

APPENDIX 3C EMFAC Traffic Emission Factor

Appendix 3C EMFAC Traffic Emission Factor

Weather Information from the Hong Kong Observatory (HKO)

To generate an estimated temperature and relative humidity around the assessment area, temperature and relative humidity from Wong Tai Sin weather station and King's Park station in 2019 are studied respectively.

The minimum temperature and relative humidity is extracted to estimate the most polluting scenario in the EMFAC stimulation.

*Minimum temperature extracted from Wong Tai Shin weather station = 9.9 deg.C
 Minimum relative humidity extracted from King's Park weather station = 18%

Remarks: *A conservative input of 9 deg.C will be applied in EMFAC due to model limitation
 The EMFAC emission factor for perspective vehicles under the mentioned scenario are as follows:

Wong Tai Sin Weather Station

Date \ Hour	Hr1	Hr2	Hr3	Hr4	Hr5	Hr6	Hr7	Hr8	Hr9	Hr10	Hr11	Hr12	Hr13	Hr14	Hr15	Hr16	Hr17	Hr18	Hr19	Hr20	Hr21	Hr22	Hr23	Hr24	Min	
January 2019																										
1	10.1	10.1	10.5	10.3	9.9	10.3	10.1	10.2	11.2	14.9	14.7	15.2	15.8	17.0	17.7	17.4	15.9	15.0	14.6	14.1	14.0	14.0	13.8	13.3	13.3	9.9
2	13.1	12.8	12.8	12.7	13.0	12.8	12.8	12.7	13.1	13.5	13.9	14.1	15.0	15.6	15.8	15.8	15.4	15.1	14.9	14.2	14.3	14.2	14.1	14.3	14.3	12.7
3	14.6	14.3	14.1	14.2	14.1	14.0	13.7	14.1	14.5	15.0	14.9	15.7	17.4	17.4	16.6	17.7	17.8	17.3	17.7	17.7	17.7	17.4	17.1	17.0	17.0	13.7
4	17.2	17.7	17.3	17.0	17.2	17.6	17.6	18.2	18.6	19.2	19.9	20.5	20.3	21.5	21.3	21.0	21.1	20.7	20.0	19.7	19.6	19.4	19.2	19.2	19.2	17.0
5	19.2	19.1	19.1	19.1	19.1	19.2	19.3	19.8	20.5	21.3	21.7	22.8	24.1	24.2	24.5	23.4	22.0	21.7	21.2	21.1	21.0	21.1	20.7	20.3	20.3	19.1
6	20.3	20.0	19.4	18.7	18.7	18.8	18.2	18.0	18.4	19.5	19.8	19.2	18.9	19.2	19.1	19.4	18.9	18.5	17.9	17.6	17.7	17.4	17.4	17.4	17.4	17.4
7	17.5	17.7	17.8	17.7	17.7	17.4	17.3	17.6	18.3	18.4	18.4	19.3	19.5	19.6	19.9	19.9	19.8	19.1	19.0	19.0	19.1	18.9	18.6	18.6	18.6	17.3
8	18.6	18.6	18.7	18.6	18.7	18.8	18.9	19.2	19.5	20.0	20.1	21.3	21.1	20.1	19.0	19.7	19.4	19.2	19.3	19.1	18.9	18.6	N/A	N/A	18.6	18.6
9	N/A	N/A	N/A	17.4	17.2	16.9	16.9	17.1	17.3	18.6	18.5	19.4	18.8	18.6	20.2	18.9	19.2	17.6	17.4	17.6	17.5	17.7	17.6	17.7	17.7	16.9
10	17.7	18.2	17.6	17.6	17.3	17.5	17.7	18.3	19.6	20.0	20.3	20.7	21.2	21.1	21.6	21.2	20.0	20.1	20.3	20.4	20.2	20.1	19.5	19.4	19.4	17.3
11	19.3	19.5	19.3	18.6	17.8	17.6	17.9	19.0	20.5	20.7	21.3	22.5	24.3	24.7	25.2	24.3	24.7	22.5	21.6	20.7	20.9	20.4	19.9	19.8	19.8	17.6
12	20.1	20.0	19.1	18.4	18.5	18.9	19.7	19.8	21.8	23.6	24.8	25.6	25.3	26.5	25.4	24.9	24.5	22.9	21.8	21.3	20.9	20.4	20.7	19.1	19.1	18.4
