

APPENDIX 3.11

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**Detailed Assessment  
Results of Non-AQO  
Pollutants**

**Predicted Cumulative 1-hour Vinyl Chloride Concentration in ug/m<sup>3</sup> at various assessment height**

ASR ID	Location	Assessment Height (m)	Predicted 1-hr Vinyl Chloride Conc.	Predicted 1-hr Vinyl Chloride Conc. (with Background)*	Within Acute Reference Concentration of 1.8*10 <sup>5</sup> ug/m <sup>3</sup>
A1-1	West Ha Pak Nai	1.5	8.700E-04	2.276E+00	within
		5	8.700E-04	2.276E+00	within
		10	8.700E-04	2.276E+00	within
A1-2	West Ha Pak Nai	1.5	9.100E-04	2.276E+00	within
		5	9.100E-04	2.276E+00	within
		10	9.100E-04	2.276E+00	within
A1-3	West Ha Pak Nai	1.5	8.200E-04	2.276E+00	within
		5	8.200E-04	2.276E+00	within
		10	8.200E-04	2.276E+00	within
A1-4	East Ha Pak Nai	1.5	8.000E-04	2.276E+00	within
		5	8.000E-04	2.276E+00	within
		10	8.000E-04	2.276E+00	within
A2-1	Black Point Power Station (Office)	1.5	7.000E-04	2.276E+00	within
		5	7.000E-04	2.276E+00	within
		10	7.100E-04	2.276E+00	within
A3-1	STF Office	1.5	7.100E-04	2.276E+00	within
		5	7.400E-04	2.276E+00	within
		10	1.190E-03	2.276E+00	within
A4-1	Lung Kwu Sheung Tan	1.5	6.300E-04	2.276E+00	within
		5	6.300E-04	2.276E+00	within
		10	6.300E-04	2.276E+00	within

Note \* Background concentration = 2.275 ug/m<sup>3</sup>

Predicted Cumulative Annual Vinyl Chloride Concentration in ug/m<sup>3</sup> at various assessment height

ASR ID	Location	Assessment Height (m)	Predicted Annual Vinyl Chloride Conc.	Predicted Annual Vinyl Chloride Conc. (with Background)*	Predicted Individual Lifetime Risk **	Predicted Individual Risk Level per Year	Within Chronic Reference Concentration of 100 ug/m <sup>3</sup>	Within Individual Lifetime Risk 1E-6	Within Individual Lifetime Risk per year 1.4E-8
A1-1	West Ha Pak Nai	1.5	2.000E-05	2.275E+00	2.000E-11	2.857E-13	within	within	within
		5	2.000E-05	2.275E+00	2.000E-11	2.857E-13	within	within	within
		10	2.000E-05	2.275E+00	2.000E-11	2.857E-13	within	within	within
A1-2	West Ha Pak Nai	1.5	2.000E-05	2.275E+00	2.000E-11	2.857E-13	within	within	within
		5	2.000E-05	2.275E+00	2.000E-11	2.857E-13	within	within	within
		10	2.000E-05	2.275E+00	2.000E-11	2.857E-13	within	within	within
A1-3	West Ha Pak Nai	1.5	1.000E-05	2.275E+00	1.000E-11	1.429E-13	within	within	within
		5	1.000E-05	2.275E+00	1.000E-11	1.429E-13	within	within	within
		10	1.000E-05	2.275E+00	1.000E-11	1.429E-13	within	within	within
A1-4	East Ha Pak Nai	1.5	2.000E-05	2.275E+00	2.000E-11	2.857E-13	within	within	within
		5	2.000E-05	2.275E+00	2.000E-11	2.857E-13	within	within	within
		10	2.000E-05	2.275E+00	2.000E-11	2.857E-13	within	within	within
A2-1	Black Point Power Station (Office)	1.5	2.000E-05	2.275E+00	2.000E-11	2.857E-13	within	within	within
		5	2.000E-05	2.275E+00	2.000E-11	2.857E-13	within	within	within
		10	2.000E-05	2.275E+00	2.000E-11	2.857E-13	within	within	within
A3-1	STF Office	1.5	4.000E-05	2.275E+00	4.000E-11	5.714E-13	within	within	within
		5	5.000E-05	2.275E+00	5.000E-11	7.143E-13	within	within	within
		10	8.000E-05	2.275E+00	8.000E-11	1.143E-12	within	within	within
A4-1	Lung Kwu Sheung Tan	1.5	1.000E-05	2.275E+00	1.000E-11	1.429E-13	within	within	within
		5	1.000E-05	2.275E+00	1.000E-11	1.429E-13	within	within	within
		10	1.000E-05	2.275E+00	1.000E-11	1.429E-13	within	within	within

Note \* Background concentration = 2.275 ug/m<sup>3</sup>

Note \*\* Unit Risk Factor = 0.000001ug/m<sup>3</sup>

**Predicted Cumulative 1-hour Benzene Concentration in ug/m<sup>3</sup> at various assessment height**

ASR ID	Location	Assessment Height (m)	Predicted 1-hr Benzene Conc.	Predicted 1-hr Benzene Conc. (with Background)*	Within Acute Reference Concentration of 1.3*10 <sup>3</sup> ug/m <sup>3</sup>
A1-1	West Ha Pak Nai	1.5	1.290E-03	3.951E+00	within
		5	1.290E-03	3.951E+00	within
		10	1.300E-03	3.951E+00	within
A1-2	West Ha Pak Nai	1.5	1.360E-03	3.951E+00	within
		5	1.360E-03	3.951E+00	within
		10	1.360E-03	3.951E+00	within
A1-3	West Ha Pak Nai	1.5	1.220E-03	3.951E+00	within
		5	1.220E-03	3.951E+00	within
		10	1.230E-03	3.951E+00	within
A1-4	East Ha Pak Nai	1.5	1.180E-03	3.951E+00	within
		5	1.180E-03	3.951E+00	within
		10	1.180E-03	3.951E+00	within
A2-1	Black Point Power Station (Office)	1.5	1.050E-03	3.951E+00	within
		5	1.050E-03	3.951E+00	within
		10	1.070E-03	3.951E+00	within
A3-1	STF Office	1.5	1.080E-03	3.951E+00	within
		5	1.120E-03	3.951E+00	within
		10	1.910E-03	3.952E+00	within
A4-1	Lung Kwu Sheung Tan	1.5	9.300E-04	3.951E+00	within
		5	9.300E-04	3.951E+00	within
		10	9.300E-04	3.951E+00	within

