Appendix 4.4.1

SWL of PME

Title: SWL of PMEs

	Unmitigated SWLs				Quiet Plant				Mitigated Scenario				
PME	ID	Description	PME SWL, dB(A)	ID ^{[1][2][3]}	Power rating Size, wieght	PME SWL, dB(A)	Silencer, dB(A)	Acoustic Mat, dB(A)	Enclosure, dB(A)	Barrier, dB(A)	Total Reduction, dB(A)	Mitigated SWL, dB(A)	
Air Compressor	CNP002	Air compressor, air flow > 10m³/min and <= 30m³/min	102			53003010303030	000000000000000000000000000000000000000	3300331030333331030003103300331030033103003331030033310		-5	-5	97	
Air Compressor	CNP003	Air compressor, air flow > 30m ³ /min	104							-5	-5	99	
Asphalt Paver	CNP004	Asphalt paver	109	EPD-01226R	VOLVO, Model: ABG5770	104				-5	-5	99	
Bar Bender and Cutter	CNP021	Bar bender and cutter (electric)	90							-5	-5	85	
Hand Held Breaker	CNP025	Breaker, hand held, mass => 20kg and <= 35kg	111	EPD-12755	Hilti, TE 3000-AVR	108				-5	-5	103	
Breaker, excavator mounted	CNP027	Breaker, excavator mounted (pneumatic)	122	QCM#	Hydraulic Crusher	94				-5	-5	89	
Breaker, excavator mounted	CNP028	Breaker, excavator mounted (hydraulic)	122	QCM#	Hydraulic Crusher	94				-5	-5	89	
Concrete Corer	CNP042	Concrete corer	117							-5	-5	112	
Concrete Lorry Mixer	CNP044	Concrete lorry mixer	109							-5	-5	104	
Concrete Pump	CNP047	Concrete pump, stationary / lorry mounted	109						-15		-15	94	
Mobile Crane	CNP048	Crane, mobile / barge mounted (diesel)	112	EPD-13684	KOBELCO, Model:CKS900	101				-5	-5	96	
Compactor, vibratory	CNP050	Compactor, vibratory	105							-5	-5	100	
Drill, percussive, hand-held (electric)	CNP064	Drill, percussive, hand-held (electric)	103							-5	-5	98	
Grinder	CNP065	Drill / grinder, hand-held (electric)	98							-5	-5	93	
Dump Truck	CNP067	Dump truck, gross vehicle weight > 38 tonne	117							-5	-5	112	
Excavator	CNP081	Excavator / loader, wheeled / tracked	112	EPD-07150	YANMAR, Model: SV08-1A	90				-5	-5	85	
Generator	CNP101	Generator, standard	108	EPD-13064	DENYO, Model:DCA-45LSK	87						87	
Generator	CNP102	Generator, silenced, 75 db(A) at 7 m	100	EPD-13064	DENYO, Model: DCA-45LSK	87						87	
Generator	CNP103	Generator, super silenced, 70 db(A) at 7 m	95	EPD-13064	DENYO, Model: DCA-45LSK	87						87	
Hoist	CNP122	Hoist, passenger / material (electric)	95							-5	-5	90	
Hoist	CNP123	Hoist, passenger/material (Petrol)	104							-5	-5	99	
Lorry	CNP141	Lorry	112	CPME-042	Lorry, 5.5 tonnes <gross td="" tonne<="" vehicle="" weight="" ≤38=""><td>105</td><td></td><td></td><td></td><td>-5</td><td>-5</td><td>100</td></gross>	105				-5	-5	100	
Piling, Large Dia Bored, Reverse Circulation Drill	CNP166	Piling, large dia bored, reverse circulation drill	100							-5	-5	95	
Power Rammer (Petrol)	CNP169	Power rammer (petrol)	108	EPD-09746	Wacker Neuson, Model: BS60-4As	108				-10	-10	98	
Vibratory Poker	CNP170	Poker, vibratory, hand held	113	CPME-027	Poker, vibratory, hand-held (electric)	102				-10	-10	92	
Rock Drill	CNP181	Rock Drill, crawler mounted (pneumatic)	128					-10			-10	118	
Rock Drill	CNP183	Rock drill, hand-held (pneumatic)	116							-5	-5	111	
Road Roller	CNP185	Road Roller	108	EPD-09720	SAKAI, Model: SW502S-1	94				-5	-5	89	
Roller, Vibratory	CNP186	Roller, vibratory	108	EPD-09720	SAKAI, Model: SW502S-1	94				-5	-5	89	
Saw, Circular, Wood	CNP201	Saw, circular, wood	108	QCM#	Quieter Type Saw	107				-10	-10	97	
Saw, chain, hand-held	CNP202	Saw, chain, hand-held	114							-10	-10	104	
Saw, Concrete	CNP203	Saw / groover, concrete (petrol)	115							-10	-10	105	
Ventilation Fan	CNP241	Ventilation fan	108				-15				-15	93	
Water pump	CNP281	Water pump (electric)	88							-5	-5	83	
Water Pump, Submersible	CNP283	Water pump, submersible (electric)	85							-5	-5	80	
Air Blower (electric)	CPME-003	Air Blower (electric)	95							-5	-5	90	
Drill Rig	CPME-015	Drill Rig, rotary type (Diesel)	110							-5	-5	105	
Grout Mixer	CPME-021	Grout Mixer	90							-10	-10	80	
Grout Pump	CPME-022	Grout Pump	105							-10	-10	95	
Vibrating Hammer	CPME-026	Piling, vibrating hammer	115	QCM#	Silent Piling by Press-in Method	94				-10	-10	84	
Poker	CPME-027	Poker, vibratory, hand-held (electric)	102							-5	-5	97	
Lorry, with crane/grab	CPME-043	Lorry, with crane/grab, gross vehicle weight >38 tonne	112							-5	-5	107	
Dump Truck, with grab	CPME-047	Dump truck, with grab, 5.5 tonne < gross vehicle weight <=38 tonne	105							-5	-5	100	