13	18.4	18.1	17.7	17.4	17.4	17.4	17.5	17.6	17.8	18.3	18.1	18.3	18.2	18.8	18.9	19.5	19.0	18.7	18.2	18.1	18.0	17.8	17.6	17.7	17.7	17.4
14	17.6	17.6	17.3	17.2	17.3	17.4	17.4	17.6	18.1	18.0	19.1	19.0	19.3	19.2	19.5	19.6	19.6	19.1	18.4	18.5	18.4	18.4	18.3	17.9	17.9	17.2
15	17.6	17.2	17.2	17.1	17.1	17.2	17.4	17.7	18.1	18.7	20.1	20.1	21.5	22.3	22.4	22.4	22.0	21.1	20.5	20.3	19.7	19.2	18.6	18.5	18.5	17.1
16	18.1	17.6	17.3	16.9	16.6	16.4	16.3	16.1	16.7	17.4	18.2	18.0	18.8	18.6	18.2	18.0	17.5	16.9	16.4	16.0	15.5	15.1	15.2	15.2	15.2	15.1
17	15.4	15.0	14.3	13.6	13.7	13.7	13.9	13.8	14.7	16.8	18.4	19.7	19.5	20.5	21.5	20.1	19.5	17.9	17.0	16.6	15.8	15.6	15.6	15.4	15.4	13.6
18	15.5	15.8	16.0	15.8	15.7	15.5	15.4	15.9	16.6	17.1	17.3	17.6	18.0	18.4	17.7	18.1	17.9	17.7	17.8	17.5	17.2	17.0	16.8	16.9	16.9	15.4
19	17.3	17.6	17.6	17.5	17.3	17.6	17.8	18.3	18.8	20.8	21.8	22.2	23.1	22.4	21.9	21.0	20.5	19.4	18.4	18.7	19.0	18.9	18.7	18.8	18.8	17.3
20	19.2	19.1	19.2	19.1	18.4	18.4	18.8	19.6	20.5	21.9	23.4	24.4	23.6	24.6	24.9	24.6	24.0	22.0	21.2	21.2	20.3	19.6	18.8	18.5	18.5	18.4
21	18.4	18.0	17.2	16.9	16.6	16.0	15.7	15.6	15.8	16.0	17.2	18.4	18.5	19.2	19.8	20.3	19.4	18.0	17.2	17.0	16.7	15.9	15.4	15.0	15.0	15.0
22	14.7	14.3	13.3	12.7	12.5	12.7	12.1	12.7	14.0	15.5	16.7	17.4	18.7	19.4	20.0	19.6	19.0	17.4	16.5	16.3	16.4	16.2	15.6	15.3	15.3	12.1
23	15.1	14.5	13.9	13.4	13.3	12.9	12.1	13.5	16.3	17.6	18.5	19.1	19.2	19.1	19.4	19.3	18.1	16.7	16.2	15.5	15.4	15.0	14.3	14.2	14.2	12.1
24	15.1	14.8	14.8	14.7	14.6	14.3	14.4	15.6	17.3	18.4	18.9	19.3	19.9	20.6	20.5	20.5	18.8	17.6	16.4	16.3	16.5	16.8	17.0	16.4	16.4	14.3
25	16.2	16.0	16.0	14.8	15.3	14.3	14.4	16.0	20.1	21.4	23.0	23.3	23.4	24.4	23.7	23.7	21.6	20.1	19.1	18.4	17.9	17.4	17.1	16.7	16.7	14.3
26	16.2	15.8	16.4	16.5	16.9	16.8	15.9	16.4	17.8	19.0	19.6	21.1	21.7	22.3	21.6	20.8	19.3	18.6	17.3	16.5	16.6	16.5	16.3	16.3	16.3	15.8
27	16.2	15.9	15.7	15.5	15.3	15.2	15.1	15.2	16.6	17.0	18.4	18.3	18.4	18.7	19.4	18.5	17.3	16.5	16.0	16.1	16.5	16.5	16.3	16.1	16.1	15.1
28	15.9	15.9	15.6	15.5	15.4	15.6	15.8	16.3	16.9	17.9	19.0	20.3	20.9	20.3	20.5	20.8	19.4	18.5	17.2	16.7	16.5	16.1	15.5	15.6	15.6	15.4
29	16.0	15.6	15.3	15.9	17.1	18.1	17.5	17.4	19.5	20.3	20.6	20.2	20.4	21.4	20.7	20.6	20.3	18.6	18.3	18.6	18.5	18.7	18.1	18.1	18.1	15.3
30	18.0	17.5	17.3	17.2	17.2	17.6	17.3	18.9	20.4	20.4	21.1	22.0	21.7	21.1	20.8	22.3	21.1	20.6	20.3	19.9	19.6	19.8	19.7	19.7	19.7	17.2
31	20.1	20.1	19.5	19.1	18.8	17.9	17.8	19.1	22.8	23.7	25.6	24.8	25.1	25.3	26.7	26.3	25.0	23.8	22.3	21.5	21.0	21.5	22.4	21.5	21.5	17.8

