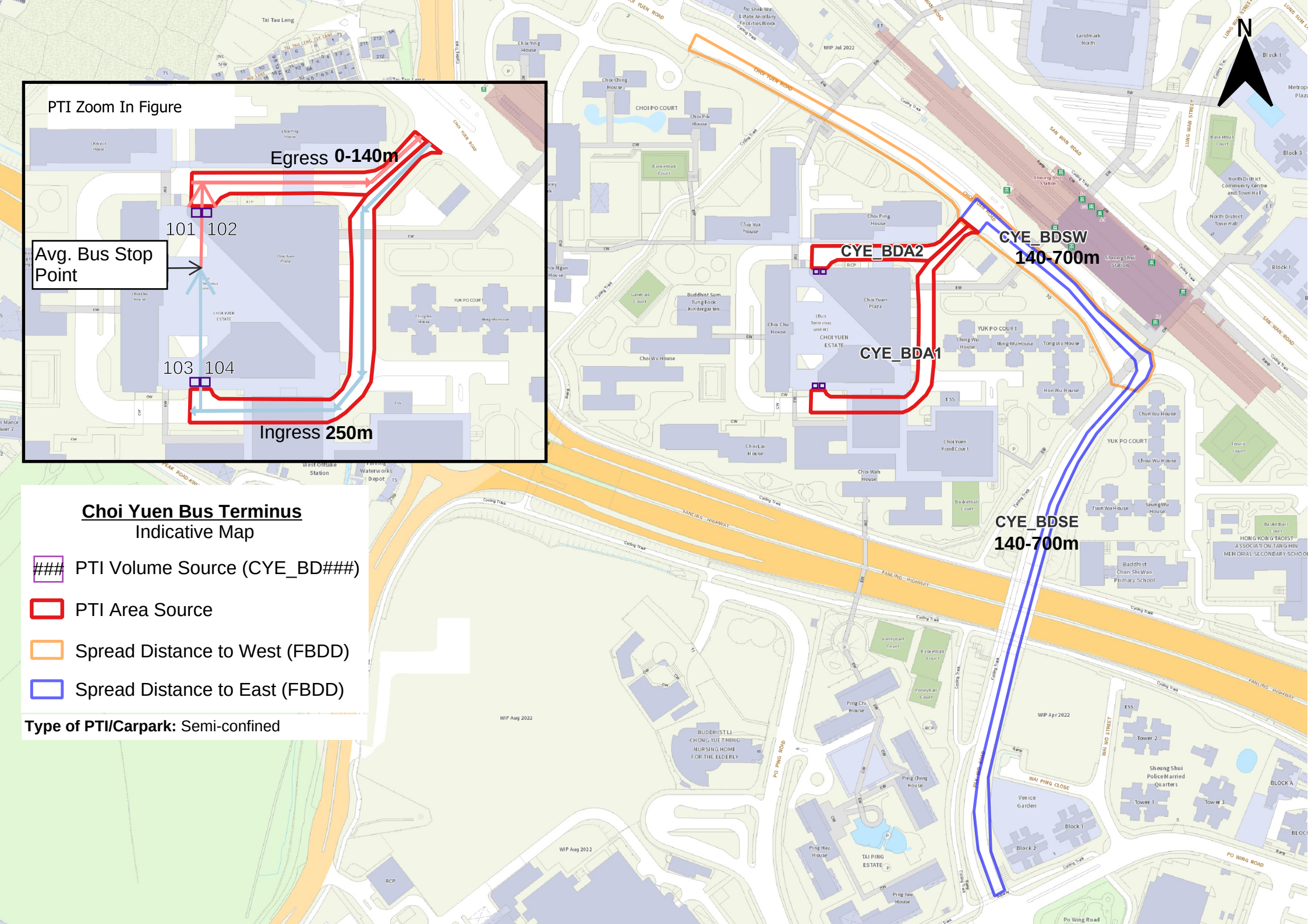
Model ID: MSR_B6SS

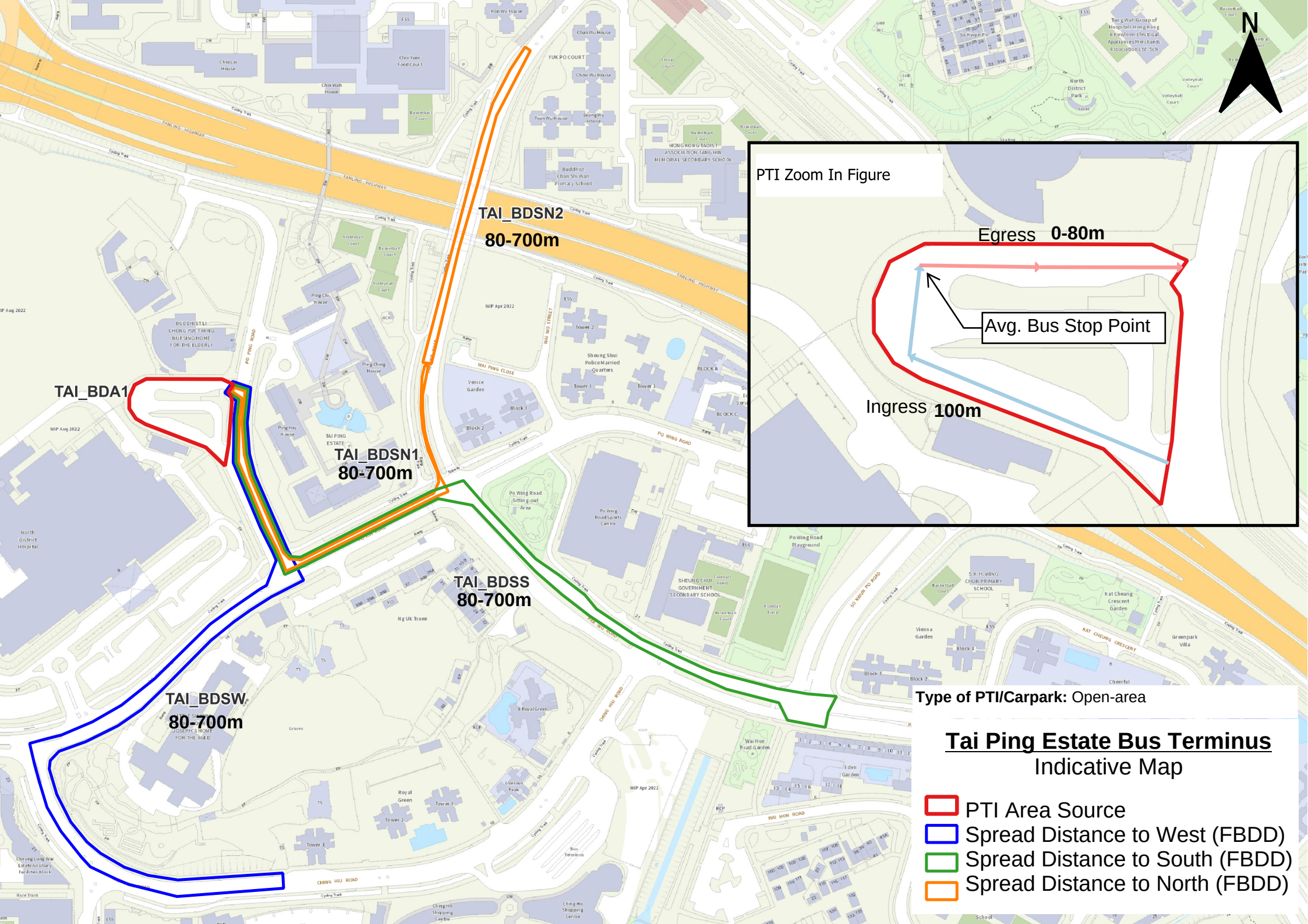
Start Hour	End Hour	Spread distance = D to Fan Leng Lau Road SB (Section 3) Total Emission (g/s)			
		NO	NO_2	RSP	FSP
2400	100	0.000E+00	0.000E+00	0	0
100	200	0.000E+00	0.000E+00	0	0
200	300	0.000E+00	0.000E+00	0	0
300	400	0.000E+00	0.000E+00	0	0
400	500	0.000E+00	0.000E+00	0	0
500	600	0.000E+00	0.000E+00	0	0
600	700	0.000E+00	0.000E+00	0	0
700	800	0.000E+00	0.000E+00	0	0
800	900	0.000E+00	0.000E+00	0	0
900	**1000**	**3.371E-04**	**1.311E-04**	**0**	**0**
1000	1100	0.000E+00	0.000E+00	0	0
1100	1200	0.000E+00	0.000E+00	0	0
1200	1300	1.018E-04	3.957E-05	0	0
1300	1400	0.000E+00	0.000E+00	0	0
1400	1500	0.000E+00	0.000E+00	0	0
1500	1600	0.000E+00	0.000E+00	0	0
1600	1700	0.000E+00	0.000E+00	0	0
1700	1800	0.000E+00	0.000E+00	0	0
1800	1900	0.000E+00	0.000E+00	0	0
1900	2000	0.000E+00	0.000E+00	0	0
2000	2100	0.000E+00	0.000E+00	0	0
2100	2200	0.000E+00	0.000E+00	0	0
2200	2300	0.000E+00	0.000E+00	0	0
2300	2400	0.000E+00	0.000E+00	0	0

