

Annex A9-2 - Health Risk Assessment for Benzene & Vinyl Chloride during Aftercare Phase

Benzene

Unit Risk Factor

7.80E-06

ASR	Name	Approx. Maximum Height of Building (m)	Annual Concentration ($\mu\text{g}/\text{m}^3$)				Health Risk Level				
			GD	10m	20m	30m	GD	10m	20m	30m	Highest
A1-1	Proposed C&DM Handling Facility	30	0.00002	0.00002	0.00003	0.00004	1.6E-10	1.6E-10	2.3E-10	3.1E-10	3.1E-10
A1-2 (1)	Planned Industrial Uses in TKO 137 (South of Extension) - 1	30	0	0	0.00002	0.00075	0.0E+00	0.0E+00	1.6E-10	5.9E-09	5.9E-09
A1-2 (2)	Planned Industrial Uses in TKO 137 (South of extension) - 2 (outside 200m HKSG buffer distance)	30	0.00001	0.00002	0.00003	0.00006	7.8E-11	1.6E-10	2.3E-10	4.7E-10	4.7E-10
A1-3 (1)	Planned Industrial Uses in TKO 137 - (South of TVB City) 1	30	0.00003	0.00003	0.00003	0.00003	2.3E-10	2.3E-10	2.3E-10	2.3E-10	2.3E-10
A1-3 (2)	Planned Industrial Uses in TKO 137 - (South of TVB City) - 2 (outside 200m HKPSG buffer distance)	30	0.00002	0.00002	0.00003	0.00004	1.6E-10	1.6E-10	2.3E-10	3.1E-10	3.1E-10
A2	TVB City	30	0.00003	0.00003	0.00003	0.00003	2.3E-10	2.3E-10	2.3E-10	2.3E-10	2.3E-10
A3	HAESL	30	0.00002	0.00002	0.00002	0.00003	1.6E-10	1.6E-10	1.6E-10	2.3E-10	2.3E-10
A4	HAECO Component Overhaul Building	30	0.00002	0.00002	0.00002	0.00003	1.6E-10	1.6E-10	1.6E-10	2.3E-10	2.3E-10
A7	Yan Hing Machinery Industrial Building	30	0.00003	0.00003	0.00004	0.00005	2.3E-10	2.3E-10	3.1E-10	3.9E-10	3.9E-10
A8	Apple Daily	30	0.00003	0.00003	0.00003	0.00005	2.3E-10	2.3E-10	2.3E-10	3.9E-10	3.9E-10

Vinyl Chloride

Unit Risk Factor

8.80E-06

ASR	Name	Approx. Maximum Height of Building (m)	Annual Concentration ($\mu\text{g}/\text{m}^3$)				Health Risk Level				
			GD	10m	20m	30m	GD	10m	20m	30m	Highest
A1-1	Proposed C&DM Handling Facility	30	0	0	0	0.00001	0.0E+00	0.0E+00	0.0E+00	8.8E-11	8.8E-11
A1-2 (1)	Planned Industrial Uses in TKO 137 (South of Extension) - 1	30	0	0	0.00001	0.0001	0.0E+00	0.0E+00	8.8E-11	8.8E-10	8.8E-10
A1-2 (2)	Planned Industrial Uses in TKO 137 (South of extension) - 2 (outside 200m HKSG buffer distance)	30	0	0	0.00001	0.00001	0.0E+00	0.0E+00	8.8E-11	8.8E-11	8.8E-11
A1-3 (1)	Planned Industrial Uses in TKO 137 - (South of TVB City) 1	30	0.00001	0.00001	0.00001	0.00001	8.8E-11	8.8E-11	8.8E-11	8.8E-11	8.8E-11
A1-3 (2)	Planned Industrial Uses in TKO 137 - (South of TVB City) - 2 (outside 200m HKPSG buffer distance)	30	0	0	0.00001	0.00001	0.0E+00	0.0E+00	8.8E-11	8.8E-11	8.8E-11
A2	TVB City	30	0.00001	0.00001	0.00001	0.00001	8.8E-11	8.8E-11	8.8E-11	8.8E-11	8.8E-11
A3	HAESL	30	0	0	0	0.00001	0.0E+00	0.0E+00	0.0E+00	8.8E-11	8.8E-11
A4	HAECO Component Overhaul Building	30	0	0	0.00001	0.00001	0.0E+00	0.0E+00	8.8E-11	8.8E-11	8.8E-11
A7	Yan Hing Machinery Industrial Building	30	0.00001	0.00001	0.00001	0.00001	8.8E-11	8.8E-11	8.8E-11	8.8E-11	8.8E-11
A8	Apple Daily	30	0.00001	0.00001	0.00001	0.00001	8.8E-11	8.8E-11	8.8E-11	8.8E-11	8.8E-11

Total Risk

ASR	Name	Approx. Maximum Height of Building (m)	Total Health Risk Level				
			GD	10m	20m	30m	Highest
A1-1	Proposed C&DM Handling Facility	30	1.6E-10	1.6E-10	2.3E-10	4.0E-10	4.0E-10
A1-2 (1)	Planned Industrial Uses in TKO 137 (South of Extension) - 1	30	0.0E+00	0.0E+00	2.4E-10	6.7E-09	6.7E-09
A1-2 (2)	Planned Industrial Uses in TKO 137 (South of extension) - 2 (outside 200m HKSG buffer distance)	30	7.8E-11	1.6E-10	3.2E-10	5.6E-10	5.6E-10
A1-3 (1)	Planned Industrial Uses in TKO 137 - (South of TVB City) 1	30	3.2E-10	3.2E-10	3.2E-10	3.2E-10	3.2E-10
A1-3 (2)	Planned Industrial Uses in TKO 137 - (South of TVB City) - 2 (outside 200m HKPSG buffer distance)	30	1.6E-10	1.6E-10	3.2E-10	4.0E-10	4.0E-10
A2	TVB City	30	3.2E-10	3.2E-10	3.2E-10	3.2E-10	3.2E-10
A3	HAESL	30	1.6E-10	1.6E-10	1.6E-10	3.2E-10	3.2E-10
A4	HAECO Component Overhaul Building	30	1.6E-10	1.6E-10	2.4E-10	3.2E-10	3.2E-10
A7	Yan Hing Machinery Industrial Building	30	3.2E-10	3.2E-10	4.0E-10	4.8E-10	4.8E-10
A8	Apple Daily	30	3.2E-10	3.2E-10	3.2E-10	4.8E-10	4.8E-10