Appendix 4.4 Construction Plant Inventory (Unmitigated)

Item		Activity	Power Mechanical Equipment (PME)	Reference		SWL, dB(A) / Unit	No. of Units	% Usage	SWL, dB(A) (PME)	SWL, dB(A) (Activity)
A	Inlet Work + PST	Mobilisation & Excavation	Excavator/loader, wheeled/tracked	CNP 081	[1]	112	4	50%	115	119
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	4	50%	115	
			Generator, standard	CNP 101	[1]	108	2	100%	111	
			Water pump (electric)	CNP 281	[1]	88	2	100%	91	
			Dump truck, 5.5 tonne < gross vehicle weight ≦ 38 tonne	Other PME 46	[2]	105	4	50%	108	
		Piling	Drill rig, rotary type (diesel)	Other PME 15	[2]	110	8	90%	119	122
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	8	70%	119	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Water pump (electric)	CNP 281	[1]	88	1	100%	88	
			Piling, large diameter bored, reverse circulation drill	CNP 166	[1]	100	8	90%	109	
			Grout mixer	Other PME 21	[2]	90	1	100%	90	
			Grout pump	Other PME 22	[2]	105	1	100%	105	
		Superstructure	Concrete lorry mixer	CNP 044	[1]	109	3	50%	111	117
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	1	50%	109	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Poker, vibratory, hand-held	CNP 170	[1]	113	2	50%	113	
			Bar bender and cutter (electric)	CNP 021	[1]	90	1	50%	87	
B	Bioreactors / Teritary Treatment	Mobilisation & Excavation	Excavator/loader, wheeled/tracked	CNP 081	[1]	112	4	50%	115	119
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	4	50%	115	
			Generator, standard	CNP 101	[1]	108	2	100%	111	
			Water pump (electric)	CNP 281	[1]	88	2	100%	91	
			Dump truck, 5.5 tonne < gross vehicle weight ≦ 38 tonne	Other PME 46	[2]	105	4	50%	108	
		Piling	Drill rig, rotary type (diesel)	Other PME 15	[2]	110	8	90%	119	122
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	8	70%	119	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Water pump (electric)	CNP 281	[1]	88	1	100%	88	
			Piling, large diameter bored, reverse circulation drill	CNP 166	[1]	100	8	90%	109	
			Grout mixer	Other PME 21	[2]	90	1	100%	90	
			Grout pump	Other PME 22	[2]	105	1	100%	105	
		Superstructure	Concrete lorry mixer	CNP 044	[1]	109	3	50%	111	117
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	1	50%	109	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Poker, vibratory, hand-held	CNP 170	[1]	113	2	50%	113	
			Bar bender and cutter (electric)	CNP 021	[1]	90	1	50%	87	
C	Sludge Treatment	Excavation	Excavator/loader, wheeled/tracked	CNP 081	[1]	112	4	50%	115	119
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	4	50%	115	
			Generator, standard	CNP 101	[1]	108	2	100%	111	
			Water pump (electric)	CNP 281	[1]	88	2	100%	91	
			Dump truck, 5.5 tonne < gross vehicle weight ≦ 38 tonne	Other PME 46	[2]	105	4	50%	108	
		Piling	Drill rig, rotary type (diesel)	Other PME 15	[2]	110	8	90%	119	122
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	8	70%	119	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Water pump (electric)	CNP 281	[1]	88	1	100%	88	
			Piling, large diameter bored, reverse circulation drill	CNP 166	[1]	100	8	90%	109	
			Grout mixer	Other PME 21	[2]	90	1	100%	90	
			Grout pump	Other PME 22	[2]	105	1	100%	105	
		Superstructure	Concrete lorry mixer	CNP 044	[1]	109	3	50%	111	117
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	1	50%	109	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Poker, vibratory, hand-held	CNP 170	[1]	113	2	50%	113	
			Bar bender and cutter (electric)	CNP 021	[1]	90	1	50%	87	
D	Sludge Treatment 2 + Organic Waste Receiption	Excavation	Excavator/loader, wheeled/tracked	CNP 081	[1]	112	2	50%	112	116
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	2	50%	112	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Water pump (electric)	CNP 281	[1]	88	1	100%	88	
			Dump truck, 5.5 tonne < gross vehicle weight ≦ 38 tonne	Other PME 46	[2]	105	2	50%	105	
		Piling	Drill rig, rotary type (diesel)	Other PME 15	[2]	110	8	90%	119	122
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	8	70%	119	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Water pump (electric)	CNP 281	[1]	88	1	100%	88	
			Piling, large diameter bored, reverse circulation drill	CNP 166	[1]	100	8	90%	109	
			Grout mixer	Other PME 21	[2]	90	1	100%	90	
			Grout pump	Other PME 22	[2]	105	1	100%	105	
		Superstructure	Concrete lorry mixer	CNP 044	[1]	109	3	50%	111	117
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	1	50%	109	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Poker, vibratory, hand-held	CNP 170	[1]	113	2	50%	113	
			Bar bender and cutter (electric)	CNP 021	[1]	90	1	50%	87	
E	Roadworks	Roadworks	Concrete lorry mixer	CNP 044	[1]	109	1	50%	106	118
			Poker, vibratory, hand-held	CNP 170	[1]	113	1	70%	111	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Chipper, hand-held (pneumatic)	CNP 043	[1]	112	1	60%	110	
			Roller, vibratory	CNP 186	[1]	108	1	60%	106	
			Excavator/loader, wheeled/tracked	CNP 081	[1]	112	1	70%	110	
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	1	70%	110	
F	Pipeworks + Buried Utilities	Pipeworks + Buried Utilities	Breaker, mini-robot mounted	Other PME 6	[2]	115	1	70%	113	116
			Excavator/loader, wheeled/tracked	CNP 081	[1]	112	1	70%	110	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Water pump (electric)	CNP 281	[1]	88	1	100%	88	
G	Workshop + Store Room + Car Park	Superstructure	Concrete lorry mixer	CNP 044	[1]	109	3	50%	111	117
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	1	50%	109	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Poker, vibratory, hand-held	CNP 170	[1]	113	2	50%	113	
			Bar bender and cutter (electric)	CNP 021	[1]	90	1	50%	87	
H	Sludge Treatment 3 + Admin Building	Piling	Drill rig, rotary type (diesel)	Other PME 15	[2]	110	4	90%	116	120
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	4	70%	116	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Water pump (electric)	CNP 281	[1]	88	1	100%	88	
			Piling, large diameter bored, reverse circulation drill	CNP 166	[1]	100	4	90%	106	
			Grout mixer	Other PME 21	[2]	90	1	100%	90	
			Grout pump	Other PME 22	[2]	105	1	100%	105	
		Superstructure	Concrete lorry mixer	CNP 044	[1]	109	3	50%	111	117
			Crane, mobile/barge mounted (diesel)	CNP 048	[1]	112	1	50%	109	
			Generator, standard	CNP 101	[1]	108	1	100%	108	
			Poker, vibratory, hand-held	CNP 170	[1]	113	2	50%	113	
			Bar bender and cutter (electric)	CNP 021	[1]	90	1	50%	87	

Remark:

[1] The SWL is referenced from Table 3 of EPD's Technical Memorandum on Noise from Construction Work Other Than Percussive Piling.

[2] The SWL is referenced from EPD's Sound Power Levels of Other Commonly Used PME