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0.0000	0.0000
100	200	0.0000	0.0000	0.0000	0.0000
200	300	0.0000	0.0000	0.0000	0.0000
300	400	0.0000	0.0000	0.0000	0.0000
400	500	0.0000	0.0000	0.0000	0.0000
500	600	0.0000	0.0000	0.0000	0.0000
600	700	0.0000	0.0000	0.0000	0.0000
700	800	0.0000	0.0000	0.0000	0.0000
800	900	0.0000	0.0000	0.0000	0.0000
900	**1000**	**1.0000**	**1.0000**	**1.0000**	**1.0000**
1000	1100	0.0000	0.0000	0.0000	0.0000
1100	1200	0.0000	0.0000	0.0000	0.0000
1200	1300	0.4352	0.4352	0.5000	0.5000
1300	1400	0.0000	0.0000	0.0000	0.0000
1400	1500	0.0000	0.0000	0.0000	0.0000
1500	1600	0.0000	0.0000	0.0000	0.0000
1600	1700	0.0000	0.0000	0.0000	0.0000
1700	1800	0.0000	0.0000	0.0000	0.0000
1800	1900	0.0000	0.0000	0.0000	0.0000
1900	2000	0.0000	0.0000	0.0000	0.0000
2000	2100	0.0000	0.0000	0.0000	0.0000
2100	2200	0.0000	0.0000	0.0000	0.0000
2200	2300	0.0000	0.0000	0.0000	0.0000
2300	2400	0.0000	0.0000	0.0000	0.0000

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0	0
600	700	0.0000	0.0000	0	0
700	800	0.0000	0.0000	0	0
800	900	0.0000	0.0000	0	0
900	**1000**	**1.0000**	**1.0000**	**0**	**0**
1000	1100	0.0000	0.0000	0	0
1100	1200	0.0000	0.0000	0	0
1200	1300	0.3019	0.3018	0	0
1300	1400	0.0000	0.0000	0	0
1400	1500	0.0000	0.0000	0	0
1500	1600	0.0000	0.0000	0	0
1600	1700	0.0000	0.0000	0	0
1700	1800	0.0000	0.0000	0	0
1800	1900	0.0000	0.0000	0	0
1900	2000	0.0000	0.0000	0	0
2000	2100	0.0000	0.0000	0	0
2100	2200	0.0000	0.0000	0	0
2200	2300	0.0000	0.0000	0	0
2300	2400	0.0000	0.0000	0	0

Start Hour	End Hour	Hourly Profile Ratio (0900-1000 as Baseline)			
		NO	NO_2	RSP	FSP
2400	100	0.0000	0.0000	0	0
100	200	0.0000	0.0000	0	0
200	300	0.0000	0.0000	0	0
300	400	0.0000	0.0000	0	0
400	500	0.0000	0.0000	0	0
500	600	0.0000	0.0000	0	0
600	700	0.0000	0.0000	0	0
700	800	0.0000	0.0000	0	0
800	900	0.0000	0.0000	0	0
900	**1000**	**1.0000**	**1.0000**	**0**	**0**
1000	1100	0.0000	0.0000	0	0
1100	1200	0.0000	0.0000	0	0
1200	1300	0.3019	0.3018	0	0
1300	1400	0.0000	0.0000	0	0
1400	1500	0.0000	0.0000	0	0
1500	1600	0.0000	0.0000	0	0
1600	1700	0.0000	0.0000	0	0
1700	1800	0.0000	0.0000	0	0
1800	1900	0.0000	0.0000	0	0
1900	2000	0.0000	0.0000	0	0
2000	2100	0.0000	0.0000	0	0
2100	2200	0.0000	0.0000	0	0
2200	2300	0.0000	0.0000	0	0
2300	2400	0.0000	0.0000	0	0


PTI Zoom In Figure
Egress 0-140m
101 102
Avg. Bus Stop Point
103 104
Ingress 250m
CYE_BDA2
CYE_BDA1
CYE_BDSW
140-700m
CYE_BDSE
140-700m
N
Choi Yuen Bus Terminus
Indicative Map
PTI Volume Source (CYE_BD###)
PTI Area Source
Spread Distance to West (FBDD)
Spread Distance to East (FBDD)
Type of PTI/Carpark: Semi-confined

