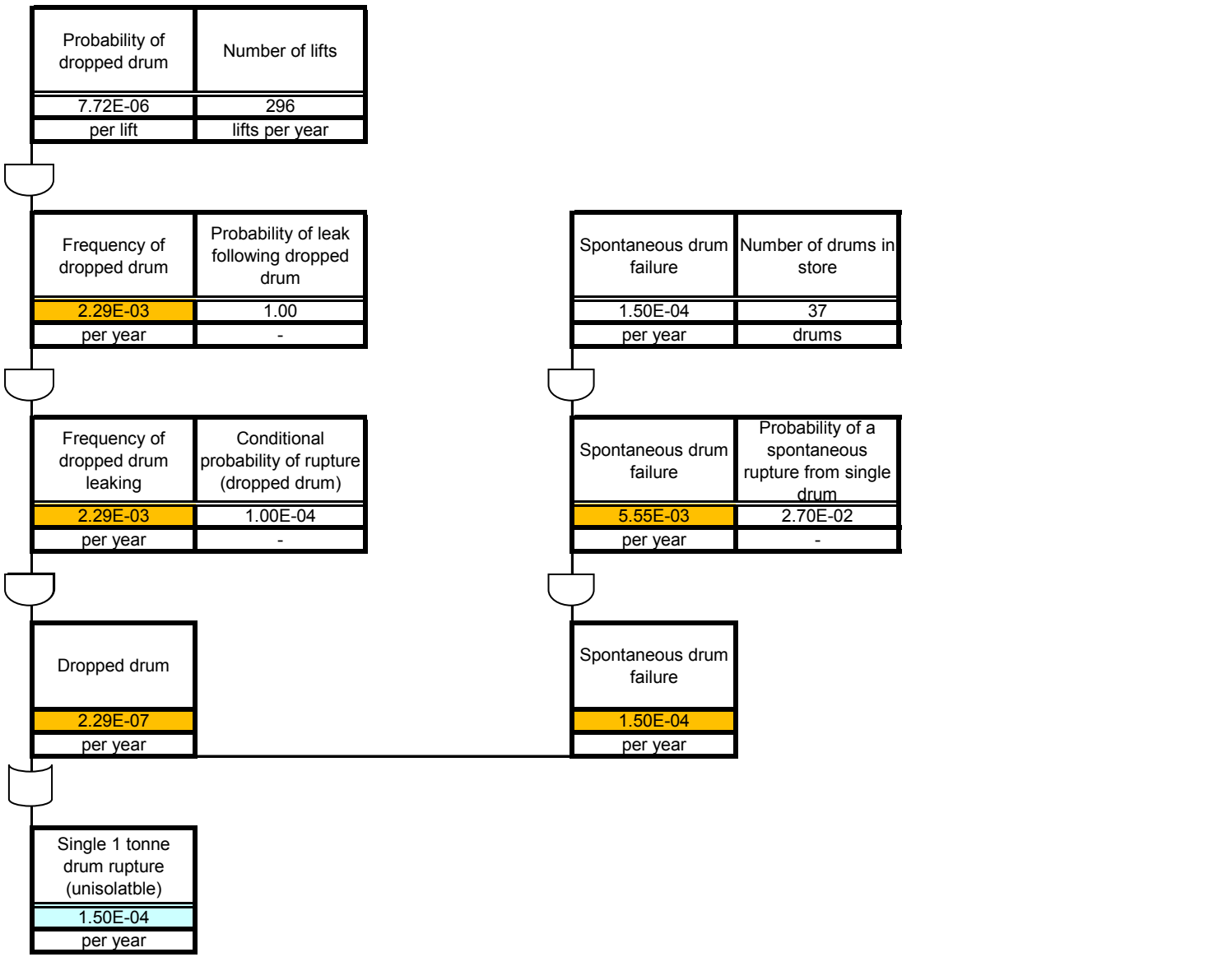
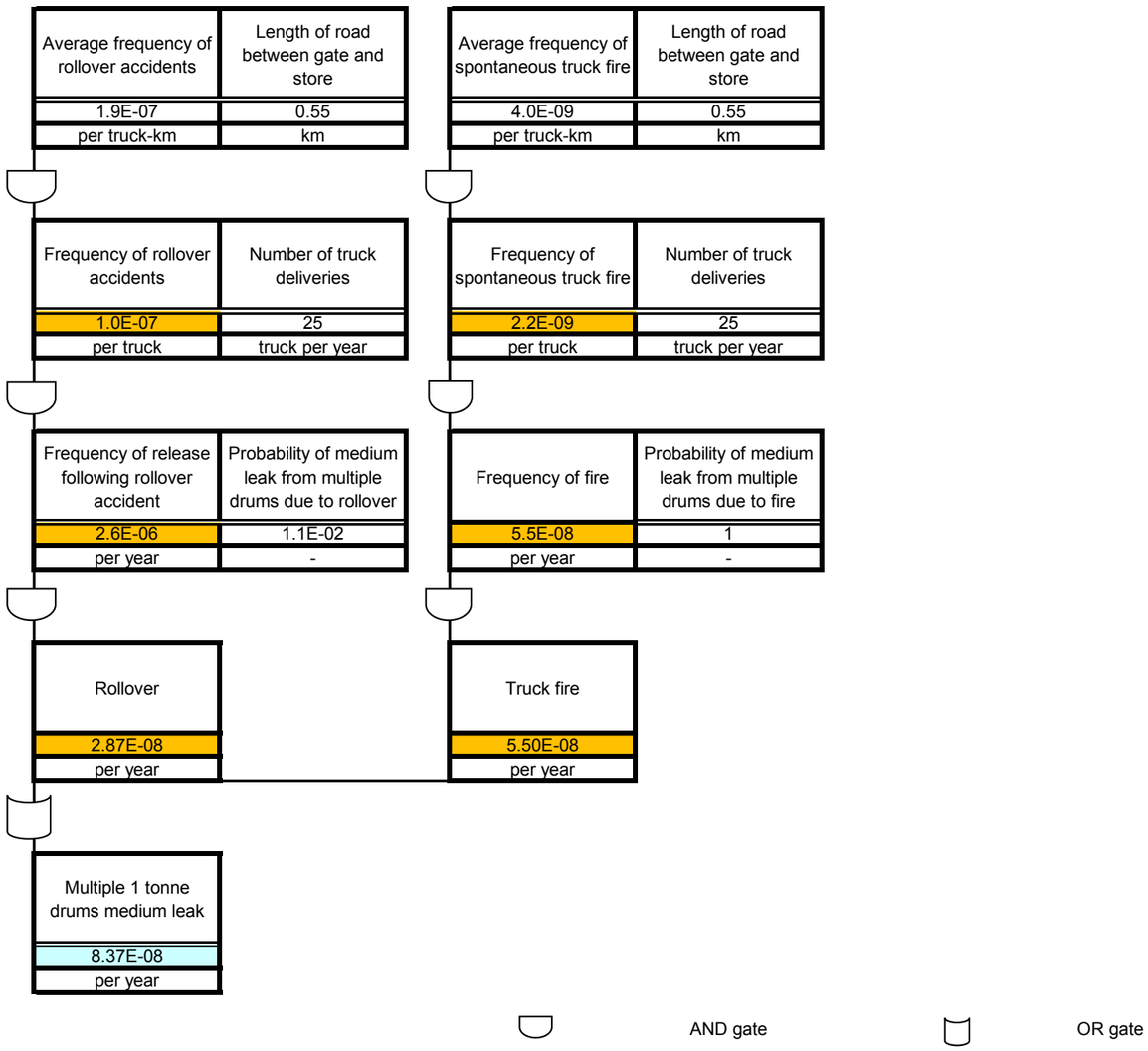
IU1TSRU (Internal Release) Rupture from Single 1 tonne Drum (in store)

