Appendix 4.5 Construction Plant Inventory (Mitigated Scenario)

Poker, vibratory, hand-held

Bar bender and cutter (electric)

Crane, mobile/barge mounted (diesel)

Lorry

1. Road Works 1a - Road Widening						
PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item, dB(A)	Utilization Rate (%)	Barrier Correction, dB(A)	Sub-total SWL, dB(A
Lorry	OCUPME-42	1	105	100%	-5	100
Excavator	EPD-13453	1	91	100%	-5	86
Generator, Silenced	EPD-13286	1	88	100%	-15	73
Breaker, hand-held, mass > 10kg and < 20kg	EPD-12721	1	99	100%	-10	89
Dump Truck	OCUPME-46	1	105	100%	-5	100
Jan., P. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.					Total SWL	103
1b - Road paving						
PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item, dB(A)	(%)	Barrier Correction, dB(A)	Sub-total SWL, dB(A)
Asphalt paver	EPD-12854	1	104	100%	-5	99
Road Roller	EPD-13135	1	97	100%	-5	92
Dump Truck	OCUPME-46	1	105	50%	-5	97
Paint line marker	OCUPME-30	1	87	100%	-5	82
					Total SWL	102
1c - Piers	TM Dof / other		014/1 / 16	11411	Barrian Oarra atlan	
PME	TM Ref./ other Ref [1][2]	No. of Items	dB(A)	(%)	Barrier Correction, dB(A)	Sub-total SWL, dB(A)
Generator, Silenced	EPD-13286	1	88	100%	-15	73
Air compressor	EPD-13031	2	94	100%	-15	82
Concrete pump, stationary/lorry mounted	CNP 047	1	109	50%	-15	91
Poker, vibratory, hand-held	OCUPME-27	1	102	50%	-10	89
Lorry	OCUPME-42	1	105	100%	-5	100
Crane, mobile/barge mounted (diesel)	EPD-13334	1	89	100%	-5	84
Bar bender and cutter (electric)	CNP 021	1	90	80%	-10	79
					Total SWL	101
<u>1d - Bridge Decks</u>	TM Ref./ other		CWI / Itam	Hilization Bata	Barriar Carraction	
PME	Ref [1][2]	No. of Items	dB(A)	(%)	Barrier Correction, dB(A)	Sub-total SWL, dB(A)
Generator, Silenced	EPD-13286	1	88	100%	-15	73
Air compressor	EPD-13031	2	94	100%	-15	82
Concrete pump, stationary/lorry mounted	CNP 047	1	109	50%	-15	91
Poker, vibratory, hand-held	OCUPME-27	1	102	50%	-10	89
Lorry	OCUPME-42	1	105	100%	-5	100
Crane, mobile/barge mounted (diesel)	EPD-13334	1	89	100%	-5	84
Bar bender and cutter (electric)	CNP 021	1	90	80%	-10	79
					Total SWL	101
2. Demolition						
PME	TM Ref./ other Ref ^{[1][2]}	No. of Items	SWL/ Item, dB(A)	Utilization Rate (%)	Barrier Correction, dB(A)	Sub-total SWL, dB(A)
Lorry	OCUPME-42	1	105	100%	-5	100
,			88	100%	-15	73
Generator, Silenced	EPD-13286	1	-	10070		
-	EPD-13286 EPD-13031	1 1	94	100%	-15	79
Generator, Silenced					-15 -10	
Generator, Silenced Air compressor	EPD-13031	1	94	100%		79
Generator, Silenced Air compressor	EPD-13031	1	94	100%	-10	79 96
Generator, Silenced Air compressor Quieter Type Blade Saw	EPD-13031	1	94 106	100% 100%	-10	79 96 101
Generator, Silenced Air compressor Quieter Type Blade Saw 3. Geotechnical Work	EPD-13031 [3] TM Ref./ other	1	94 106 SWL/ Item,	100% 100% Utilization Rate	-10 Total SWL Barrier Correction,	79 96 101
Generator, Silenced Air compressor Quieter Type Blade Saw 3. Geotechnical Work PME	EPD-13031 [3] TM Ref./ other Ref. ^{[1][2]}	1 1 No. of Items	94 106 SWL/ Item, dB(A)	100% 100% Utilization Rate (%)	-10 Total SWL Barrier Correction, dB(A)	79 96 101 Sub-total SWL, dB(A)
Generator, Silenced Air compressor Quieter Type Blade Saw 3. Geotechnical Work PME Excavator, mini-robot mounted Generator, Silenced	EPD-13031 [3] TM Ref./ other Ref. ^{[1][2]} OCUPME-16 EPD-13286	1 1 No. of Items	94 106 SWL/ Item, dB(A) 94	100% 100% Utilization Rate (%) 70% 70%	-10 Total SWL Barrier Correction, dB(A) -5	79 96 101 Sub-total SWL, dB(A)
Generator, Silenced Air compressor Quieter Type Blade Saw 3. Geotechnical Work PME Excavator, mini-robot mounted Generator, Silenced Air compressor	EPD-13031 [3] TM Ref./ other Ref. ^{[1][2]} OCUPME-16 EPD-13286 EPD-13031	1 1 No. of Items 1 1	94 106 SWL/ Item, dB(A) 94 88	100% 100% Utilization Rate (%) 70% 70% 70%	-10 Total SWL Barrier Correction, dB(A) -5 -15	79 96 101 Sub-total SWL, dB(A) 87 71
Generator, Silenced Air compressor Quieter Type Blade Saw 3. Geotechnical Work PME Excavator, mini-robot mounted Generator, Silenced	EPD-13031 [3] TM Ref./ other Ref. ^{[1][2]} OCUPME-16 EPD-13286	1 1 No. of Items 1 1	94 106 SWL/ Item, dB(A) 94 88 94	100% 100% Utilization Rate (%) 70% 70%	-10 Total SWL Barrier Correction, dB(A) -5 -15 -15	79 96 101 Sub-total SWL, dB(A) 87 71 77