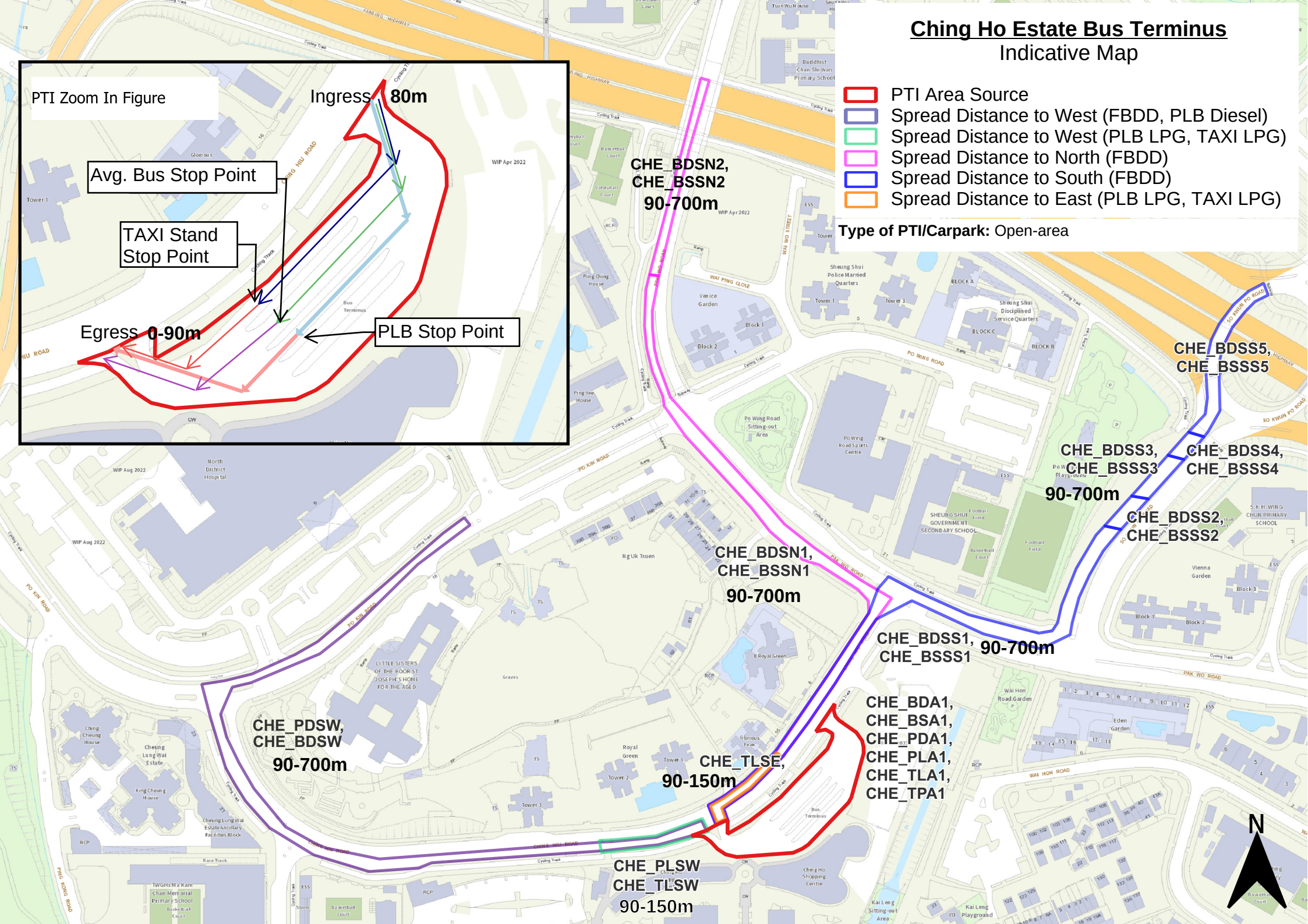

N
PTI Zoom In Figure
Egress 0-80m
Avg. Bus Stop Point
Ingress 100m
TAI_BDSN2
80-700m
TAI_BDA1
TAI_BDSN1
80-700m
TAI_BDSS
80-700m
TAI_BDSW
80-700m
Type of PTI/Carpark: Open-area
Tai Ping Estate Bus Terminus
Indicative Map
PTI Area Source
Spread Distance to West (FBDD)
Spread Distance to South (FBDD)
Spread Distance to North (FBDD)