Note \* Background concentration = 3.95 ug/m<sup>3</sup>

Predicted Cumulative Annual Benzene Concentration in ug/m<sup>3</sup> at various assessment height

ASR ID	Location	Assessment Height (m)	Predicted Annual Benzene Conc.	Predicted Annual Benzene Conc. (with Background)*	Predicted Individual Lifetime Risk Level **	Predicted Individual Risk Level per Year	Within Chronic Reference Concentration of 30 ug/m <sup>3</sup>	Within Individual Lifetime Risk 1E-6	Within Individual Lifetime Risk per year 1.4E-8
A1-1	West Ha Pak Nai	1.5	2.000E-05	3.950E+00	1.200E-10	1.714E-12	within	within	within
		5	2.000E-05	3.950E+00	1.200E-10	1.714E-12	within	within	within
		10	2.000E-05	3.950E+00	1.200E-10	1.714E-12	within	within	within
A1-2	West Ha Pak Nai	1.5	3.000E-05	3.950E+00	1.800E-10	2.571E-12	within	within	within
		5	3.000E-05	3.950E+00	1.800E-10	2.571E-12	within	within	within
		10	3.000E-05	3.950E+00	1.800E-10	2.571E-12	within	within	within
A1-3	West Ha Pak Nai	1.5	2.000E-05	3.950E+00	1.200E-10	1.714E-12	within	within	within
		5	2.000E-05	3.950E+00	1.200E-10	1.714E-12	within	within	within
		10	2.000E-05	3.950E+00	1.200E-10	1.714E-12	within	within	within
A1-4	East Ha Pak Nai	1.5	3.000E-05	3.950E+00	1.800E-10	2.571E-12	within	within	within
		5	3.000E-05	3.950E+00	1.800E-10	2.571E-12	within	within	within
		10	3.000E-05	3.950E+00	1.800E-10	2.571E-12	within	within	within
A2-1	Black Point Power Station (Office)	1.5	3.000E-05	3.950E+00	1.800E-10	2.571E-12	within	within	within
		5	3.000E-05	3.950E+00	1.800E-10	2.571E-12	within	within	within
		10	3.000E-05	3.950E+00	1.800E-10	2.571E-12	within	within	within
A3-1	STF Office	1.5	6.000E-05	3.950E+00	3.600E-10	5.143E-12	within	within	within
		5	8.000E-05	3.950E+00	4.800E-10	6.857E-12	within	within	within
		10	1.300E-04	3.950E+00	7.800E-10	1.114E-11	within	within	within
A4-1	Lung Kwu Sheung Tan	1.5	2.000E-05	3.950E+00	1.200E-10	1.714E-12	within	within	within
		5	2.000E-05	3.950E+00	1.200E-10	1.714E-12	within	within	within
		10	2.000E-05	3.950E+00	1.200E-10	1.714E-12	within	within	within

Note \* Background concentration = 3.95 ug/m<sup>3</sup>

Note \*\* Unit Risk Factor = 0.000006ug/m<sup>3</sup>

**Predicted Lifetime Health Risk of Benzene + Vinyl Chloride Concentration (ug/m<sup>3</sup>) at various assessment height**

ASR ID	Location	Assessment Height (m)	Predicted Individual Lifetime Risk Level (Benzene + Vinyl Chloride)	Predicted Individual Lifetime Risk Level per year (Benzene + Vinyl Chloride)	Within Individual Lifetime Risk of 1x10 <sup>-6</sup>	Within Individual Lifetime Risk of 1.4x10 <sup>-8</sup>
A1-1	West Ha Pak Nai	1.5	1.400E-10	2.000E-12	within	within
		5	1.400E-10	2.000E-12	within	within
		10	1.400E-10	2.000E-12	within	within
A1-2	West Ha Pak Nai	1.5	2.000E-10	2.857E-12	within	within
		5	2.000E-10	2.857E-12	within	within
		10	2.000E-10	2.857E-12	within	within
A1-3	West Ha Pak Nai	1.5	1.300E-10	1.857E-12	within	within
		5	1.300E-10	1.857E-12	within	within
		10	1.300E-10	1.857E-12	within	within
A1-4	East Ha Pak Nai	1.5	2.000E-10	2.857E-12	within	within
		5	2.000E-10	2.857E-12	within	within
		10	2.000E-10	2.857E-12	within	within
A2-1	Black Point Power Station (Office)	1.5	2.000E-10	2.857E-12	within	within
		5	2.000E-10	2.857E-12	within	within
		10	2.000E-10	2.857E-12	within	within
A3-1	STF Office	1.5	4.000E-10	5.714E-12	within	within
		5	5.300E-10	7.571E-12	within	within
		10	8.600E-10	1.229E-11	within	within
A4-1	Lung Kwu Sheung Tan	1.5	1.300E-10	1.857E-12	within	within
		5	1.300E-10	1.857E-12	within	within
		10	1.300E-10	1.857E-12	within	within