Appendix 3C EMFAC Traffic Emission Factor

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December 2019																									
1	18.6	18.2	18.3	18.6	18.7	18.6	18.4	20.3	23.0	24.8	25.5	26.6	27.1	27.2	26.8	25.8	24.9	23.4	22.0	21.4	21.4	19.9	18.8	18.3	18.2
2	17.5	16.7	16.1	15.8	15.5	15.2	14.8	15.2	16.2	17.3	17.2	18.5	19.1	19.6	19.7	19.2	18.6	17.8	17.1	16.8	16.5	16.0	15.3	14.8	14.8
3	14.4	13.9	13.5	13.3	13.4	13.2	13.2	13.7	15.4	16.2	17.1	19.3	18.7	20.4	19.7	20.4	18.3	16.9	16.7	16.8	16.5	16.2	15.8	15.2	13.2
4	14.8	14.6	14.7	14.3	13.8	13.8	13.8	14.6	15.9	16.8	17.7	19.0	19.8	21.3	21.3	21.4	20.0	19.7	19.7	19.4	19.0	18.6	18.3	18.2	13.8
5	17.9	17.4	17.1	16.7	16.5	16.1	15.6	15.0	15.0	14.5	13.5	13.5	12.9	12.7	13.1	13.6	13.2	13.7	13.3	14.0	15.2	15.6	16.0	15.5	12.7
6	15.2	15.0	14.9	14.2	14.5	14.0	14.1	14.6	15.2	15.8	17.6	18.8	19.4	20.0	19.9	19.8	18.7	18.0	17.6	16.9	16.8	16.4	15.7	15.5	14.0
7	15.2	14.9	14.4	13.9	13.3	12.8	13.3	13.5	14.5	15.8	16.9	18.3	19.0	20.1	20.5	20.1	18.9	17.9	16.8	16.3	16.4	16.9	16.4	16.0	12.8
8	15.2	14.9	14.6	13.7	13.4	13.1	12.5	13.8	15.7	16.5	17.4	18.4	19.5	20.5	19.8	19.9	18.2	16.3	15.2	14.6	13.9	13.2	13.7	13.6	12.5
9	13.6	13.4	13.4	14.3	14.6	14.6	14.4	15.6	16.8	18.4	20.6	21.4	22.0	21.8	21.9	21.3	20.0	17.9	16.8	16.5	16.7	17.0	16.9	16.8	13.4
10	16.9	16.6	16.2	15.8	15.0	14.0	14.0	16.4	19.4	20.0	21.4	21.4	22.6	23.2	22.7	21.4	20.2	19.6	19.0	17.4	17.0	16.8	16.3	15.7	14.0
11	15.9	15.2	14.8	14.4	13.9	14.5	14.7	17.6	19.9	22.8	23.3	24.4	25.0	24.6	23.5	24.0	21.5	19.8	19.6	19.1	19.0	18.8	18.2	18.6	13.9
12	18.5	18.0	17.8	17.8	17.9	18.2	17.8	18.9	19.8	21.0	21.0	21.5	20.7	21.1	21.4	20.1	19.6	18.8	19.1	18.8	18.8	18.9	18.8	18.8	17.8
13	18.7	18.5	18.3	18.1	18.0	17.8	17.8	18.0	18.7	19.5	20.5	22.7	22.9	23.1	22.7	22.9	21.3	20.0	19.4	18.5	17.6	17.7	17.5	17.2	17.2
14	16.8	17.3	18.5	17.9	18.2	17.7	17.4	19.2	20.1	21.5	22.3	23.3	23.5	23.8	23.0	22.8	21.6	19.6	18.9	18.7	18.8	18.9	18.7	18.8	16.8
15	18.7	18.7	18.2	18.3	18.2	18.3	18.4	18.7	19.3	20.0	19.9	20.0	20.2	20.2	20.4	20.7	20.6	20.0	20.0	20.1	20.3	20.4	20.4	20.3	18.2
16	20.4	20.1	19.8	19.8	19.8	20.0	20.1	20.6	21.1	21.7	22.0	24.0	24.8	24.5	24.2	23.7	23.3	22.9	22.7	22.4	22.0	21.9	21.7	21.7	19.8
17	21.7	21.6	21.5	21.5	21.0	21.0	21.2	22.2	23.9	25.4	25.9	27.0	28.3	27.4	27.3	26.3	24.9	24.3	23.6	23.2	22.7	21.9	21.5	21.1	21.0
18	20.6	20.1	19.8	19.5	20.2	20.6	21.1	22.1	24.0	25.6	26.8	27.4	27.9	27.6	27.1	25.6	23.7	22.0	20.8	20.2	20.1	19.6	19.3	19.2	19.2
19	19.0	18.9	18.7	18.5	18.4	18.5	18.2	18.3	18.4	18.5	19.5	20.3	20.8	20.8	20.9	19.7	19.4	19.1	19.1	19.0	18.9	18.4	18.3	18.3	18.2
20	18.0	17.9	17.4	17.2	17.4	17.2	16.7	17.0	18.2	19.5	20.3	21.4	21.7	20.9	21.8	21.3	19.7	19.1	18.4	18.7	18.4	17.8	17.2	16.7	16.7
21	16.6	16.3	16.7	16.8	16.8	16.9	17.3	17.6	19.5	20.8	20.9	22.1	23.2	22.5	22.2	21.8	21.3	20.8	20.1	19.9	19.3	19.4	19.3	19.2	16.3
22	19.3	19.4	19.4	19.3	19.4	19.5	19.4	19.7	20.6	22.7	23.2	22.6	22.2	23.7	23.5	23.5	22.3	21.3	20.3	19.8	19.4	19.6	19.4	18.9	18.9
23	18.5	18.2	17.9	18.4	18.5	18.9	19.2	20.1	19.6	20.7	21.5	21.7	20.9	20.4	21.8	20.7	20.3	20.3	20.0	19.9	19.8	19.7	19.3	19.4	17.9
24	19.3	19.2	19.1	19.0	18.9	18.7	18.6	19.2	20.1	21.4	22.8	23.4	24.0	24.8	24.3	24.5	22.8	21.7	20.5	19.7	19.2	18.8	18.3	18.9	18.3
25	18.9	19.1	18.9	18.8	18.8	19.1	19.3	18.9	19.8	20.8	21.0	21.7	22.9	21.9	22.4	22.5	21.7	20.5	19.6	18.9	18.8	18.6	19.1	19.2	18.6
26	19.4	19.4	19.2	19.3	19.7	19.1	18.2	19.8	22.9	23.9	26.2	26.9	27.1	26.6	25.9	25.8	24.7	22.9	20.8	19.4	18.5	18.0	17.5	16.9	16.9
27	16.4	16.1	15.7	15.1	14.8	14.8	14.6	15.1	16.2	17.8	18.0	19.3	20.2	22.2	21.7	20.9	19.4	17.9	17.5	17.4	17.3	17.8	17.8	17.7	14.6
28	17.6	17.3	17.1	16.9	16.8	16.2	16.0	16.3	17.2	17.2	17.6	20.1	21.1	21.0	21.5	21.8	20.6	19.4	18.7	18.8	18.4	18.5	18.2	18.2	16.0
29	18.4	18.4	18.3	18.4	18.6	17.8	17.2	17.7	18.8	19.2	18.1	18.9	19.4	18.9	19.0	19.1	19.1	19.4	19.2	19.2	19.2	19.5	19.4	19.2	17.2
30	19.1	18.9	18.9	18.9	19.0	19.2	19.3	19.7	20.7	21.9	22.0	21.8	22.3	21.7	21.2	21.4	21.0	20.4	20.4	20.3	20.1	20.0	20.0	20.0	18.9
31	19.8	19.9	20.0	20.0	20.1	20.0	20.0	19.8	19.8	19.3	19.1	18.3	17.8	17.7	17.8	18.0	18.3	18.2	18.0	18.2	18.1	18.2	17.9	17.6	17.6
Minimum Temperature (deg. C)																							9.9		

