Emission factor for Shiu Wing Steel Limited (Iron and Steel Works)

With reference to the current Specified Process (SP) Licence [A0683]:

Emission Details

Source ID	Emissoin Rate (kg/hour)						Emissoin Rate (g/s)					
	CO	VOC	Nox	SO2	PM10	PM2.5 [1]	CO	VOC	Nox	SO2	PM10	PM2.5
EP1	246.2000	24.6200	-	-	12.3100	12.0023	68.3889	6.8389	-	-	3.4194	3.3340
EP2	0.4100	-	1.6400	0.0006	2.5200	2.4570	0.1139	-	0.4556	0.0002	0.7000	0.6825
EP3	3.0900	-	13.3800	0.4400	1.6700	1.6283	0.8583	-	3.7167	0.1222	0.4639	0.4523
EP4	-	-	-	-	0.0315	0.0307	-	-	-	-	0.0088	0.0085
EP5	-	-	-	-	0.0170	0.0166	-	-	-	-	0.0047	0.0046
EP6	0.5580	-	2.5900	0.1730	0.1840	0.1794	0.1550	-	0.7194	0.0481	0.0511	0.0498
EP7	-	-	-	-	0.4200	0.4095	-	-	-	-	0.1167	0.1138

Note [1] According to the USEPA AP-42 Section 12.5-Table 12.5-2, the mass fraction of PM2.5 is 97.5% of PM10. Hence, a correction factor of 0.975 is adopted to estimate the emission of PM2.5.

Dimensions

Source ID	Gas Flow Rate	Temperature	Exit Velocity	Diameter	Emission Height
	(m3/hour)	(K)	(m/s)	(m)	(mAG)
EP1	1655000	367	15.2	6.20	50
EP2	300000	325	15.7	2.60	35
EP3	99600	813	10.3	1.85	50
EP4	3500	303	10.8	0.34	16
EP5	1910	303	5.9	0.34	16
EP6	1080	753	14.9	0.16	7
EP7	-	-	-	-	0

Emission factor for ECO Aviation Fuel Services Ltd (Organic Chemical Works)

With reference to the current Specified Process (SP) Licence [L-25-018(1)]:

Emission Details

Source ID	Emissoin Rate (kg/hour)						Emissoin Rate (g/s)					
	CO	VOC	Nox	SO2	PM10	PM2.5	CO	VOC	Nox	SO2	PM10	PM2.5
EP1	-	-	-	-	-	-	-	-	-	-	-	-
EP2	-	-	-	-	-	-	-	-	-	-	-	-
EP3	-	-	-	-	-	-	-	-	-	-	-	-
EP4	-	-	-	-	-	-	-	-	-	-	-	-
EP5	-	-	-	-	-	-	-	-	-	-	-	-
EP6	-	-	-	-	-	-	-	-	-	-	-	-
EP7	-	-	-	-	-	-	-	-	-	-	-	-
EP8	-	-	-	-	-	-	-	-	-	-	-	-
EP9	-	-	-	-	-	-	-	-	-	-	-	-
EP10	-	-	-	-	-	-	-	-	-	-	-	-
EP11	-	-	-	-	-	-	-	-	-	-	-	-
EP12	-	-	14.4	0.027	0.16	0.16	-	-	4.0000	0.0075	0.0444	0.0444
EP13	-	-	14.4	0.027	0.16	0.16	-	-	4.0000	0.0075	0.0444	0.0444

Dimensions

Source ID	Gas Flow Rate	Temperature	Exit Velocity	Diameter	Emission Height
	(m3/hour)	(K)	(m/s)	(m)	(mAG)
EP1	120	298	0.30	0.35	34.6
EP2	120	298	0.30	0.35	34.6
EP3	120	298	0.30	0.35	34.6
EP4	120	298	0.30	0.35	34.6
EP5	120	298	0.30	0.35	34.6
EP6	120	298	0.30	0.35	34.6
EP7	120	298	0.30	0.35	34.6
EP8	120	298	0.30	0.35	34.6
EP9	0.19	298	0.00	0.10	4.0
EP10	0.034	298	0.00	0.10	4.1
EP11		298	0.00	0.10	4.0
EP12	15612	666.7	45.10	0.35	7.0
EP13	15612	666.7	45.10	0.35	7.0

Emission factor for Butterfly Beach Laundry

Industrial Chimneys

With reference to the USEPA AP-42 Section 1.3, Tables 1.3-1 & 1.3-6 :

Emission Factors

Emissoin Rate (g/L)					
CO	VOC	NOX	SO2 *	RSP	FSP
0.6	-	2.4	0.0852	0.12	0.03

Note * Assuming 0.005% sulphur content

Given

Operation Hour per day =	24	hour	[Referenced from the approved EIA Study "Tuen Mun - Chek Lap Kok Link"]
Fuel Usage =	559	kg/hour	
Fuel Density =	0.85	kg/L	

Source ID	Emissoin Rate (g/s)					
	CO	VOC	NOX	SO2 *	RSP	FSP
BBL_1	0.1096	-	0.4384	0.0156	0.0219	0.0055
BBL_2	0.1096	-	0.4384	0.0156	0.0219	0.0055
BBL_3	0.1096	-	0.4384	0.0156	0.0219	0.0055