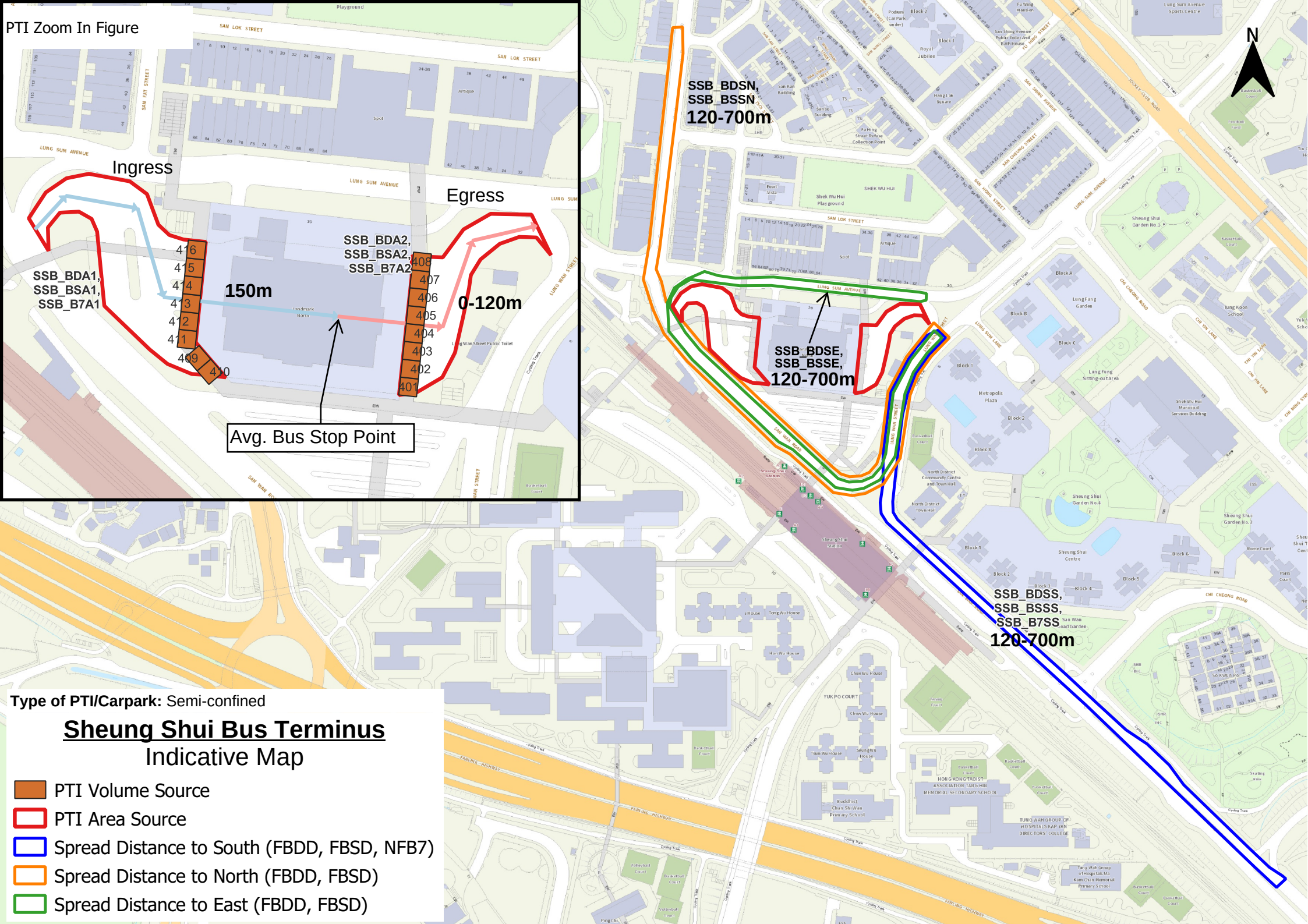
Ching Ho Estate Bus Terminus

Indicative Map

- PTI Area Source
- Spread Distance to West (FBDD, PLB Diesel)
- Spread Distance to West (PLB LPG, TAXI LPG)
- Spread Distance to North (FBDD)
- Spread Distance to South (FBDD)
- Spread Distance to East (PLB LPG, TAXI LPG)

Type of PTI/Carpark: Open-area




PTI Zoom In Figure
Ingress
Egress
SSB_BDA1,
SSB_BSA1,
SSB_B7A1
150m
SSB_BDA2,
SSB_BSA2,
SSB_B7A2
0-120m
416
415
414
413
412
411
409
410
408
407
406
405
404
403
402
401
Avg. Bus Stop Point
SSB_BDSN,
SSB_BSSN
120-700m
SSB_BDSE,
SSB_BSSE,
120-700m
SSB_BDSS,
SSB_BSSS,
SSB_B7SS
120-700m
N
Type of PTI/Carpark: Semi-confined
Sheung Shui Bus Terminus
Indicative Map
PTI Volume Source
PTI Area Source
Spread Distance to South (FBDD, FBSD, NFB7)
Spread Distance to North (FBDD, FBSD)
Spread Distance to East (FBDD, FBSD)