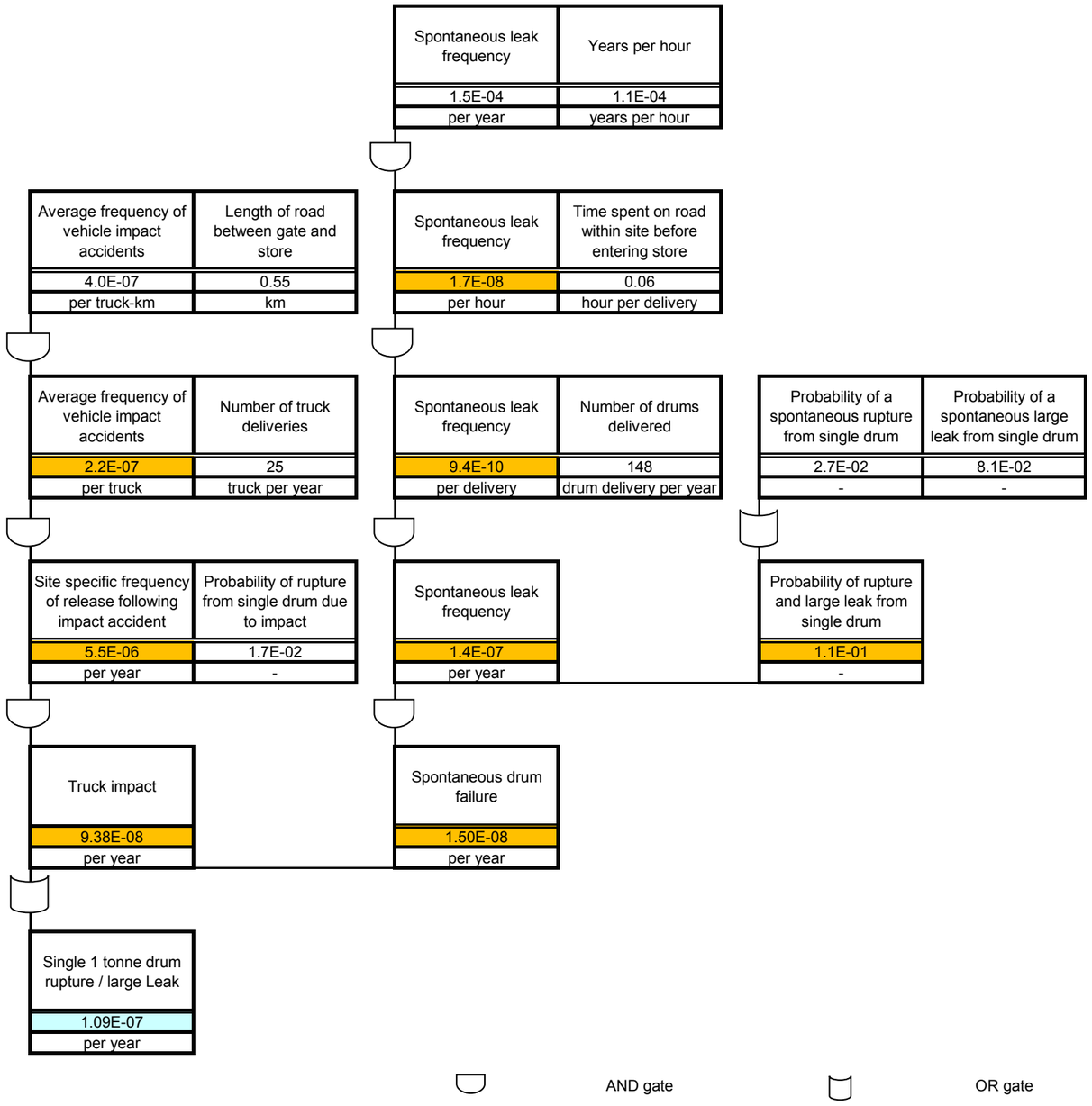


R1TSML (External Release) Medium Leak from Single 1 tonne Drum (on Road)

R1TMML (External Release) Medium Leak from Multiple 1 tonne Drum (on Road)



R1TSRU (External Release) Rupture and Large Leak from Single 1 tonne Drum (on Road)



x	y	Ft	Fl	take-off	landing			Total No. of flights	Total No. of airways	Landing accident prob	Take off accident prob. per flight
27.6	14.5	4.7E-17	9.3E-11	8.91E-20	1.19E-13			377560	8	2.70E-08	4.00E-08
27.6	16	1.1E-17	6.9E-11	1.99E-20	8.79E-14	2.07E-13	7.44E-17	377560	8	2.70E-08	4.00E-08

07L Take-off	25R Landing	07R Take-off	25L Landing
50%	50%	50%	50%
3%	26%	67%	4%

Airplane Crash Frequencies

Desalination Plant	Distance from Runway Threshold (km)				Crash Frequency (/km^2/yr)*					Chlorine drums Store Area (m^2)**	Impact Frequency (/yr)
	07L/25R		07R/25L		07L Take-off	25R Landing	07R Take-off	25L Landing	Total		
	x	*y*	*x*	*y*							
Chlorine store	27.6	16	27.6	14.5	1.19E-21	4.57E-14	1.19E-19	9.50E-15	5.52E-14	1000	5.52E-17

* Take-offs to the west on runways 25L/R, and landings from the west on runways 07L/R will not contribute to the crash frequencies impacting on the desalination plant

** Size of chlorine drums storage area is about 28m x 20m. Conservatively assumed as 1000 m2.

Distribution of landing/takeoff in the HK Int. airport (April08 - March09):-

Landing:
07L - 60%
07R - 10%
25R - 26%
25L - 4%

Take-off:
07L - 3%
07R - 67%
25R - 2%
25L - 28%