Appendix 3C EMFAC Traffic Emission Factor

Running Emission Factor

2022 Running Exhaust Emission Factor (g/km)

Pollutant Name: PM10

Temperature: 9 deg.C

Relative Humidity: 18%

Speed (km/hr)	01 - Private Cars	02 - Taxi	03 - Light Goods Vehicles<=2.5t	04 - Lt Goods Vehicles 2.5-3.5t	05 - Light Goods Vehicles>3.5t	06 - Medium & Heavy Goods Vehicl	07 - Medium & Heavy Goods Vehicl	08 - Public Light Buses	09 - Private Light Bus <=3.5t	10 - Private Light Bus >3.5t	11 - Non-franchised Bus<=6.4t	12 - Non-franchised Bus 6.4-15t	13 - Non-franchised Bus >15t	14 - Franchised Bus (SD)	15 - Franchised Bus (DD)	16 - Motorcycles
11	0.0099	0.0000	0.0398	0.0341	0.0704	0.1224	0.2314	0.0457	0.0391	0.0783	0.1382	0.1144	0.4973	0.3436	0.3062	0.0168
12	0.0094	0.0000	0.0386	0.0330	0.0676	0.1124	0.2191	0.0439	0.0376	0.0751	0.1328	0.1077	0.4709	0.3294	0.2930	0.0160
13	0.0089	0.0000	0.0374	0.0320	0.0651	0.1041	0.2084	0.0421	0.0362	0.0721	0.1275	0.1020	0.4478	0.3167	0.2813	0.0153
14	0.0084	0.0000	0.0363	0.0311	0.0629	0.0970	0.1989	0.0405	0.0349	0.0693	0.1225	0.0971	0.4274	0.3052	0.2709	0.0146
15	0.0080	0.0000	0.0352	0.0302	0.0609	0.0909	0.1905	0.0389	0.0337	0.0666	0.1177	0.0927	0.4093	0.2949	0.2614	0.0139
16	0.0076	0.0000	0.0342	0.0293	0.0591	0.0857	0.1829	0.0374	0.0325	0.0640	0.1131	0.0889	0.3930	0.2854	0.2528	0.0133
17	0.0073	0.0000	0.0332	0.0285	0.0575	0.0811	0.1761	0.0360	0.0314	0.0616	0.1087	0.0854	0.3783	0.2767	0.2450	0.0127
18	0.0069	0.0000	0.0322	0.0277	0.0560	0.0771	0.1698	0.0346	0.0303	0.0592	0.1046	0.0823	0.3649	0.2686	0.2378	0.0122
19	0.0066	0.0000	0.0313	0.0269	0.0546	0.0735	0.1641	0.0333	0.0293	0.0570	0.1006	0.0795	0.3527	0.2612	0.2311	0.0117
20	0.0063	0.0000	0.0304	0.0261	0.0534	0.0703	0.1589	0.0321	0.0283	0.0549	0.0968	0.0769	0.3415	0.2543	0.2249	0.0112
21	0.0060	0.0000	0.0296	0.0254	0.0522	0.0674	0.1541	0.0309	0.0274	0.0529	0.0931	0.0746	0.3312	0.2478	0.2192	0.0108
26	0.0048	0.0000	0.0259	0.0223	0.0475	0.0565	0.1347	0.0259	0.0235	0.0443	0.0776	0.0653	0.2895	0.2210	0.1955	0.0088
27	0.0046	0.0000	0.0252	0.0217	0.0467	0.0549	0.1316	0.0251	0.0228	0.0428	0.0749	0.0638	0.2828	0.2165	0.1915	0.0085
35	0.0034	0.0000	0.0208	0.0179	0.0421	0.0452	0.1117	0.0199	0.0183	0.0339	0.0588	0.0546	0.2402	0.1880	0.1665	0.0065
36	0.0033	0.0000	0.0204	0.0175	0.0416	0.0443	0.1098	0.0195	0.0178	0.0331	0.0573	0.0537	0.2360	0.1851	0.1640	0.0064
37	0.0032	0.0000	0.0199	0.0172	0.0412	0.0434	0.1079	0.0190	0.0174	0.0323	0.0559	0.0529	0.2319	0.1824	0.1616	0.0062
39	0.0030	0.0000	0.0191	0.0164	0.0405	0.0419	0.1044	0.0182	0.0166	0.0310	0.0535	0.0513	0.2244	0.1773	0.1571	0.0058
41	0.0028	0.0000	0.0183	0.0158	0.0398	0.0405	0.1012	0.0176	0.0159	0.0299	0.0515	0.0498	0.2174	0.1727	0.1530	0.0055
42	0.0027	0.0000	0.0179	0.0155	0.0396	0.0399	0.0997	0.0173	0.0155	0.0294	0.0506	0.0491	0.2142	0.1705	0.1511	0.0054
43	0.0026	0.0000	0.0176	0.0151	0.0393	0.0393	0.0982	0.0170	0.0152	0.0289	0.0498	0.0485	0.2110	0.1685	0.1492	0.0053
