

Appendix 5.1 Unmitigated Construction Plant Inventory

PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)
Construction of Organic Waste Treatment Facility					
Activity 1 - Demolition and Site Clearance					
Group 1					
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	2	100%	105
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Breaker, excavator mounted (hydraulic)	CNP 028	122	2	100%	125
Total SWL, dB (A)					125
Group 2					
Excavator/ loader, wheeled/ tracked	CNP 081	112	2	100%	115
Total SWL, dB (A)					115
Group 3					
Bulldozer	CNP 030	115	2	100%	118
Lorry, with crane/grab, 5.5 tonne < gross vehicle weight <= 38 tonne	[1]	105	3	100%	110
Dump truck	CNP 067	117	2	100%	120
Total SWL, dB (A)					122
Maximum SWL, dB (A)					125
Activity 2 - Construction Piling					
Group 1					
Piling, diaphragm wall, bentonite filtering plant	CNP 162	105	2	100%	108
Piling, diaphragm wall, hydraulic extractor	CNP 163	90	2	100%	93
Crane, mobile/ barge mounted (diesel)	CNP 048	112	2	100%	115
Concrete lorry mixer	CNP 044	109	2	100%	112
Concrete pump, stationary/ lorry mounted	CNP 047	109	2	100%	112
Total SWL, dB (A)					118
Group 2					
Piling, large diameter bored, grab and chisel	CNP 164	115	2	100%	118
Piling, large diameter bored, oscillator	CNP 165	115	2	100%	118
Piling, large diameter bored, reverse circulation drill	CNP 166	100	2	100%	103
Crane, mobile/ barge mounted (diesel)	CNP 048	112	2	100%	115
Concrete lorry mixer	CNP 044	109	2	100%	112
Concrete pump, stationary/ lorry mounted	CNP 047	109	2	100%	112
Total SWL, dB (A)					123
Maximum SWL, dB (A)					123
Activity 3 - Site Formation					
Group 1					
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	2	100%	105
Excavator/ loader, wheeled/ tracked	CNP 081	112	2	100%	115
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Lorry, with crane/grab, 5.5 tonne < gross vehicle weight <= 38 tonne	[1]	105	3	100%	110
Total SWL, dB (A)					117
Group 2					
Excavator/ loader, wheeled/ tracked	CNP 081	112	2	100%	115
Water pump, submersible (electric)	CNP 283	85	4	100%	91
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	2	100%	105
Dump truck	CNP 067	117	2	100%	120
Total SWL, dB (A)					121
Group 3					
Concrete lorry mixer	CNP 044	109	2	100%	112
Concrete pump, stationary/ lorry mounted	CNP 047	109	2	100%	112
Poker, vibratory, hand-held	CNP 170	113	2	100%	116
Compactor, vibratory	CNP 050	105	2	100%	108
Roller, vibratory	CNP 186	108	2	100%	111
Total SWL, dB (A)					120
Maximum SWL, dB (A)					121
Activity 4 - Buildings (Pre-treatment, Office, Wastewater Treatment, Composting)					
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	2	100%	105
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	111	2	100%	114
Concrete lorry mixer	CNP 044	109	2	100%	112
Concrete pump, stationary/ lorry mounted	CNP 047	109	2	100%	112
Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	100%	112
Lorry, with crane/grab, 5.5 tonne < gross vehicle weight <= 38 tonne	[1]	105	3	100%	110
Poker, vibratory, hand-held	CNP 170	113	2	100%	116
Bar bender and cutter (electric)	CNP 021	90	4	100%	96
Drill/grinder, hand-held (electric)	CNP 065	98	4	100%	104
Saw, circular, wood	CNP 201	108	1	100%	108
Crane, tower (electric)	CNP 049	95	2	100%	98
Hoist, passenger/ material (electric)	CNP 122	95	2	100%	98
Air blower (electric)	[1]	95	4	100%	101
Total SWL, dB (A)					121