Sheung Shui Station Minibus Terminus
Indicative Map

PTI Area Source

Spread Distance to North (PLB DIESEL)

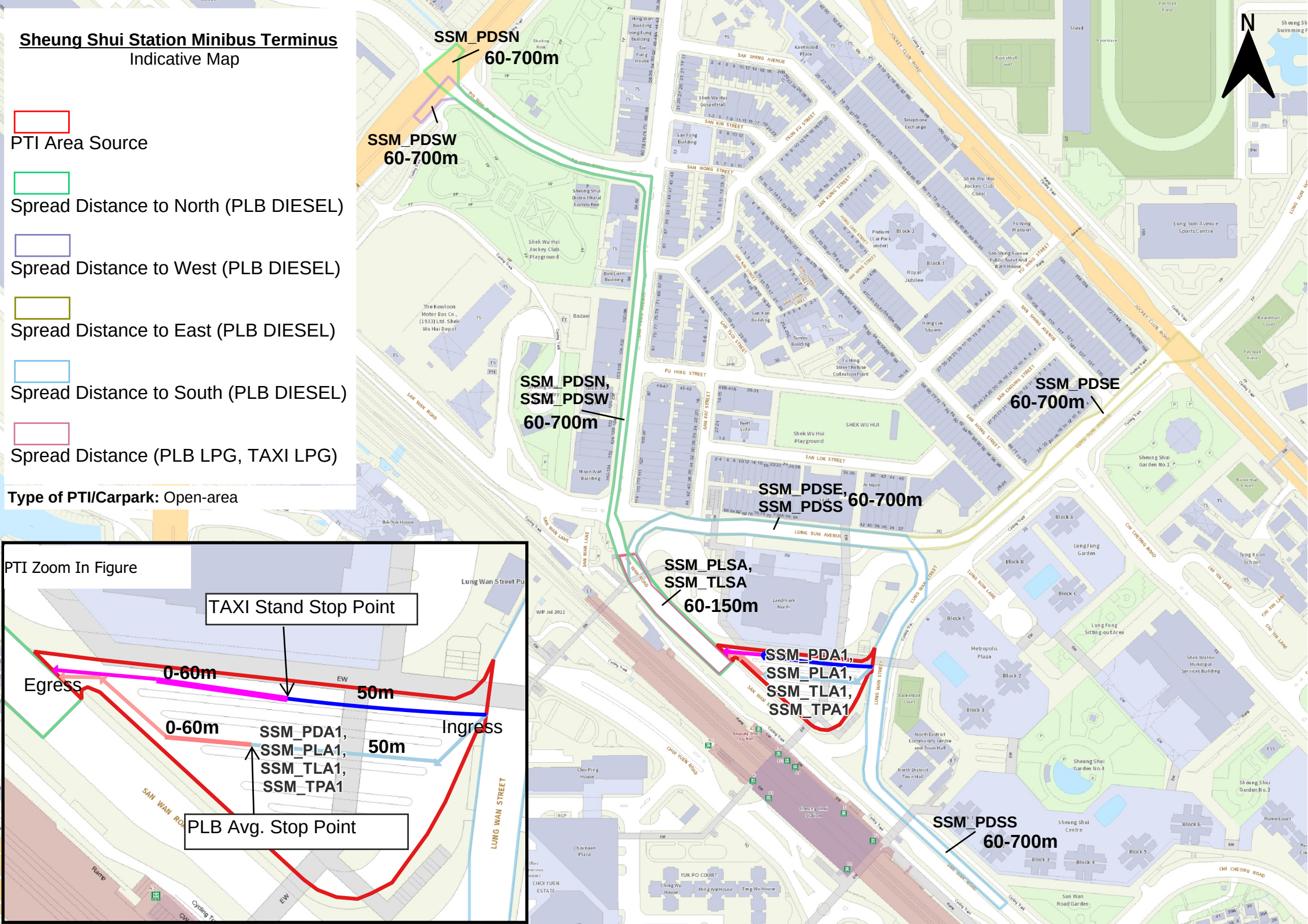
Spread Distance to West (PLB DIESEL)