44	0.0026	0.0000	0.0172	0.0149	0.0390	0.0387	0.0968	0.0168	0.0149	0.0285	0.0491	0.0479	0.2080	0.1665	0.1474	0.0052
45	0.0025	0.0000	0.0169	0.0146	0.0388	0.0382	0.0954	0.0166	0.0145	0.0281	0.0484	0.0473	0.2051	0.1646	0.1457	0.0050
46	0.0024	0.0000	0.0166	0.0143	0.0386	0.0377	0.0941	0.0164	0.0142	0.0278	0.0478	0.0467	0.2023	0.1627	0.1441	0.0049
47	0.0024	0.0000	0.0163	0.0140	0.0384	0.0372	0.0929	0.0162	0.0140	0.0275	0.0473	0.0461	0.1996	0.1610	0.1425	0.0048
48	0.0023	0.0000	0.0160	0.0138	0.0382	0.0367	0.0917	0.0161	0.0137	0.0272	0.0469	0.0456	0.1970	0.1593	0.1410	0.0047
49	0.0023	0.0000	0.0157	0.0135	0.0380	0.0363	0.0905	0.0159	0.0134	0.0270	0.0465	0.0450	0.1944	0.1577	0.1395	0.0046
50	0.0022	0.0000	0.0154	0.0133	0.0379	0.0358	0.0894	0.0158	0.0132	0.0268	0.0461	0.0445	0.1920	0.1561	0.1381	0.0046
51	0.0022	0.0000	0.0152	0.0131	0.0378	0.0354	0.0893	0.0157	0.0130	0.0266	0.0459	0.0440	0.1919	0.1561	0.1380	0.0045
52	0.0021	0.0000	0.0149	0.0129	0.0376	0.0350	0.0893	0.0156	0.0127	0.0265	0.0456	0.0436	0.1919	0.1561	0.1379	0.0044
53	0.0021	0.0000	0.0147	0.0127	0.0375	0.0347	0.0893	0.0155	0.0125	0.0264	0.0454	0.0431	0.1919	0.1561	0.1378	0.0043
55	0.0020	0.0000	0.0142	0.0123	0.0374	0.0340	0.0892	0.0154	0.0121	0.0262	0.0451	0.0422	0.1918	0.1561	0.1377	0.0042
56	0.0020	0.0000	0.0140	0.0121	0.0373	0.0336	0.0892	0.0154	0.0119	0.0261	0.0450	0.0418	0.1918	0.1561	0.1376	0.0041
57	0.0019	0.0000	0.0138	0.0119	0.0373	0.0333	0.0891	0.0154	0.0117	0.0261	0.0449	0.0414	0.1918	0.1561	0.1375	0.0041
58	0.0019	0.0000	0.0136	0.0117	0.0373	0.0330	0.0891	0.0153	0.0115	0.0260	0.0449	0.0410	0.1918	0.1561	0.1375	0.0040
59	0.0019	0.0000	0.0134	0.0116	0.0372	0.0327	0.0891	0.0153	0.0114	0.0260	0.0448	0.0407	0.1917	0.1561	0.1374	0.0040
60	0.0018	0.0000	0.0132	0.0114	0.0372	0.0325	0.0891	0.0153	0.0112	0.0260	0.0448	0.0403	0.1917	0.1561	0.1374	0.0039
61	0.0018	0.0000	0.0130	0.0112	0.0372	0.0322	0.0891	0.0153	0.0111	0.0259	0.0448	0.0399	0.1917	0.1561	0.1373	0.0039
62	0.0018	0.0000	0.0129	0.0111	0.0373	0.0319	0.0890	0.0153	0.0109	0.0259	0.0448	0.0396	0.1917	0.1561	0.1373	0.0039
63	0.0018	0.0000	0.0127	0.0109	0.0373	0.0317	0.0890	0.0152	0.0108	0.0259	0.0448	0.0392	0.1917	0.1561	0.1372	0.0038
64	0.0017	0.0000	0.0125	0.0108	0.0373	0.0315	0.0890	0.0152	0.0106	0.0259	0.0448	0.0389	0.1917	0.1561	0.1372	0.0038
65	0.0017	0.0000	0.0124	0.0107	0.0374	0.0312	0.0890	0.0152	0.0105	0.0259	0.0447	0.0386	0.1916	0.1561	0.1372	0.0038
66	0.0017	0.0000	0.0122	0.0106	0.0375	0.0312	0.0890	0.0152	0.0104	0.0258	0.0447	0.0386	0.1916	0.1561	0.1372	0.0037
67	0.0017	0.0000	0.0121	0.0104	0.0376	0.0312	0.0890	0.0152	0.0103	0.0258	0.0447	0.0386	0.1916	0.1561	0.1372	0.0037
68	0.0017	0.0000	0.0120	0.0103	0.0377	0.0312	0.0890	0.0152	0.0102	0.0258	0.0447	0.0386	0.1916	0.1561	0.1372	0.0037
69	0.0017	0.0000	0.0118	0.0102	0.0378	0.0312	0.0890	0.0151	0.0101	0.0257	0.0447	0.0386	0.1916	0.1561	0.1372	0.0037