PME	TM or other reference	SWL, dB(A)	No. of PME	% on time	Total SWL, dB(A)
Construction of Organic Waste Treatment Facility					
Activity 5 - Road Widening					
Group 1					
Excavator/ loader, wheeled/ tracked	CNP 081	112	2	100%	115
Concrete lorry mixer	CNP 044	109	2	100%	112
Concrete pump, stationary/ lorry mounted	CNP 047	109	2	100%	112
Poker, vibratory, hand-held	CNP 170	113	2	100%	116
Dump truck	CNP 067	117	2	100%	120
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Total SWL, dB (A)					123
Group 2					
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Asphalt paver	CNP 004	109	2	100%	112
Roller, vibratory	CNP 186	108	2	100%	111
Road roller	CNP 185	108	2	100%	111
Total SWL, dB (A)					116
Maximum SWL, dB (A)					123
Activity 6 - Sewerage System Construction					
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	2	100%	105
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Breaker, hand-held, mass >= 20kg and <= 35kg	CNP 025	111	2	100%	114
Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	100%	112
Excavator/ loader, wheeled/ tracked	CNP 081	112	2	100%	115
Lorry, with crane/grab, 5.5 tonne < gross vehicle weight <= 38 tonne	[1]	105	3	100%	110
Concrete lorry mixer	CNP 044	109	2	100%	112
Concrete pump, stationary/ lorry mounted	CNP 047	109	2	100%	112
Poker, vibratory, hand-held	CNP 170	113	2	100%	116
Bar bender and cutter (electric)	CNP 021	90	4	100%	96
Compactor, vibratory	CNP 050	105	2	60%	106
Total SWL, dB (A)					122
Activity 7 - Landscaping					
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Excavator/ loader, wheeled/ tracked	CNP 081	112	2	100%	115
Lorry, with crane/grab, 5.5 tonne < gross vehicle weight <= 38 tonne	[1]	105	3	100%	110
Total SWL, dB (A)					116
Activity 8 - Process Plants and E&M Plants Installation					
Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	100%	112
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Lorry, with crane/grab, 5.5 tonne < gross vehicle weight <= 38 tonne	[1]	105	3	100%	110
Drill/grinder, hand-held (electric)	CNP 065	98	2	100%	101
Hoist, passenger/ material (electric)	CNP 122	95	2	100%	98
Total SWL, dB (A)					114
Activity 9 - Utilities Installation					
Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	100%	112
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Lorry, with crane/grab, 5.5 tonne < gross vehicle weight <= 38 tonne	[1]	105	3	100%	110
Air compressor, air flow > 10m3/min and <= 30m3/min	CNP 002	102	2	100%	105
Excavator/ loader, wheeled/ tracked	CNP 081	112	2	100%	115
Breaker, hand-held, mass > 10kg and < 20kg	CNP 024	108	2	100%	111
Hoist, passenger/ material (electric)	CNP 122	95	2	100%	98
Total SWL, dB (A)					119
Construction of Rising Main and Gas Pipeline					
Activity 1 - Rising Main Installation					
Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	100%	112
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Lorry, with crane/grab, 5.5 tonne < gross vehicle weight <= 38 tonne	[1]	105	1	100%	105
Total SWL, dB (A)					113
Activity 2 - Gas Pipeline Installation					
Crane, mobile/ barge mounted (diesel)	CNP 048	112	1	100%	112
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Lorry, with crane/grab, 5.5 tonne < gross vehicle weight <= 38 tonne	[1]	105	1	100%	105
Total SWL, dB (A)					113
Activity 3 - Minor Modification of Access Road					
Group 1					
Excavator/ loader, wheeled/ tracked	CNP 081	112	1	100%	112
Concrete lorry mixer	CNP 044	109	1	100%	109
Concrete pump, stationary/ lorry mounted	CNP 047	109	1	100%	109
Poker, vibratory, hand-held	CNP 170	113	1	100%	113
Dump truck	CNP 067	117	1	100%	117
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Total SWL, dB (A)					120
Group 2					
Generator, super silenced, 70 dB(A) at 7 m	CNP 103	95	1	100%	95
Asphalt paver	CNP 004	109	1	100%	109
Road roller	CNP 185	108	1	100%	108
Concrete lorry mixer	CNP 044	109	1	100%	109
Total SWL, dB (A)					114
Maximum SWL, dB (A)					120

Note: [1] Extracted from EPD document namely, "Sound Power Levels of Other Commonly Used PME"
http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf