

Appendix 3F Details of Industrial Emission Sources

AQO Pollutant Emission Inventory for Industrial Emissions

Industrial Source	Source ID	Type	X	Y	Base Elevation ftspDI	Release Height ftm	Exit Temperature K	Exit Velocity m/s	Internal Diameter ftm	X-dim ftm	Y-dim ftm	Angle °	Emission Rate Referenced from Specified License						Emission Rate Referenced from TM [1]			Operation Hour per Day			
			ftm	ftm									RSP	SP	NOx	SO ₂	CO	PM ₁₀	RSP	SP	NOx				
													g/s	g/s	g/s	g/s	g/s	g/s	g/s	g/s	g/s	g/s	g/s	g/s	g/s
Hudson Environmental Technology Limited (HETL)	HET1	POINT	809307	829223	4.3	16.0	423	27.98	0.20	-	-	-	1.111E-02	-	1.111E-02	-	1.331E-01	2.806E-02	2.806E-02	2.778E-04	-	-	-	assumed 24-hour in APCP	

Notes:

- [1] Reference was made to the approved "Final Air Quality Impact Assessment Report of Provision of Consultancy Services for Air Quality Impact Assessment at West New Territories Landfill Extension" and the latest information at the time of the I-PARK2 EIA.
- [2] Chimney parameters (stack height, exhaust temperature, exhaust velocity and chimney diameter) and emission from Hong Kong Asphalt (Green) Limited was made reference to the respective specified license (License No. L-15-029(S)-A0766) and approved "Final Air Quality Impact Assessment Report of Provision of Consultancy Services for Air Quality Impact Assessment at West New Territories Landfill Extension".
- [3] Chimney parameters (stack height, exhaust temperature, exhaust velocity and chimney diameter) and emission from T. Park was made reference to the respective specified license (License No. L-12-009(3)-A0737) and approved "Final Air Quality Impact Assessment Report of Provision of Consultancy Services for Air Quality Impact Assessment at West New Territories Landfill Extension". The emission rates of TPA1-2 and TP81-2 were reference to the maximum emission rate stated in the specified license.
- [4] Chimney parameters (stack height, exhaust temperature, exhaust velocity and chimney diameter) and emission details from power generation units from BPPS (BPS1-BPS4) was provided by EPD and made reference to the respective specified license (License No. L-7-011(13)-A0833a). Emissions from other gas heaters (BPS-BP17) have been referenced to the respective SP license and APCP. The emission rates referenced from its SP license were adopted for short-term impact assessment while the emission rates referenced from 9th TM were adopted for long-term impact assessment.
- [5] Chimney parameters (stack height, exhaust temperature, exhaust velocity and chimney diameter) and emission details from Castle Peak Power Station was provided by EPD and made reference to the respective SP license. Due to decommissioning of units 1-3, CPA1 represents unit 4 only. The emission rates referenced from its SP license were adopted for short-term impact assessment while the emission rates referenced from 9th TM were adopted for long-term impact assessment. Emission profile extracted from PATH V3.0 Model was adopted for CPA1 and CP81 for short-term impact assessment.
- [6] Chimney parameters (stack height, exhaust temperature, exhaust velocity and chimney diameter) and emission from Green Island Cement Plant was made reference to the respective specified license (License No. L-3-003(B)-A0823) and approved "Final Air Quality Impact Assessment Report of Provision of Consultancy Services for Air Quality Impact Assessment at West New Territories Landfill Extension".
- [7] Chimney parameters (stack height, exhaust temperature, exhaust velocity and chimney diameter) and emission from Hip On Concrete (Hong Kong) Limited was made reference to the respective specified license (License No. L-3-2016)-A0722a) and approved "Final Air Quality Impact Assessment Report of Provision of Consultancy Services for Air Quality Impact Assessment at West New Territories Landfill Extension".
- [8] Chimney parameters (stack height, exhaust temperature, exhaust velocity and chimney diameter) and emission from Road Asphalt Limited was made reference to the respective specified license (License No. L-15-037(2)-A0840) and approved "Final Air Quality Impact Assessment Report of Provision of Consultancy Services for Air Quality Impact Assessment at West New Territories Landfill Extension".
- [9] Chimney parameters (stack height, exhaust temperature, exhaust velocity and chimney diameter) and emission from Hudson Environmental Technology Limited was made reference to the respective specified license (License No. L-26-005(1)-A0872).
- [10] 24 hrs is adopted as the operation period for assessment for Hudson Environment Technology Limited.
- [11] In accordance with the "Ninth Technical Memorandum for Allocation of Emission Allowances in Respect of Specified Licences", the emission allowances after Year 2026 to be allocated to the respective power stations were used in long term (annual) cumulative air quality assessment.