Appendix 3C EMFAC Traffic Emission Factor

Running Emission Factor

2022 Running Exhaust Emission Factor (g/km)

Pollutant Name: PM2.5

Temperature: 9 deg.C

Relative Humidity: 18%

Speed (km/hr)	01 - Private Cars	02 - Taxi	03 - Light Goods Vehicles<=2.5t	04 - Lt Goods Vehicles 2.5- 3.5t	05 - Light Goods Vehicles>3.5t	06 - Medium & Heavy Goods Vehicl	07 - Medium & Heavy Goods Vehicl	08 - Public Light Buses	09 - Private Light Bus <=3.5t	10 - Private Light Bus >3.5t	11 - Non- franchised Bus<=6.4t	12 - Non- franchised Bus 6.4-15t	13 - Non- franchised Bus >15t	14 - Franchised Bus (SD)	15 - Franchised Bus (DD)	16 - Motorcycles
11	0.0092	0.0000	0.0365	0.0314	0.0647	0.1126	0.2129	0.0421	0.0361	0.0720	0.1272	0.1052	0.4576	0.3161	0.2817	0.0133
12	0.0087	0.0000	0.0354	0.0304	0.0622	0.1034	0.2016	0.0404	0.0347	0.0691	0.1221	0.0991	0.4332	0.3030	0.2696	0.0126
13	0.0083	0.0000	0.0343	0.0295	0.0599	0.0957	0.1917	0.0388	0.0334	0.0664	0.1173	0.0939	0.4120	0.2913	0.2588	0.0120
14	0.0078	0.0000	0.0333	0.0286	0.0579	0.0892	0.1830	0.0372	0.0322	0.0638	0.1127	0.0893	0.3932	0.2808	0.2492	0.0115
15	0.0074	0.0000	0.0323	0.0278	0.0560	0.0837	0.1752	0.0358	0.0311	0.0613	0.1083	0.0853	0.3765	0.2713	0.2405	0.0110
16	0.0071	0.0000	0.0313	0.0270	0.0544	0.0788	0.1683	0.0344	0.0300	0.0589	0.1041	0.0817	0.3615	0.2626	0.2326	0.0105
17	0.0067	0.0000	0.0304	0.0262	0.0529	0.0746	0.1620	0.0331	0.0289	0.0567	0.1000	0.0786	0.3480	0.2545	0.2254	0.0100
18	0.0064	0.0000	0.0296	0.0255	0.0515	0.0709	0.1562	0.0318	0.0280	0.0545	0.0962	0.0757	0.3357	0.2472	0.2187	0.0096
19	0.0061	0.0000	0.0287	0.0247	0.0503	0.0676	0.1510	0.0307	0.0270	0.0525	0.0925	0.0731	0.3245	0.2403	0.2126	0.0092
20	0.0058	0.0000	0.0279	0.0241	0.0491	0.0647	0.1462	0.0295	0.0261	0.0505	0.0890	0.0708	0.3142	0.2339	0.2069	0.0088
21	0.0056	0.0000	0.0272	0.0234	0.0480	0.0620	0.1418	0.0284	0.0253	0.0487	0.0857	0.0686	0.3047	0.2280	0.2016	0.0084
26	0.0044	0.0000	0.0238	0.0205	0.0437	0.0520	0.1239	0.0239	0.0216	0.0407	0.0714	0.0601	0.2664	0.2033	0.1798	0.0069
27	0.0043	0.0000	0.0232	0.0200	0.0430	0.0505	0.1210	0.0231	0.0210	0.0394	0.0689	0.0587	0.2601	0.1992	0.1762	0.0067
35	0.0031	0.0000	0.0191	0.0165	0.0387	0.0415	0.1028	0.0183	0.0169	0.0312	0.0541	0.0503	0.2210	0.1729	0.1532	0.0051
36	0.0030	0.0000	0.0187	0.0161	0.0383	0.0407	0.1010	0.0179	0.0165	0.0304	0.0527	0.0494	0.2171	0.1703	0.1509	0.0050
37	0.0029	0.0000	0.0183	0.0158	0.0379	0.0400	0.0993	0.0175	0.0161	0.0297	0.0515	0.0487	0.2134	0.1678	0.1487	0.0048
39	0.0028	0.0000	0.0175	0.0151	0.0373	0.0386	0.0960	0.0168	0.0153	0.0285	0.0492	0.0472	0.2064	0.1632	0.1445	0.0046
41	0.0026	0.0000	0.0168	0.0145	0.0367	0.0373	0.0931	0.0162	0.0146	0.0275	0.0474	0.0458	0.2000	0.1589	0.1408	0.0043
42	0.0025	0.0000	0.0164	0.0142	0.0364	0.0367	0.0917	0.0159	0.0143	0.0270	0.0465	0.0452	0.1970	0.1569	0.1390	0.0042
43	0.0024	0.0000	0.0161	0.0139	0.0361	0.0362	0.0903	0.0157	0.0140	0.0266	0.0458	0.0446	0.1941	0.1550	0.1373	0.0041
44	0.0024	0.0000	0.0158	0.0137	0.0359	0.0356	0.0891	0.0155	0.0137	0.0262	0.0451	0.0440	0.1914	0.1531	0.1356	0.0040
