Project : Agreement No. CE18/2012(CE) - Development at Anderson Road Quarry - Investigation
Title : SWLs of PMEs

PME	% Operation	Corr, dB(A)	Unmitigated SWLs					Quiet Plant				Mitigated Scenario				
			ID	Description	Power rating Size, wieght	PME SWL, dB(A)	Unmitigated SWL, dB(A) [1]	ID	Power rating Size, wieght	PME SWL, dB(A)	Quiet Plant SWL, dB(A) [1]	Enclosure / Shed/ Silencer, dB(A)	Barrier, dB(A)	Acoustic Mat, dB(A)	Total Reduction, dB(A)	Mitigated SWL, dB(A) [1]
Air Compressor (CNP002) (100%)	100	0	CNP002	Air compressor, air flow > 10m3/min and =< 30 m3/min	-	102	102				102	-10			-10	92
Asphalt Paver (CNP004) (60%)	60	-2	CNP004	Asphalt paver	-	109	107	EPD-01226	VOLVO - ABG5770*	104	102		-5		-5	97
Asphalt Paver (CNP004) (70%)	70	-2	CNP004	Asphalt paver	-	109	107	EPD-01226	VOLVO - ABG5770*	104	102		-5		-5	97
Asphalt Paver (CNP004) (100%)	100	0	CNP004	Asphalt paver	-	109	109	EPD-01226	VOLVO - ABG5770*	104	104		-5		-5	99
Bar Bender, Cutter (CNP021) (10%)	10	-10	CNP021	Bar bender and cutter (electric)	-	90	80				80		-5		-5	75
Bar Bender, Cutter (CNP021) (20%)	20	-7	CNP021	Bar bender and cutter (electric)	-	90	83				83		-5		-5	78
Bar Bender, Cutter (CNP021) (30%)	30	-5	CNP021	Bar bender and cutter (electric)	-	90	85				85		-5		-5	80
Bar Bender, Cutter (CNP021) (50%)	50	-3	CNP021	Bar bender and cutter (electric)	-	90	87				87		-5		-5	82
Bar Bender, Cutter (CNP021) (100%)	100	0	CNP021	Bar bender and cutter (electric)	-	90	90				90		-5		-5	85
Breaker, handheld (CNP023) (100%)	100	0	CNP023	Breaker, hand held, masss =< 10 kg	-	108	108		(Ref: Atlas Copco - TEX 280PE)*	106	106		-5		-5	101
Breaker, handheld (CNP024) (20%)	20	-7	CNP024	Breaker, hand held, masss > 10kg and < 20 kg	-	108	101		(Ref: Atlas Copco - TEX 280PE)*	106	99		-5		-5	94
Breaker (CNP025) (20%)	20	-7	CNP025	Breaker, hand held, masss >= 20kg and =< 35 kg	-	111	104		(Ref: Atlas Copco - TEX 280PE)*	106	99		-5		-5	94
Breaker (CNP025) (30%)	30	-5	CNP025	Breaker, hand held, masss >= 20kg and =< 35 kg	-	111	106		(Ref: Atlas Copco - TEX 280PE)*	106	101		-5		-5	96
Breaker, excavator mounted (pneumatic) (CNP027) (30%)	30	-5	CNP027	Breaker, excavator mounted (pneumatic)	-	122	117		200kg (Ref: Sandhurst - XT-200)*	110	105		-5		-5	100
Breaker, Excavator Mounted (Hydraulic) (CNP028) (30%)	30	-5	CNP028	Breaker, excavator mounted (hydraulic)	-	122	117		73kW, 200kg	110	105		-5		-5	100
Bulldozer (CNP030) (30%)	30	-5	CNP030	Bulldozer	-	115	110	WSW EIA+	(Ref:Komatsu - D21A-8)*	102	97		-5		-5	92
Bulldozer (CNP030) (70%)	70	-2	CNP030	Bulldozer	-	115	113	WSW EIA+	(Ref:Komatsu - D21A-8)*	102	100		-5		-5	95
Bulldozer (CNP030) (100%)	100	0	CNP030	Bulldozer	-	115	115	WSW EIA+	(Ref:Komatsu - D21A-8)*	102	102		-5		-5	97
Concrete Lorry Mixer (CNP044) (30%)	30	-5	CNP044	Concrete lorry mixer	-	109	104				104		-5		-5	99
Concrete Lorry Mixer (CNP044) (50%)	50	-3	CNP044	Concrete lorry mixer	-	109	106				106		-5		-5	101
