Appendix 7E - Estimated Accident Rates for Dangerous Goods Vehicles

Table 1 - Actual Numbers of Accident Recorded on Expressway

Total No. of Accident Recorded	Accident rates per millopn vehicle - km		
on Expressway	Year 2000	Year 1999	Year 1998
Sha Tin Road	0.33	0.43	0.38
Tolo Highway	0.35	0.29	0.33
Fanling Highway	0.33	0.38	0.34
San Tin Highway	0.15	0.19	0.49
Yuen Long Highway	0.24	0.16	0.14
Tuen Mun Road	0.44	0.34	0.36
Tsuen Wan Road	0.38	0.37	0.37
Tai Po Road - Sha Tin	0.14	0.23	0.21
Tate's Cairn Highway	0.34	0.39	0.25
Kwun Tung Bypass	0.30	0.34	0.38
Island Eastern Corridor	0.72	0.65	0.57
North Lantau Highway	0.16	0.17	0.22
Tsing Kwai Highway	0.37	0.47	0.28
West Kowloon Highway	0.45	0.50	0.83
Cheung Tsing Highway	0.75	0.97	N/A
Tsing Long Highway	0.18	0.15	0.06
Average	0.35	0.38	0.35

Table 2 - Actual No of Accident for Goods Vehicles (GV)

No. of Accident Recorded	Year 2000	Year 1999	Year 1998
Goods Vehicles only	4455	4353	4318
Total	22935	22320	21142
% of Goods Vehicle only	19.42	19.50	20.42

Table 3 - No of Goods Vehicle Under Licensed

Actual No of Vehicle Under License	Year 2000	Year 1999	Year 1998
Goods Vehicles only	114277	113770	115051
Total	516782	503974	500673

It should be noted that 3000 lisences will be granted from Fire Serives Department to cover all Dangerous Goods Vehicle (DGV) after the DG(Amendment) - as stated in FSD letter dated 31/5/02, the % of DGV of all GV (all categories except cat. 1) = 3000 / 114366 (average) = 2.6%

Table 4 - Actual Accident Severity Recorded

Type of Accident	Year 2000	Year 1999	Year 1998
Fatal	88	74	124
Serious	868	854	784
Slight	3283	3527	3445
% of Fatal & Serious Accident only	22.55	20.83	20.86

Assuming that only fatal and serious accidents will result in spillages of chemical substances

Table 5 - Estimated Accident Rates involving DGV

Description	Year 2000	Year 1999	Year 1998
Average accident rates per million veh-km (Table 1)	0.35	0.38	0.35
% of Accident Involving Goods Vehicle Only (Table 2)	19.42	19.50	20.42
% of DGV of all GV (Table 3)	2.6	2.6	2.6
% of fatal and serious accidents of all accidents (Table 4)	22.55	20.83	20.86
% of Ecological toxic DG (Cat 3,4,5& 6) of all DG (See Note 1)	64.50	64.50	64.50
Estimated Accident Rates involving DGV in term of million veh-km	0.00026	0.00026	0.00025

Note 1:

Based on Dagerous Goods Neneral, Fire Protection No. 4