

## Provision of Cremators at Wo Hop Shek Crematorium

### Emission Rates of PM, HCl, CO, organic compounds, Hg, dioxins, sulphur dioxide and nitrogen dioxide

Parameter	Target Emission Limits	Flue Gas Volumetric Flow Rate <sup>1</sup> , m <sup>3</sup> /hour			Emission Rate, g/s		
		100kg cremator	170kg cremator	250kg cremator	100kg cremator	170kg cremator	250kg cremator
Particulate matter <sup>1</sup>	40 mg/m <sup>3</sup>	1,798	1,798	2,318	0.01998	0.01998	0.02576
Hydrogen Chloride (excluding particulate matter) <sup>1</sup>	30 mg/m <sup>3</sup>	1,798	1,798	2,318	0.01498	0.01498	0.01932
Carbon monoxide <sup>1</sup>	100 mg/m <sup>3</sup> (60 minute average)	1,798	1,798	2,318	0.04994	0.04994	0.06439
Organic compounds (excluding particulate matter and expressed as total carbon) <sup>1</sup>	20 mg/m <sup>3</sup>	1,798	1,798	2,318	0.00999	0.00999	0.01288
Mercury <sup>1</sup>	0.05 mg/m <sup>3</sup>	1,798	1,798	2,318	2.4972E-05	2.4972E-05	3.2194E-05
Dioxins <sup>1</sup>	0.1 ng/m <sup>3</sup>	1,798	1,798	2,318	4.9944E-11	4.9944E-11	6.4389E-11
Sulphur Dioxide <sup>2</sup>	180 mg/m <sup>3</sup>	1,798	1,798	2,318	0.08990	0.08990	0.11590
Nitrogen Oxides <sup>2</sup>	380 mg/m <sup>3</sup>	1,798	1,798	2,318	0.18979	0.18979	0.24468
Nitrogen Dioxide <sup>3</sup>	- mg/m <sup>3</sup>	1,798	1,798	2,318	0.03796	0.03796	0.04894

#### Notes:

1. All under the same condition: 273K, 1atm, 11% oxygen and dry. Reference: EIA Report for Fu Shan and Diamond Hill Crematorium and these are the best available information at this stage.
2. Emission limits adopted from the Ministry of Public Safety & Solicitor General, British Columbia, Canada - Crematorium Operations and Emissions.
3. Assume 20% of NO<sub>x</sub> to be NO<sub>2</sub>.

**Emission Rates of odour**

Parameter	Odour Concentration <sup>1</sup> , OU	Flue Gas Volumetric Flow Rate <sup>1</sup> , m <sup>3</sup> /hour			Emission Rate, OU-m <sup>3</sup> /s		
		100kg cremator	170kg cremator	250kg cremator	100kg cremator	170kg cremator	250kg cremator
Odour	325 OU	1,575.4	1,575.4	2,898.5	142.2	142.2	261.7

Notes:

1. All under the same condition: 298K, 1atm, 11% oxygen and dry. Reference: EIA Report Diamond Hill Crematorium and the above are the best available information at this stage as confirmed by ArchSD.