Concrete Lorry Mixer (CNP044) (70%)	70	-2	CNP044	Concrete lorry mixer	-	109	107				107		-5		-5	102
Concrete Lorry Mixer (CNP044) (100%)	100	0	CNP044	Concrete lorry mixer	-	109	109				109		-5		-5	104
Concrete pump (CNP047) (30%)	30	-5	CNP047	Concrete pump, stationary / lorry mounted	-	109	104				104		-5		-5	99
Concrete pump (CNP047) (50%)	50	-3	CNP047	Concrete pump, stationary / lorry mounted	-	109	106				106		-5		-5	101
Concrete pump (CNP047) (100%)	100	0	CNP047	Concrete pump, stationary / lorry mounted	-	109	109				109		-5		-5	104
Mobile Crane (CNP048) (20%)	20	-7	CNP048	Crane, mobile / barge mounted (diesel)	-	112	105		(Ref: Hitachi Sumitomo SCX700, 132kW)*	101	94		-5		-5	89
Mobile Crane (CNP048) (30%)	30	-5	CNP048	Crane, mobile / barge mounted (diesel)	-	112	107		(Ref: Hitachi Sumitomo SCX700, 132kW)*	101	96		-5		-5	91
Mobile Crane (CNP048) (40%)	40	-4	CNP048	Crane, mobile / barge mounted (diesel)	-	112	108		(Ref: Hitachi Sumitomo SCX700, 132kW)*	101	97		-5		-5	92
Mobile Crane (CNP048) (50%)	50	-3	CNP048	Crane, mobile / barge mounted (diesel)	-	112	109		(Ref: Hitachi Sumitomo SCX700, 132kW)*	101	98		-5		-5	93
Mobile Crane (CNP048) (100%)	100	0	CNP048	Crane, mobile / barge mounted (diesel)	-	112	112		(Ref: Hitachi Sumitomo SCX700, 132kW)*	101	101		-5		-5	96
Tower Crane (CNP049) (60%)	60	-2	CNP049	Crane, tower (electric)	-	95	93				93		-5		-5	88
Truck (CNP067) (30%)	30	-5	CNP067	Dump truck	-	117	112	CNP069	Dump Truck with Grab	105	100		-5		-5	95
Truck (CNP067) (50%)	50	-3	CNP067	Dump truck	-	117	114	CNP069	Dump Truck with Grab	105	102		-5		-5	97
Truck (CNP067) (100%)	100	0	CNP067	Dump truck	-	117	117	CNP069	Dump Truck with Grab	105	105		-5		-5	100
Dump Truck (CNP067) (10%)	10	-10	CNP067	Dump truck	-	117	107	CNP069	Dump Truck with Grab	105	95		-5		-5	90
Dump Truck (CNP067) (30%)	30	-5	CNP067	Dump truck	-	117	112	CNP069	Dump Truck with Grab	105	100		-5		-5	95
Dump Truck (CNP067) (50%)	50	-3	CNP067	Dump truck	-	117	114	CNP069	Dump Truck with Grab	105	102		-5		-5	97
Dump Truck (CNP067) (70%)	70	-2	CNP067	Dump truck	-	117	115	CNP069	Dump Truck with Grab	105	103		-5		-5	98
Backhoe (CNP081) (10%)	10	-10	CNP081	Backhoe	-	112	102	EPD-01145	CATERPILLAR - 320D*	99	89		-5		-5	84
Backhoe (CNP081) (50%)	50	-3	CNP081	Backhoe	-	112	109	EPD-01145	CATERPILLAR - 320D*	99	96		-5		-5	91
Backhoe (CNP081) (70%)	70	-2	CNP081	Backhoe	-	112	110	EPD-01145	CATERPILLAR - 320D*	99	97		-5		-5	92
Excavator (CNP081) (30%)	30	-5	CNP081	Excavator / loader, wheeled / tracked	-	112	107	EPD-01145	CATERPILLAR - 320D*	99	94		-5		-5	89
Excavator (CNP081) (50%)	50	-3	CNP081	Excavator / loader, wheeled / tracked	-	112	109	EPD-01145	CATERPILLAR - 320D*	99	96		-5		-5	91
Excavator (CNP081) (70%)	70	-2	CNP081	Excavator / loader, wheeled / tracked	-	112	110	EPD-01145	CATERPILLAR - 320D*	99	97		-5		-5	92
Generator (CNP101) (100%)	100	0	CNP101	Generator, standard	-	108	108	CNP103	Generator, super silenced, 70dB(A) at 7m	95	95	-10			-10	85