^[1] PME with code "EPD-XXXXX" are quiet equipment with SWLs extracted from EPD's QPME inventory.
[2] The SWL of quiet plant with code "CPME#" are based on SWLs of other commonly used PME from https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf
[3] The SWL of quiet plant with code "QCM#" are based on SPL at 7m from equipment of quieter construction methods from https://www.epd.gov.hk/epd/misc/construction_noise/contents/index.php/en/index.html. Distance correction of + 20log(D) + 8 is applied to the referenced SPL.

Title: SWL of PMEs for Workfront FM2 (with retractable noise barrier)

	Unmitigated SWLs			Quiet Plant					Mitigated Scenario				
PME	ID	Description	PME SWL, dB(A)	ID ^{[1][2][3]}	Power rating Size, wieght	PME SWL, dB(A)	Silencer, dB(A)	Barrier, dB(A)	Total Reduction, dB(A)	Mitigated SWL, dB(A)			
Bar Bender and Cutter	CNP021	Bar bender and cutter (electric)	90					-10	-10	80			
Breaker, excavator mounted	CNP027	Breaker, excavator mounted (pneumatic)	122	QCM#	Hydraulic Crusher	94		-10	-10	84			
Breaker, excavator mounted	CNP028	Breaker, excavator mounted (hydraulic)	122	QCM#	Hydraulic Crusher	94		-10	-10	84			
Concrete Lorry Mixer	CNP044	Concrete lorry mixer	109					-10	-10	99			
Mobile Crane	CNP048	Crane, mobile / barge mounted (diesel)	112	EPD-13684	KOBELCO, Model:CKS900	101		-10	-10	91			
Compactor, vibratory	CNP050	Compactor, vibrator	105					-10	-10	95			
Excavator	CNP081	Excavator / loader, wheeled / tracked	112	EPD-07150	YANMAR, Model: SV08-1A	90		-10	-10	80			
Generator	CNP101	Generator, standard	108	EPD-13064	DENYO, Model:DCA-45LSK	87		-10	-10	77			
Generator	CNP102	Generator, silenced, 75 db(A) at 7 m	100	EPD-13064	DENYO, Model: DCA-45LSK	87		-10	-10	77			
Lorry	CNP141	Lorry	112	CPME-042	Lorry, 5.5 tonnes <gross td="" tonne<="" vehicle="" weight="" ≤38=""><td>105</td><td></td><td>-10</td><td>-10</td><td>95</td></gross>	105		-10	-10	95			
Power Rammer (Petrol)	CNP169	Power rammer (petrol)	108	EPD-09746	Wacker Neuson, Model: BS60-4As	108		-10	-10	98			
Vibratory Poker	CNP170	Poker, vibratory, hand held	113	CPME-027	Poker, vibratory, hand-held (electric)	102		-10	-10	92			
Road Roller	CNP185	Road Roller	108	EPD-09720	SAKAI, Model: SW502S-1	94		-10	-10	84			
Saw, Circular, Wood	CNP201	Saw, circular, wood	108					-10	-10	98			
Saw, chain, hand-held	CNP202	Saw, chain, hand-held	114					-10	-10	104			
Ventilation Fan	CNP241	Ventilation fan	108				-15		-15	93			
Water pump	CNP281	Water pump (electric)	88					-10	-10	78			
Air Blower (electric)	CPME-003	Air Blower (electric)	95					-10	-10	90			
Dump Truck, with grab	CPME-047	Dump truck, with grab, 5.5 tonne < gross vehicle weight <=38 tonne	105					-10	-10	95			