45	0.0023	0.0000	0.0155	0.0134	0.0357	0.0351	0.0878	0.0153	0.0134	0.0259	0.0445	0.0435	0.1887	0.1514	0.1341	0.0039
46	0.0023	0.0000	0.0152	0.0132	0.0355	0.0347	0.0866	0.0151	0.0131	0.0256	0.0440	0.0429	0.1861	0.1497	0.1326	0.0039
47	0.0022	0.0000	0.0149	0.0129	0.0353	0.0342	0.0854	0.0149	0.0129	0.0253	0.0435	0.0424	0.1836	0.1481	0.1311	0.0038
48	0.0021	0.0000	0.0147	0.0127	0.0351	0.0338	0.0843	0.0148	0.0126	0.0251	0.0431	0.0419	0.1812	0.1465	0.1297	0.0037
49	0.0021	0.0000	0.0144	0.0125	0.0350	0.0334	0.0833	0.0147	0.0124	0.0249	0.0428	0.0414	0.1789	0.1450	0.1283	0.0036
50	0.0020	0.0000	0.0142	0.0122	0.0349	0.0330	0.0822	0.0145	0.0122	0.0247	0.0425	0.0410	0.1766	0.1436	0.1270	0.0036
51	0.0020	0.0000	0.0139	0.0120	0.0347	0.0326	0.0822	0.0145	0.0119	0.0245	0.0422	0.0405	0.1766	0.1436	0.1269	0.0035
52	0.0020	0.0000	0.0137	0.0118	0.0346	0.0322	0.0821	0.0144	0.0117	0.0244	0.0420	0.0401	0.1766	0.1436	0.1268	0.0034
53	0.0019	0.0000	0.0135	0.0116	0.0345	0.0319	0.0821	0.0143	0.0115	0.0243	0.0418	0.0397	0.1765	0.1436	0.1268	0.0034
55	0.0018	0.0000	0.0130	0.0113	0.0344	0.0312	0.0821	0.0142	0.0112	0.0241	0.0415	0.0389	0.1765	0.1436	0.1266	0.0033
56	0.0018	0.0000	0.0128	0.0111	0.0343	0.0309	0.0820	0.0142	0.0110	0.0240	0.0414	0.0385	0.1765	0.1436	0.1266	0.0032
57	0.0018	0.0000	0.0127	0.0109	0.0343	0.0307	0.0820	0.0141	0.0108	0.0240	0.0413	0.0381	0.1764	0.1436	0.1265	0.0032
58	0.0017	0.0000	0.0125	0.0108	0.0343	0.0304	0.0820	0.0141	0.0106	0.0239	0.0413	0.0377	0.1764	0.1436	0.1265	0.0031
59	0.0017	0.0000	0.0123	0.0106	0.0343	0.0301	0.0820	0.0141	0.0105	0.0239	0.0413	0.0374	0.1764	0.1436	0.1264	0.0031
60	0.0017	0.0000	0.0121	0.0105	0.0343	0.0299	0.0819	0.0141	0.0103	0.0239	0.0412	0.0371	0.1764	0.1436	0.1264	0.0031
61	0.0017	0.0000	0.0120	0.0103	0.0343	0.0296	0.0819	0.0140	0.0102	0.0239	0.0412	0.0367	0.1764	0.1436	0.1264	0.0030
62	0.0016	0.0000	0.0118	0.0102	0.0343	0.0294	0.0819	0.0140	0.0101	0.0238	0.0412	0.0364	0.1764	0.1436	0.1263	0.0030
63	0.0016	0.0000	0.0117	0.0101	0.0343	0.0292	0.0819	0.0140	0.0099	0.0238	0.0412	0.0361	0.1763	0.1436	0.1263	0.0030
64	0.0016	0.0000	0.0115	0.0099	0.0344	0.0289	0.0819	0.0140	0.0098	0.0238	0.0412	0.0358	0.1763	0.1436	0.1262	0.0030
65	0.0016	0.0000	0.0114	0.0098	0.0344	0.0287	0.0819	0.0140	0.0097	0.0238	0.0412	0.0355	0.1763	0.1436	0.1262	0.0029
66	0.0016	0.0000	0.0112	0.0097	0.0345	0.0287	0.0819	0.0140	0.0096	0.0238	0.0412	0.0355	0.1763	0.1436	0.1262	0.0029
67	0.0016	0.0000	0.0111	0.0096	0.0346	0.0287	0.0819	0.0140	0.0095	0.0237	0.0412	0.0355	0.1763	0.1436	0.1262	0.0029
68	0.0015	0.0000	0.0110	0.0095	0.0347	0.0287	0.0819	0.0139	0.0094	0.0237	0.0412	0.0355	0.1763	0.1436	0.1262	0.0029
69	0.0015	0.0000	0.0109	0.0094	0.0348	0.0287	0.0819	0.0139	0.0093	0.0237	0.0412	0.0355	0.1763	0.1436	0.1262	0.0029

Appendix 3C EMFAC Traffic Emission Factor

Starting Emission Factor

2022 Starting Emission Factor (g/trip)

Pollutant Name: PM10

Temperature: 9 deg.C

Relative Humidity: 18%

RSP Starting Emission (g/trip)

