

Appendix 4.5

PME Inventory

Area	Construction Activity	Unmitigated Scenario							
		Equipment	Reference Code [2]	No. of item	% on-time in 30 min	PME SWL, dB(A)	Unmitigated Sub-total SWL, dB(A)	Total SWL dB(A)	
1.1.1	1.1 Construction Access across Pak Ngan Heung River								
	1.1.1 Site Clearance & Mobilisation	Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109	114	
		Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	30%	108	103		
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	100%	95	95		
		Water pump (electric)	CNP 281	1	100%	88	88		
		Dump truck	CNP 067	1	30%	117	112		
	1.1.2	1.1.2 Construction of Crossing Bridge	Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109	116
			Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	100%	95	95	
			Water pump (electric)	CNP 281	1	50%	88	85	
			Dump truck	CNP 067	1	30%	117	112	
			Concrete lorry mixer	CNP 044	1	50%	109	106	
			Poker, vibratory, hand-held	CNP 170	1	50%	113	110	
1.2.1	1.2 Construction of Stormwater Pumping Station								
	1.2.1 Site Clearance & Mobilisation	Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109	114	
		Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	30%	108	103		
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	100%	95	95		
		Water pump (electric)	CNP 281	1	100%	88	88		
		Dump truck	CNP 067	1	30%	117	112		
	1.2.2	1.2.2 Excavation for Stormwater Pumping Station	Excavator/ loader, wheeled/ tracked	CNP 081	2	50%	112	112	115
			Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	100%	95	98	
			Water pump (electric)	CNP 281	2	100%	88	91	
			Dump truck	CNP 067	1	30%	117	112	
	1.2.3	1.2.3 Piling Works for Wet Well and Pumping Station	Piling, large diameter bored, reverse circulation drill	CNP 166	1	50%	100	97	114
			Drill rig, rotary type (diesel)	OCUPME-015	1	50%	110	107	
Air compressor, air flow > 30m ³ /min			CNP 003	2	50%	104	104		
Generator, super silenced, 70 dB(A) at 7 m			CNP 103	2	100%	95	98		
Water pump (electric)			CNP 281	2	100%	88	91		

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1.2.4	1.2.4 Concreting Works for Wet Well	Crane, mobile/ barge mounted (diesel)	CNP 048	2	50%	112	112			
		Concrete lorry mixer	CNP 044	1	80%	109	108	114		
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	100%	95	98			
		Poker, vibratory, hand-held	CNP 170	1	80%	113	112			
1.2.5	1.2.5 Superstructure for Pumping Station	Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109	114		
		Concrete lorry mixer	CNP 044	1	60%	109	107			
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	100%	95	98			
		Poker, vibratory, hand-held	CNP 170	1	50%	113	110			
1.2.6	1.2.6 E&M Installation for Pumping Station	Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109	109		
1.2.7	1.2.7 Reinstatement	Concrete lorry mixer	CNP 044	1	85%	109	108	114		
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	85%	95	94			
		Poker, vibratory, hand-held	CNP 170	1	85%	113	112			
1.3.1	1.3 Construction of Associated Drainage Works (Outlet Channel to River Silver)									
		Excavator/ loader, wheeled/ tracked	CNP 081	2	50%	112	112	115		
		Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	1	30%	108	103			
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	100%	95	98			
		Water pump (electric)	CNP 281	2	100%	88	91			
		Dump truck	CNP 067	1	30%	117	112			
		1.3.2	1.3.2 Excavation & Temporary Works	Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109	114
				Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	100%	95	95	
				Water pump (electric)	CNP 281	1	30%	88	83	
				Dump truck	CNP 067	1	30%	117	112	
		1.3.3	1.3.3 Formwork Erection, Reinforcement Fixing and Concreting	Concrete lorry mixer	CNP 044	1	50%	109	106	113
				Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	100%	95	95	
				Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109	