Generator (CNP103) (100%)	100	0	CNP 103	Generator, super silenced, 70dB(A) at 7m		95	95				95	-10			-10	85
Piling, Large Bored Pile (CNP166) (50%)	50	-3	CNP166	Piling, large dia bored, RCD	-	100	97				97			-10	-10	87
Piling machine (CNP166) (100%)	100	0	CNP166	Piling, large dia bored, RCD	-	100	100				100			-10	-10	90
Vibratory Poker (CNP170) (15%)	15	-8	CNP170	Poker, vibratory, hand held	-	113	105	CNP173	Poker, vibratory, hand-held (electric)	102	94		-5		-5	89
Vibratory Poker (CNP170) (20%)	20	-7	CNP170	Poker, vibratory, hand held	-	113	106	CNP173	Poker, vibratory, hand-held (electric)	102	95		-5		-5	90
Vibratory Poker (CNP170) (30%)	30	-5	CNP170	Poker, vibratory, hand held	-	113	108	CNP173	Poker, vibratory, hand-held (electric)	102	97		-5		-5	92
Vibratory Poker (CNP170) (40%)	40	-4	CNP170	Poker, vibratory, hand held	-	113	109	CNP173	Poker, vibratory, hand-held (electric)	102	98		-5		-5	93
Vibratory Poker (CNP170) (50%)	50	-3	CNP170	Poker, vibratory, hand held	-	113	110	CNP173	Poker, vibratory, hand-held (electric)	102	99		-5		-5	94
Vibratory Poker (CNP170) (100%)	100	0	CNP170	Poker, vibratory, hand held	-	113	113	CNP173	Poker, vibratory, hand-held (electric)	102	102		-5		-5	97
Rock drill, crawler mounted (hydraulic) (CNP182) (10%)	10	-10	CNP182	Rock drill, crawler mounted (hydraulic)	-	123	113	SIL EIA#	Approved SIL(E) EIA	108	98		-5		-5	93
Rock drill, crawler mounted (hydraulic) (CNP182) (60%)	60	-2	CNP182	Rock drill, crawler mounted (hydraulic)	-	123	121	SIL EIA#	Approved SIL(E) EIA	108	106		-5		-5	101
Rock drill, crawler mounted (hydraulic) (CNP182) (70%)	70	-2	CNP182	Rock drill, crawler mounted (hydraulic)	-	123	121	SIL EIA#	Approved SIL(E) EIA	108	106		-5		-5	101
Roller (CNP185) (30%)	30	-5	CNP185	Road Roller	-	108	103	EPD-01183	Hitachi CP220-3*	97	92		-5		-5	87
Roller (CNP185) (50%)	50	-3	CNP185	Road Roller	-	108	105	EPD-01183	Hitachi CP220-3*	97	94		-5		-5	89
Roller (CNP185) (100%)	100	0	CNP185	Road Roller	-	108	108	EPD-01183	Hitachi CP220-3*	97	97		-5		-5	92
Roller, Vibratory (CNP186) (20%)	20	-7	CNP186	Roller, vibratory	-	108	101				101		-5		-5	96
Saw, circular, wood (CNP201) (30%)	30	-5	CNP201	Saw, circular, wood	-	108	103		(Ref: Makita - BSS501Z, 2.6kg)*	103	98		-5		-5	93
Saw, circular, wood (CNP201) (50%)	50	-3	CNP201	Saw, circular, wood	-	108	105		(Ref: Makita - BSS501Z, 2.6kg)*	103	100		-5		-5	95
Saw, circular, wood (CNP201) (20%)	20	-7	CNP201	Saw, circular, wood	-	108	101		(Ref: Makita - BSS501Z, 2.6kg)*	103	96		-5		-5	91
Ventilation Fan (CNP241) (100%)	100	0	CNP241	Ventilation fan	-	108	108				108	-15			-15	93
Water pump (CNP281) (Electric) (100%)	100	0	CNP281	Water pump (electric)	-	88	88				88	-10			-10	78

Note: [1] SWL with utilisation rates adjustment
* PME is for reference only, contractor(s) can use other brands or series of this kind of PME with same or lower SWL.
# Reference to Approved South Island Land (East) EIA.
+ Reference to Approved Proposed Comprehensive Development at Wo Shang Wai, Yuen Long EIA