Appendix 3F Details of Industrial Emission Sources

Non-AQO Pollutant Emission Inventory for Industrial Emissions

Industrial Source	Source ID	Emission Rate																	Operation Hour per Day						
		Hg (g/s)	Cd (g/s)	Tl (g/s)	As (g/s)	Sb (g/s)	Cr (VI) (g/s)	Co (g/s)	Cu (g/s)	Mn (g/s)	Ni (g/s)	V (g/s)	HCl (g/s)	HF (g/s)	Be (g/s)	Zn (g/s)	Dioxin&Furans (g I-TEQ/s)	TOC (g/s)		VOCs (g/s)	PAHs (g/s)	PCBs (g/s)	NH3 (g/s)		
	RA10 13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24 Hour
	RA10 14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RA10 15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RA11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RA12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RA13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RA14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RA15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RA16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RA17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hudson Environmental Technology Limited (HET)	HET1	2.778E-05	2.778E-05	2.778E-05	2.778E-04	2.778E-04	2.778E-04	2.778E-04	2.778E-04	2.778E-04	2.778E-04	2.778E-04	6.111E-03	5.556E-04	-	-	5.556E-11	1.111E-02	-	-	-	-	-	assumed 24-hour in A/CP	

Notes:

[1] Reference was made to the approved "Final Air Quality Impact Assessment Report of Provision of Consultancy Services for Air Quality Impact Assessment at West New Territories Landfill Extension" and the latest information at the time of the I-PARK EIA.

[2] Non-AQO pollutant emission from Hone Kone Asphalt (Green) Limited was made reference to the respective specified license (License No. L-15-029(5)-A0766)

[3] For Hg, Cd, Ti, HCl, HF, Dioxin&Furans and TOC, emission rate of T. Park was made reference to the respective specified license (License No. L-12-009(3)-A0737).

[4] Non-AQO pollutant emission from Black Point Power Station was made reference to the respective specified license (License No. L-7-011(13)-A0833a)

[5] Non-AQO pollutant emission from Castle Peak Power Station was made reference to the respective specified license (License No. L-7-003(13)-A0572b)

[6] Non-AQO pollutant emission from Green Island Cement Plant was made reference to the respective specified license (License No. L-3-003(8)-A0823)

[7] Non-AQO pollutant emission from Hio On Concrete (Hone Kone) Limited was made reference to the respective specified license (License No. L-3-201(4)-A0722a)

[8] Non-AQO pollutant emission from Road Asphalt Limited was made reference to the respective specified license (License No. L-15-037(2)-A0840)

[9] Non-AQO pollutant emission from Hudson Environmental Technology Limited was made reference to the respective specified license (License No. L-26-005(11)-A0872)

[10] 24 hrs is adopted as the operation period for assessment for Hudson Environment Technology Limited.

[11] The maximum emission rate of Total Heavy Metals among the four T-Park stacks referenced from monitoring data is adopted as the emission rate for the Heavy Metals (Sb, As, Cr, Co, Cu, Pb, Mn, Ni, V) in the assessment as a conservative scenario (Source: https://www.epd.gov.hk/epd/english/environment/hk/waste/data/data_stf.html). According to the information available from "Monitoring of Solid Waste in Hong Kong" between 2015 and 2022 (Source: <http://www.wastereduction.gov.hk/en-hk/resources-centre/waste-statistics>), about 1,000 tpd dewatered sewage sludge is currently treated at the T-PARK and so a factor of 2 is applied on the monitoring data to reflect the design capacity of 2,000 tpd for T-PARK. The characteristics of the dewatered sewage sludge are expected to remain similar in future and hence the past monitoring data are considered applicable.