Time (min)	01 - Private Cars	02 - Taxi	03 - Light Goods Vehicles<=2.5t	04 - Lt Goods Vehicles 2.5-3.5t	05 - Light Goods Vehicles>3.5t	06 - Medium & Heavy Goods Vehicle	07 - Medium & Heavy Goods Vehicl	08 - Public Light Buses	09 - Private Light Bus <=3.5t	10 - Private Light Bus >3.5t	11 - Non-franchised Bus<=6.4t	12 - Non-franchised Bus 6.4-15t	13 - Non-franchised Bus >15t	14 - Franchised Bus (SD)	15 - Franchised Bus (DD)	16 - Motorcycles
5	0.0004	0.0000	0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0058
10	0.0008	0.0000	0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0053
20	0.0016	0.0000	0.0006	0.0001	0.0000	0.0000	0.0000	0.0000	0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0044
30	0.0024	0.0000	0.0006	0.0001	0.0000	0.0000	0.0000	0.0000	0.0017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0036
40	0.0031	0.0000	0.0007	0.0001	0.0000	0.0000	0.0000	0.0000	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0031
50	0.0038	0.0000	0.0007	0.0002	0.0000	0.0000	0.0000	0.0000	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0027
60	0.0044	0.0000	0.0008	0.0002	0.0000	0.0000	0.0000	0.0000	0.0031	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0025
120	0.0073	0.0000	0.0012	0.0003	0.0000	0.0000	0.0000	0.0000	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0053
180	0.0081	0.0000	0.0014	0.0003	0.0000	0.0000	0.0000	0.0000	0.0052	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0074
240	0.0089	0.0000	0.0016	0.0004	0.0000	0.0000	0.0000	0.0000	0.0056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0094
300	0.0096	0.0000	0.0018	0.0004	0.0000	0.0000	0.0000	0.0000	0.0060	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0111
360	0.0101	0.0000	0.0020	0.0004	0.0000	0.0000	0.0000	0.0000	0.0063	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0125
420	0.0106	0.0000	0.0021	0.0004	0.0000	0.0000	0.0000	0.0000	0.0066	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0138
480	0.0110	0.0000	0.0022	0.0005	0.0000	0.0000	0.0000	0.0000	0.0068	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0149
540	0.0113	0.0000	0.0023	0.0005	0.0000	0.0000	0.0000	0.0000	0.0070	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0157
600	0.0115	0.0000	0.0024	0.0005	0.0000	0.0000	0.0000	0.0000	0.0071	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0163
660	0.0116	0.0000	0.0025	0.0005	0.0000	0.0000	0.0000	0.0000	0.0072	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0167
720	0.0116	0.0000	0.0025	0.0005	0.0000	0.0000	0.0000	0.0000	0.0073	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0168

Appendix 3C EMFAC Traffic Emission Factor

Starting Emission Factor

2022 Starting Emission Factor (g/trip)

Pollutant Name: PM2.5

Temperature: 9 deg.C

Relative Humidity: 18%

FSP Starting Emission (g/trip)

Time (min)	01 - Private Cars	02 - Taxi	03 - Light Goods Vehicles<=2.5t	04 - Lt Goods Vehicles 2.5-3.5t	05 - Light Goods Vehicles>3.5t	06 - Medium & Heavy Goods Vehicle	07 - Medium & Heavy Goods Vehicl	08 - Public Light Buses	09 - Private Light Bus <=3.5t	10 - Private Light Bus >3.5t	11 - Non-franchised Bus<=6.4t	12 - Non-franchised Bus 6.4-15t	13 - Non-franchised Bus >15t	14 - Franchised Bus (SD)	15 - Franchised Bus (DD)	16 - Motorcycles
5	0.0004	0.0000	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0044
10	0.0008	0.0000	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0040
20	0.0015	0.0000	0.0005	0.0001	0.0000	0.0000	0.0000	0.0000	0.0011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0034
30	0.0022	0.0000	0.0005	0.0001	0.0000	0.0000	0.0000	0.0000	0.0016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0029
40	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0000	0.0000	0.0020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0025
50	0.0035	0.0000	0.0006	0.0002	0.0000	0.0000	0.0000	0.0000	0.0024	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0022
60	0.0041	0.0000	0.0007	0.0002	0.0000	0.0000	0.0000	0.0000	0.0028	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0021
120	0.0068	0.0000	0.0011	0.0003	0.0000	0.0000	0.0000	0.0000	0.0044	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0043
180	0.0076	0.0000	0.0012	0.0003	0.0000	0.0000	0.0000	0.0000	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0059
240	0.0083	0.0000	0.0014	0.0003	0.0000	0.0000	0.0000	0.0000	0.0052	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0074
300	0.0089	0.0000	0.0016	0.0004	0.0000	0.0000	0.0000	0.0000	0.0055	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0087
360	0.0094	0.0000	0.0017	0.0004	0.0000	0.0000	0.0000	0.0000	0.0058	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0098
420	0.0098	0.0000	0.0018	0.0004	0.0000	0.0000	0.0000	0.0000	0.0061	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0108
480	0.0102	0.0000	0.0019	0.0004	0.0000	0.0000	0.0000	0.0000	0.0063	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0116
540	0.0105	0.0000	0.0020	0.0004	0.0000	0.0000	0.0000	0.0000	0.0065	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0122
600	0.0107	0.0000	0.0020	0.0004	0.0000	0.0000	0.0000	0.0000	0.0066	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0127
660	0.0107	0.0000	0.0021	0.0004	0.0000	0.0000	0.0000	0.0000	0.0067	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0130
720	0.0108	0.0000	0.0021	0.0004	0.0000	0.0000	0.0000	0.0000	0.0067	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0131