A Rooftop Helipad at New Acute Hospital at Kai Tak Development Area Environmental Impact Assessment

Appendix 5C Construction Noise Calculations

## Construction of the Proposed Helipad and Associated Structures

Powered Mechanical Equipment (PME)	ID code	SWL dB(A)/unit	No. of PME	Total SWL, dB(A)	Horizontal dist, m	Operation time in any 30 min, min	% on time	Dist correction, dB(A)	% On time correction, dB(A)	Screening	Façade correction, dB(A)	Predicted Noise Level, dB(A)
Air Compressor, air flow < 10m3/min	CNP 001	100	1	100	249	30	100%	-55.9	0.0	0.0	3.0	47.1
Crane, tower (electric)	CNP 049	95	1	95	249	30	100%	-55.9	0.0	0.0	3.0	42.1
Breaker, hand-held, mass > 35kg	CNP 026	114	1	114	249	30	100%	-55.9	0.0	0.0	3.0	61.1
Welding Set	Note (1)	78	2	81	249	30	100%	-55.9	0.0	0.0	3.0	28.1
	•	•		•	•	•	•				Total	61

#### Note:

(1): SWL of Welding Plant was referenced from the approved EIA Report of West Kowloon Cultural District (Register No. AEIAR-178/2013).

# A Rooftop Helipad at New Acute Hospital at Kai Tak Development Area Environmental Impact Assessment

## Appendix 5C

**Construction Noise Calculations (Concurrent Projects)** 

## Concurrent Project: Site A of New Acute Hospital - Finishing Works

NSR - P03 - Proposed Residential Development at Kerry Dangerous Goods Warehouse (Kowloon Bay) 7 Kai Hing Road (NKIL 5813)												
Powered Mechanical Equipment (PME)	ID code	SWL dB(A)/unit	No. of PME	Total SWL, dB(A)	Horizontal dist, m	Operation time in any 30 min, min	% on time	Dist correction, dB(A)	% On time correction, dB(A)	Screening.	Façade correction, dB(A)	Predicted Noise Level, dB(A)
Drill, hand-held (battery)	Note (1)	89	15	101	186	15	50%	-53.4	-3.0	-5.0	3.0	42.4
Jig-saw, hand-held, wood (electric)	Note (1)	99	6	107	186	15	50%	-53.4	-3.0	-10.0	3.0	43.4
Saw, wire	Note (1)	101	6	109	186	15	50%	-53.4	-3.0	-10.0	3.0	45.4
Lorry, with crane/grab	Note (1)	105	12	116	186	15	50%	-53.4	-3.0	-5.0	3.0	57.4
											Total	58

### Concurrent Project: Site B of New Acute Hospital - Finishing Works

NSR - P03 - Proposed Residential Development at Kerry Dangerous Goods Warehouse (Kowloon Bay) 7 Kai Hing Road (NKIL 5813)												
Powered Mechanical Equipment (PME)	ID code	SWL dB(A)/unit	No. of PME	Total SWL, dB(A)	Horizontal dist, m	Operation time in any 30 min, min	% on time	Dist correction, dB(A)	% On time correction, dB(A)	Screening.	Façade correction, dB(A)	Predicted Noise Level, dB(A)
Drill, hand-held (battery)	Note (1)	89	8	98	512	15	50%	-62.2	-3.0	-5.0	3.0	30.8
Jig-saw, hand-held, wood (electric)	Note (1)	99	3	104	512	15	50%	-62.2	-3.0	-10.0	3.0	31.6
Saw, wire	Note (1)	101	3	106	512	15	50%	-62.2	-3.0	-10.0	3.0	33.6
Lorry, with crane/grab	Note (1)	105	6	113	512	15	50%	-62.2	-3.0	-5.0	3.0	45.6
	•	•		•	•		•	•		•	Total	46

#### Note:

(1): SWL of PMEs are referenced from "Sound Power Levels of Other Commonly Used PME" published by EPD.

## **Cumulative Construction Noise Level**

Cumulative Construction Noise Level										
NSR - P03 - Proposed Residential Development at Kerry Dangerous Goods Warehouse (Kowloon Bay) 7 Kai Hing Road (NKIL 5813)										
Concurrent Project	Predicted Noise Level, dB(A)	Predicted Cumulative Noise Level, dB(A)	Assessment Criteria, dB(A)							
The Project	61									
Site A of New Acute Hospital - Finishing Works	58	75	75							
Site B of New Acute Hospital - Finishing Works	46	75	75							
Trunk Road T2	75									