

## **APPENDIX 4.16 Emission Inventory of Industrial Emissions**

## Emission Inventory of Industrial Emissions

Emission Point Label	Source Description	Type of Fuel	Source Type	Coordinates of Sources		Emission Rate				Emission Height	Exhaust Temperature		Outlet Length, L	Outlet Width, W	Approximate Air Flow Volume	Discharge rate at Exit Temp	Exit Velocity	Equiv. Stack dia.	Operating Period with Emissions	No. of Operating Days per Year	
						NO <sub>x</sub>	% of Initial NO <sub>2</sub> in NO <sub>x</sub>	RSP	FSP		SO <sub>2</sub>	°C									K
X	Y	g/s	g/s	g/s	mAG	m	m	Nm <sup>3</sup> /h	m <sup>3</sup> /s	m/s	m										
S1 [b]	Chimney of Restaurant	Diesel	Point	816230	830958	0.016643	10.0 [a]	0.000832	0.000208	0.00029	7.0	200.0	473.0	-	-	1,028	0.495	7.0	0.3	1000 - 1300 1600 - 2100	365
S2 [b]	Chimney of Roast Pig Factory	Wood	Point	816199	830877	0.011667	10.0 [a]	0.1275	0.1275	0.00167	20	200.0	473.0	-	-	1,028	0.495	7.0	1.5	0500 - 1300	365
S3 [c]	Castle Peak Hospital Chimney	Towngas	Point	815119	829978	8.29E-04	10.0 [a]	6.30E-05	6.30E-05	4.98E-06	18	-	322.0	-	-	-	-	0.1	0.3	24 hours	365
S4 [c]	Castle Peak Hospital Chimney	Towngas	Point	815117	829981	8.29E-04	10.0 [a]	6.30E-05	6.30E-05	4.98E-06	18	-	322.0	-	-	-	-	0.1	0.3	24 hours	365
S5 [c]	Castle Peak Hospital Chimney	Towngas	Point	815110	830009	8.29E-04	10.0 [a]	6.30E-05	6.30E-05	4.98E-06	18	-	322.0	-	-	-	-	0.1	0.3	24 hours	365
S6 [c]	Castle Peak Hospital Chimney	Towngas	Point	815110	830013	8.29E-04	10.0 [a]	6.30E-05	6.30E-05	4.98E-06	18	-	322.0	-	-	-	-	0.1	0.3	24 hours	365
S7 [c]	Castle Peak Hospital Chimney	Towngas	Point	815110	830016	8.29E-04	10.0 [a]	6.30E-05	6.30E-05	4.98E-06	18	-	322.0	-	-	-	-	0.1	0.3	24 hours	365
S8 [c]	Castle Peak Hospital Chimney	Towngas	Point	815461	830111	2.75E-03	10.0 [a]	2.09E-04	2.09E-04	1.65E-05	18	-	320.0	-	-	-	-	0.2	0.3	24 hours	365
S9 [c]	Castle Peak Hospital Chimney	Towngas	Point	815471	830113	2.75E-03	10.0 [a]	2.09E-04	2.09E-04	1.65E-05	18	-	320.0	-	-	-	-	0.2	0.3	24 hours	365
S10 [c]	Castle Peak Hospital Chimney	Towngas	Point	815277	829993	1.97E-03	10.0 [a]	1.50E-04	1.50E-04	1.18E-05	13	-	332.0	-	-	-	-	0.3	0.2	24 hours	365
S11 [c]	Castle Peak Hospital Chimney	Towngas	Point	815228	830047	4.51E-03	10.0 [a]	3.43E-04	3.43E-04	2.71E-05	22.5	-	330.0	-	-	-	-	0.3	0.2	24 hours	365
S12 [c]	Castle Peak Hospital Chimney	Towngas	Point	815233	830049	4.51E-03	10.0 [a]	3.43E-04	3.43E-04	2.71E-05	22.5	-	330.0	-	-	-	-	0.3	0.2	24 hours	365
S13 [c]	Castle Peak Hospital Chimney	Towngas	Point	815240	830050	4.51E-03	10.0 [a]	3.43E-04	3.43E-04	2.71E-05	22.5	-	330.0	-	-	-	-	0.3	0.2	24 hours	365
S14 [c]	Castle Peak Hospital Chimney	Towngas	Point	815334	830077	6.34E-03	10.0 [a]	4.82E-04	4.82E-04	3.81E-05	22.5	-	325.0	-	-	-	-	2.0	0.3	24 hours	365
S15 [c]	Castle Peak Hospital Chimney	Towngas	Point	815341	830078	6.34E-03	10.0 [a]	4.82E-04	4.82E-04	3.81E-05	22.5	-	325.0	-	-	-	-	2.0	0.3	24 hours	365
S16 [c]	Castle Peak Hospital Chimney	Towngas	Point	815351	830006	1.97E-03	10.0 [a]	1.50E-04	1.50E-04	1.18E-05	13	-	332.0	-	-	-	-	0.3	0.2	24 hours	365
S17 [c]	Castle Peak Hospital Chimney	Towngas	Point	815305	830171	3.10E-03	10.0 [a]	2.36E-04	2.36E-04	1.86E-05	18	-	330.0	-	-	-	-	0.4	0.2	24 hours	365
S18 [c]	Castle Peak Hospital Chimney	Towngas	Point	815310	830176	3.10E-03	10.0 [a]	2.36E-04	2.36E-04	1.86E-05	18	-	330.0	-	-	-	-	0.4	0.2	24 hours	365
AEP1 [b]	EP1 at Asphalt Plant at Lam Tei Quarry	-	Point	817504	830735	2.0	10.0 [c]	0.4722	0.4722	2.9333	21	-	323.15	-	-	-	-	12.03	1.0	24hrs	365
AEP2 [c]	EP2 at Asphalt Plant at Lam Tei Quarry	-	Point	817499	830738	-	-	0.0139	0.0139	-	10.2	-	298.15	-	-	-	-	0.48	0.43	24hrs	365
AEP3 [d]	EP3 at Asphalt Plant at Lam Tei Quarry	-	Point	817508	830747	-	-	0.0139	0.0139	-	12.56	-	298.15	-	-	-	-	0.48	0.43	24hrs	365

Note: [a] Boilers in Table 4.5 of Heathrow Airport EIA report ([http://www.cerc.co.uk/environmental-software/assets/data/doc\\_validation/ADMS-Airport\\_Adding%20Capacity\\_Air%20Quality.pdf](http://www.cerc.co.uk/environmental-software/assets/data/doc_validation/ADMS-Airport_Adding%20Capacity_Air%20Quality.pdf))

[b] Exit velocity and stack diameter could not be obtained from the operator. Hence, the details from the "Final PER of Agreement No. CE 60/2013 (CE) Engineering Study for Site Formation and Infrastructural Works at Hong Po Road" have been adopted.

[c] More recent fuel consumption data of chimneys at Castle Peak Hospital was not available at the time of submission. Hence, the emission details from the "Final PER of Agreement No. CE 60/2013 (CE) Engineering Study for Site Formation and Infrastructural Works at Hong Po Road" have been adopted.

[d] Emission details are obtained from the latest Specified Process License of the Asphalt Plant at Lam Tei Quarry.