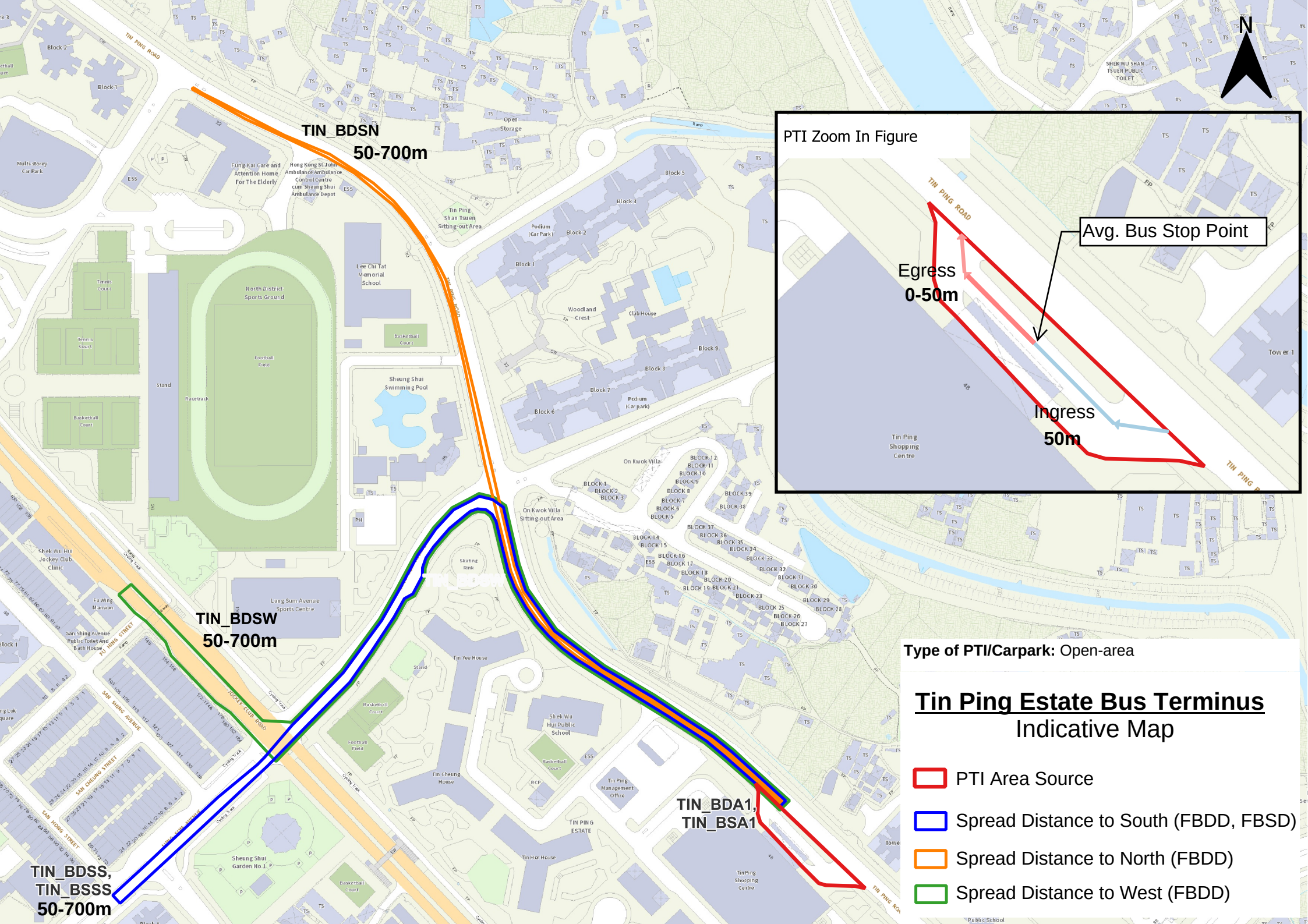
Spread Distance to East (PLB DIESEL)