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1.3.4	1.3.4 Formwork Dismantling and Backfilling	Bar bender and cutter (electric)	CNP 021	1	50%	90	87	
		Poker, vibratory, hand-held	CNP 170	1	50%	113	110	
		Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109	114
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	100%	95	95	
		Roller, vibratory	CNP 186	1	50%	108	105	
		Dump truck	CNP 067	1	30%	117	112	
1.4.1	1.4 Construction of Associated Drainage Works (Ling Tsui Tau, Nam Bin Wai and Ma Po Tsuen) 1.4.1 Pipe-laying Works							
		Concrete lorry mixer	CNP 044	1	50%	109	106	113
		Winch (electric)	CNP 262	1	50%	95	92	
		Air blower (electric)	OCUPME-003	1	50%	95	92	
		Dump truck	CNP 067	1	30%	117	112	
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	100%	95	95	
1.4.2	1.4.2 Backfilling & Reinstatement	Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109	114
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	100%	95	95	
		Roller, vibratory	CNP 186	1	50%	108	105	
		Dump truck	CNP 067	1	30%	117	112	
1.5.1	1.5 Construction of Associated Drainage Works (River Crossing) 1.5.1 Construction of Launching Pit							
		Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109	114
		Dump truck	CNP 067	1	30%	117	112	
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	100%	95	95	
		Water pump (electric)	CNP 281	1	100%	88	88	
1.5.2	1.5.2 Equipment Setup	Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109	114
		Dump truck	CNP 067	1	30%	117	112	

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		Equipment	Reference Code [2]	No. of item	% on-time in 30 min	PME SWL, dB(A)	Unmitigated Sub-total SWL, dB(A)	Total SWL dB(A)	
3.2.1		Water pump (electric)	CNP 281	2	100%	88	91		
		Dump truck	CNP 067	1	30%	117	112		
		Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109		
		Poker, vibratory, hand-held	CNP 170	1	50%	113	110		
	3.2 Improvement Works Along Luk Tei Tong Bypass Channel and Luk Tei Tong River								
	3.2.1	3.2.1 Reconstruction of gabion walls	Crane, mobile/ barge mounted (diesel)	CNP 048	1	30%	112	107	114
			Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109	
			Dump truck	CNP 067	1	30%	117	112	
	3.2.2	3.2.2 Construction of box culvert	Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109	115
			Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109	
			Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	100%	95	95	
			Water pump (electric)	CNP 281	2	100%	88	91	
Dump truck			CNP 067	1	30%	117	112		
3.2.3	3.2.3 Construction of mechanical penstocks	Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109	115	
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	100%	95	98		
		Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109		
		Water pump (electric)	CNP 281	1	100%	88	88		
		Dump truck	CNP 067	1	30%	117	112		
4.1	4.1 Construction of Temporary Barrier across River Silver & Isolation from upstream flows	4. Construction of Tidal Gate and Other Associated Works							
		Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109	115	
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	100%	95	98		
		Water pump (electric)	CNP 281	2	100%	88	91		
		Dump truck	CNP 067	1	30%	117	112		
		Crane, mobile/ barge mounted (diesel)	CNP 048	1	30%	112	107		

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		Equipment	Reference Code [2]	No. of item	% on-time in 30 min	PME SWL, dB(A)	Unmitigated Sub-total SWL, dB(A)	Total SWL dB(A)
4.2	4.2 Concreting Works for Tidal Gate							
		Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109	114
		Concrete lorry mixer	CNP 044	1	50%	109	106	
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	100%	95	98	
		Poker, vibratory, hand-held	CNP 170	1	50%	113	110	
4.3	4.3 Delivery and E&M Installation for Tidal Gates							
		Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109	109
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	100%	95	98	
5. River Revitalisation and Associated Works								
5.1	5.1 Construction of Footpath along Luk Tei Tong Bypass Channel							
		Excavator/ loader, wheeled/ tracked	CNP 081	1	50%	112	109	115
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	2	100%	95	98	
		Dump truck	CNP 067	1	30%	117	112	
		Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109	
5.2	5.2 Softscape & Hardscape Works							
		Crane, mobile/ barge mounted (diesel)	CNP 048	1	50%	112	109	114
		Generator, super silenced, 70 dB(A) at 7 m	CNP 103	1	100%	95	95	
		Excavator/ loader, wheeled/ tracked	CNP 081	2	50%	112	112	

Notes:

[1] The figures are rounded-up to a whole number.

[2] Sound power levels of other commonly used PME (by EPD) (OCUPME -no.);

[3] EIA Ref 1 - The SWL of tunnelling machine has been made reference to the approved EIA Report of Desalination Plant at Tseung Kwan O (AEIAR-192/2015)