Fire Training - Sample Calculation

Fire Training Emission = Fuel Consumption * Emission Index

Table 1: Info from Questionnaires

	5-Year Total Fuel Consumption (2007-2011)	5-Year Total Number of Trainings (2007-2011)	Total Number of Trainings (2031)	Fuel Consumption per Training [1]	Unit	Fuel Density (kg/L) [2]	2031 Fuel Consumption (Litres)
Kerosene	145000	426	126	340.38	L		42887.3
LPG	3920	426	126	9.20	kg	0.56	2070.4

Note:
[1] Fuel Consumption per Tranining = (Total Fuel Consumption in 2007-2011) / (Total Number of Trainings in 2007-2011)
[2] Source: Shell HK MSDS (http://s08.static-shell.com/content/dam/shell/static/hkg-en/downloads/lpg/material-safety-datasheetslpgen.pdf)

Table 2: Emission Indices (from EDMS Database)

	CO (kg / L)	VOC (kg / L)	NO_x (kg / L)	SO_2 (kg / L)	RSP (kg / L)
Kerosene	0.5377	0.0162	0.0040	0.0008	0.1215
LPG	0.0042	0.0038	0.0008	0.0000	0.0140

Table 3: Emission from Fire Training

	CO (kg)	VOC (kg)	NO_x (kg)	SO_2 (kg)	RSP (kg)	FSP (kg) [3]
Kerosene	23059	694	173	35	5211	5211
LPG	9	8	2	0	29	29
Total	23067	702	175	35	5240	5240

Note:
[3] To convert RSP to FSP, the conversion factor is 1.0. (Referenced from EDMS v5.1.4.1)