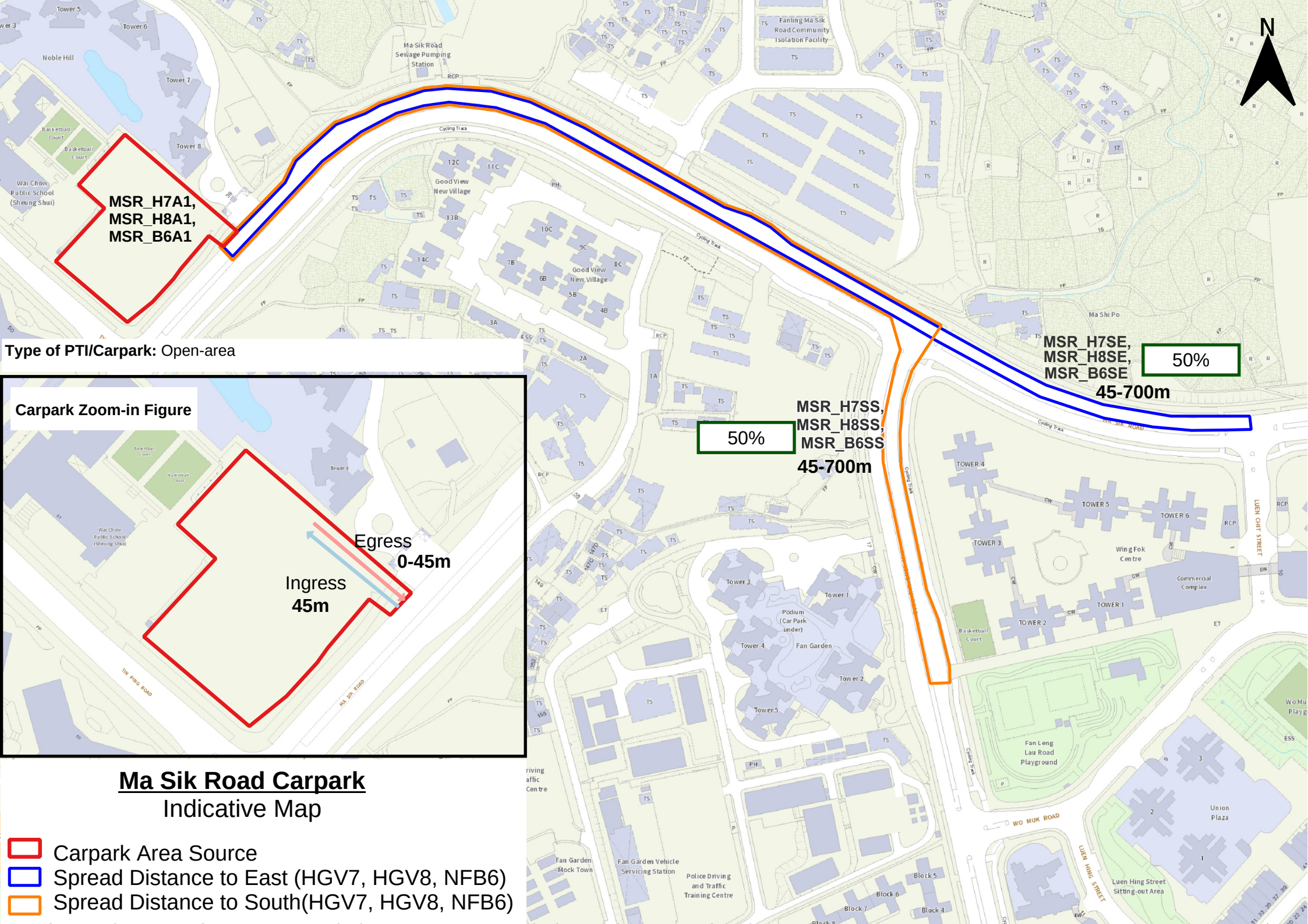
Spread Distance to South (PLB DIESEL)

Spread Distance (PLB LPG, TAXI LPG)

Type of PTI/Carpark: Open-area




TIN_BDSN
50-700m
TIN_BDSW
50-700m
TIN_BDSS,
TIN_BSSS
50-700m
TIN_BDA1,
TIN_BSA1
PTI Zoom In Figure
Avg. Bus Stop Point
Egress
0-50m
Ingress
50m
Type of PTI/Carpark: Open-area
Tin Ping Estate Bus Terminus
Indicative Map
PTI Area Source
Spread Distance to South (FBDD, FBSD)
Spread Distance to North (FBDD)
Spread Distance to West (FBDD)
N


N
MSR_H7A1,
MSR_H8A1,
MSR_B6A1
MSR_H7SE,
MSR_H8SE,
MSR_B6SE
50%
45-700m
MSR_H7SS,
MSR_H8SS,
MSR_B6SS
50%
45-700m
Type of PTI/Carpark: Open-area
Carpark Zoom-in Figure
Egress
0-45m
Ingress
45m
Ma Sik Road Carpark
Indicative Map
Carpark Area Source
Spread Distance to East (HGV7, HGV8, NFB6)
Spread Distance to South(HGV7, HGV8, NFB6)
Ma Sik Road Sewage Pumping Station
Fanling Ma Sik Road Community Isolation Facility
Good View New Village
Ma Shi Po
Wing Fok Centre
Commercial Complex
Fan Garden
Podium (Car Park under)
Fan Leng Lau Road Playground
Union Plaza
Luen Hing Street Sitting-out Area
Fan Garden Mock Town
Fan Garden Vehicle Servicing Station
Police Driving and Traffic Training Centre
Wai Chow Public School (Sheung Shui)
Noble Hill
Cycling Track
TIN PING ROAD
MA SIK ROAD
WO MUK ROAD
LUEN HING STREET
LUEN CHIT STREET