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[3] The SWL of quiet plant with code "QCM#" are based on SPL at 7m from equipment of quieter construction methods from https://www.epd.gov.hk/epd/misc/construction_noise/contents/index.php/en/index.html. Distance correction of + 20log(D) + 8 is applied to the referenced SPL.

Title: SWL of PMEs for Workfront AF3-b (with retractable noise barrier)

		Unmitigated SWLs			Quiet Plant				Mitigated Scenario			
PME	ĪD	Description	PME SWL, dB(A)	ID ^{[1][2][3]}	Power rating Size, wieght	PME SWL, dB(A)	Silencer, dB(A)	Barrier, dB(A)	Total Reduction, dB(A)	Mitigated SWL, dB(A)		
Bar Bender and Cutter	CNP021	Bar bender and cutter (electric)	90					-10	-10	80		
Breaker, excavator mounted	CNP027	Breaker, excavator mounted (pneumatic)	122	QCM#	Hydraulic Crusher	94		-10	-10	84		
Breaker, excavator mounted	CNP028	Breaker, excavator mounted (hydraulic)	122	QCM#	Hydraulic Crusher	94		-10	-10	84		
Mobile Crane	CNP048	Crane, mobile / barge mounted (diesel)	112	EPD-13684	KOBELCO, Model:CKS900	101		-10	-10	91		
Compactor, vibratory	CNP050	Compactor, vibrator	105					-10	-10	95		
Excavator	CNP081	Excavator / loader, wheeled / tracked	112	EPD-07150	YANMAR, Model: SV08-1A	90		-10	-10	80		
Generator	CNP101	Generator, standard	108	EPD-13064	DENYO, Model:DCA-45LSK	87		-10	-10	77		
Generator	CNP102	Generator, silenced, 75 db(A) at 7 m	100	EPD-13064	DENYO, Model: DCA-45LSK	87		-10	-10	77		
Lorry	CNP141	Lorry	112	CPME-042	Lorry, 5.5 tonnes <gross td="" tonne<="" vehicle="" weight="" ≤38=""><td>105</td><td></td><td>-10</td><td>-10</td><td>95</td></gross>	105		-10	-10	95		
Power Rammer (Petrol)	CNP169	Power rammer (petrol)	108	EPD-09746	Wacker Neuson, Model: BS60-4As	108		-10	-10	98		
Vibratory Poker	CNP170	Poker, vibratory, hand held	113	CPME-027	Poker, vibratory, hand-held (electric)	102		-10	-10	92		
Road Roller	CNP185	Road Roller	108	EPD-09720	SAKAI, Model: SW502S-1	94		-10	-10	84		
Saw, Circular, Wood	CNP201	Saw, circular, wood	108					-10	-10	98		
Ventilation Fan	CNP241	Ventilation fan	108				-15		-15	93		
Water pump	CNP281	Water pump (electric)	88					-10	-10	78		
Air Blower (electric)	CPME-003	Air Blower (electric)	95					-10	-10	90		
Dump Truck, with grab	CPME-047	Dump truck, with grab, 5.5 tonne < gross vehicle weight <=38 tonne	105					-10	-10	95		

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[3] The SWL of quiet plant with code "QCM#" are based on SPL at 7m from equipment of quieter construction methods from https://www.epd.gov.hk/epd/misc/construction_noise/contents/index.php/en/index.html. Distance correction of + 20log(D) + 8 is applied to the referenced SPL.