

# Appendix 3.9 Calculations of Emission Rates from Open Road Sections Using EMFAC-HK Fleet Average Emission Factor

Year 2024																				Emission Factor for NO <sub>x</sub> in gm/mile-veh (Trunk Roads)													Emission Factor for NO <sub>x</sub> in gm/mile-veh (Other Roads)			NO <sub>x</sub> E.F. (0.01g/mile-veh)														
																				Motor Cycles	Petrol PC & LGV	Taxi	Non-franchised Buses <6.4t	Non-franchised Buses 6.4-15t	Non-franchised Buses >15t	Private Light Buses <3.5t	Private Light Buses >3.5t	Diesel PC&LGV <2.5t	Diesel LGV 2.5-3.5t	Diesel LGV >3.5t	HGV<15t	HGV>15t	Single Deck Franchised Buses	Double Deck Franchised Buses	Public Light Buses															
																				1.023	0.227	0.251	0.000	6.466	0.000	0.000	0.747	0.950	0.532	3.466	7.344	9.287	0.000	5.132	0.752															
																				Motor Cycles	Petrol PC & LGV	Taxi	Non-franchised Buses <6.4t	Non-franchised Buses 6.4-15t	Non-franchised Buses >15t	Private Light Buses <3.5t	Private Light Buses >3.5t	Diesel PC&LGV <2.5t	Diesel LGV 2.5-3.5t	Diesel LGV >3.5t	HGV<15t	HGV>15t	Single Deck Franchised Buses	Double Deck Franchised Buses	Public Light Buses															
																				1.137	0.282	0.282	0.000	7.073	0.000	0.000	0.824	1.072	0.587	3.763	7.887	10.008	5.440	5.807	0.768															
Roads Name	Source ID	Road No.	Road Link	Road Speed	Total Q	Traffic Breakdown(%)															Motor Cycles	Petrol PC & LGV	Taxi	Non-franchised Buses <6.4t	Non-franchised Buses 6.4-15t	Non-franchised Buses >15t	Private Light Buses <3.5t	Private Light Buses >3.5t	Diesel PC&LGV <2.5t	Diesel LGV 2.5-3.5t	Diesel LGV >3.5t	HGV<15t	HGV>15t	Single Deck Franchised Buses	Double Deck Franchised Buses	Public Light Buses	NO <sub>x</sub> E.F.													
Tuen Mun Road	TMR01	31	70	5565	5565	0.04	0.41	0.06	0.00	0.03	0.00	0.00	0.01	0.02	0.12	0.10	0.19	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	227.7	518.4	83.9	0.0	1079.5	0.0	0.0	41.6	105.7	355.0	1928.8	7764.4	516.8	0.0	285.6	0.0	231.951

## Appendix 3.9 Calculations of Emission Rates from Open Road Sections Using EMFAC-HK Fleet Average Emission Factor

Year 2024																				Emission Factor for RSP in gm/mile-veh (Trunk Roads)																	RSP E.F.		
																				Motor Cycles	Petrol PC & LGV	Taxi	Non-franchised Buses <6.4t	Non-franchised Buses 6.4-15t	Non-franchised Buses >15t	Private Light Buses <3.5t	Private Light Buses >3.5t	Diesel PC&LGV <2.5t	Diesel LGV 2.5-3.5t	Diesel LGV >3.5t	HGV<15t	HGV>15t	Single Deck Franchised Buses	Double Deck Franchised Buses	Public Light Buses	(g/mile-veh)			
																				0.040	0.005	0.023	0.000	0.572	0.000	0.000	0.469	0.316	0.163	0.394	0.724	0.796	0.000	0.248	0.615				
																				Emission Factor for RSP in gm/mile-veh (Other Roads)																			
																				Motor Cycles	Petrol PC & LGV	Taxi	Non-franchised Buses <6.4t	Non-franchised Buses 6.4-15t	Non-franchised Buses >15t	Private Light Buses <3.5t	Private Light Buses >3.5t	Diesel PC&LGV <2.5t	Diesel LGV 2.5-3.5t	Diesel LGV >3.5t	HGV<15t	HGV>15t	Single Deck Franchised Buses	Double Deck Franchised Buses	Public Light Buses				
																				0.062	0.008	0.033	0.000	0.739	0.000	0.000	0.608	0.402	0.210	0.500	0.899	1.027	0.815	0.330	0.687				
Roads Name	Source ID	Road Link No	Road Speed	Total Q	Traffic Breakdown(%)															Motor Cycles	Petrol PC & LGV	Taxi	Non-franchised Buses <6.4t	Non-franchised Buses 6.4-15t	Non-franchised Buses >15t	Private Light Buses <3.5t	Private Light Buses >3.5t	Diesel PC&LGV <2.5t	Diesel LGV 2.5-3.5t	Diesel LGV >3.5t	HGV<15t	HGV>15t	Single Deck Franchised Buses	Double Deck Franchised Buses	Public Light Buses	RSP E.F.			
Tuen Mun Road	TMR01	31	70	5565	5565	0.04	0.41	0.06	0.00	0.03	0.00	0.00	0.01	0.02	0.12	0.10	0.19	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.2404					