OCUPME-27

OCUPME-42

EPD-13334

CNP 021

102

105

89

100%

50%

-10

-5

-5

-10

Total SWL

100

81

79

101

Appendix 4.5 Construction Plant Inventory (Mitigated Scenario)

4. Pile Wall Construction

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item, dB(A)	Utilization Rate (%)	Barrier Correction, dB(A)	Sub-total SWL, dB(A)
Crane, mobile/barge mounted (diesel)	EPD-13334	1	89	50%	-10	76
Drill rig, rotary type (diesel)	OCUPME-15	1	110	50%	-15	92
Rock drill, crawler mounted (hydraulic)	[5]	1	108	50%	0	105
Lorry	OCUPME-42	1	105	100%	-5	100
Air compressor	EPD-13031	1	94	70%	-15	77
Excavator/loader, wheeled/tracked	EPD-13453	1	91	50%	-5	83
Concrete pump, stationary/lorry mounted	CNP 047	1	109	50%	-15	91
					Total SWL	107

Remarks:

- [1] Reference of CNP refers to Table 3 of EPD's Technical Memorandum on Noise from Construction Work Other Than Percussive Piling.
- [2] Reference of OCUPME refer to EPD's guidance "Sound power levels of other commonly used PME"
- (https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf).
- [3] Reference was made to EPD's website on quieter construction equipment.
- (https://www.epd.gov.hk/epd/misc/construction_noise/contents/index.php/en/demolition/item/85-quieter-type-blade-saw.html)
- [4] Reference was made to EPD's website on quieter construction method.
- (https://www.epd.gov.hk/epd/misc/construction_noise/contents/index.php/en/foundation-works/item/27-press-in-method.html)
- [5] Reference was made to the approved EIA Report for Tsim Sha Tsui Station Northern Subway (EIA-154/2008).