

Annex B2

Construction Plant Inventory (Unmitigated)

Regulation of Shenzhen River Stage IV

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Daytime Period (Normal days 0700 - 1900 hrs)

No.	Activities	Plant Item	TM / EPD ^[1] / BS 5228 ref.	No. of PME	On-time %	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A) ^[2]
Construction of Shenzhen River Stage IV								
I) Site Preparation								
1	Site Clearance	Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	111
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
2	Haul Road	Bulldozer	CNP 030	1	75%	115	114	116
		Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
II) Works Area I								
3	River Excavation (Sediment)	Bulldozer	CNP 030	1	75%	115	114	119
		Excavator/loader, wheeled/tracked	CNP 081	2	75%	112	114	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	3	50%	105	107	
		Drill rig, rotary type (diesel)	CNP 072	1	50%	110	107	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	50%	112	109	
		Concrete lorry mixer	CNP 044	1	50%	109	106	
		Concrete pump, stationary/lorry mounted	BS C6 36	1	50%	106	103	
		Drill/grinder, hand-held (electric)	CNP 065	1	50%	98	95	
4	Haul Road	Bulldozer	CNP 030	1	75%	115	114	116
		Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
5	Excavation and River Training	Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	115
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
		Breaker, hand-held, mass > 20kg and < 35kg	CNP 025	2	50%	111	111	
		Concrete mixer (petrol)	CNP 046	1	50%	96	93	
		Concrete pump, stationary/lorry mounted	CNP 047	1	50%	109	106	
6	Landscaping	Bulldozer	CNP 030	1	75%	115	114	117
		Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
		Drill rig, rotary type (diesel)	CNP 072	1	50%	110	107	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	50%	112	109	
III) Works Area II								
7	River Excavation (Sediment)	Bulldozer	CNP 030	1	75%	115	114	119
		Excavator/loader, wheeled/tracked	CNP 081	2	75%	112	114	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	3	50%	105	107	
		Drill rig, rotary type (diesel)	CNP 072	1	50%	110	107	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	50%	112	109	
		Concrete lorry mixer	CNP 044	1	50%	109	106	
		Concrete pump, stationary/lorry mounted	BS C6 36	1	50%	106	103	
		Drill/grinder, hand-held (electric)	CNP 065	1	50%	98	95	
8	Haul Road	Bulldozer	CNP 030	1	75%	115	114	116
		Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
9	Excavation and River Training	Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	115
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
		Breaker, hand-held, mass > 20kg and < 35kg	CNP 025	2	50%	111	111	
		Concrete mixer (petrol)	CNP 046	1	50%	96	93	
		Concrete pump, stationary/lorry mounted	CNP 047	1	50%	109	106	
10	Landscaping	Bulldozer	CNP 030	1	75%	115	114	117
		Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
		Drill rig, rotary type (diesel)	CNP 072	1	50%	110	107	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	50%	112	109	
IV) Works Area III								
11	River Excavation (Sediment)	Bulldozer	CNP 030	1	75%	115	114	119
		Excavator/loader, wheeled/tracked	CNP 081	2	75%	112	114	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	3	50%	105	107	
		Drill rig, rotary type (diesel)	CNP 072	1	50%	110	107	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	50%	112	109	
		Concrete lorry mixer	CNP 044	1	50%	109	106	
		Concrete pump, stationary/lorry mounted	BS C6 36	1	50%	106	103	
		Drill/grinder, hand-held (electric)	CNP 065	1	50%	98	95	
12	Haul Road	Bulldozer	CNP 030	1	75%	115	114	116
		Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
13	Excavation and River Training	Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	115
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
		Breaker, hand-held, mass > 20kg and < 35kg	CNP 025	2	50%	111	111	
		Concrete mixer (petrol)	CNP 046	1	50%	96	93	
		Concrete pump, stationary/lorry mounted	CNP 047	1	50%	109	106	

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No.	Activities	Plant Item	TM / EPD ^[1] / BS 5228 ref.	No. of PME	On- time %	Unit SWL, SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A) ^[2]
14	Landscaping	Bulldozer	CNP 030	1	75%	115	114	117
		Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
		Drill rig, rotary type (diesel)	CNP 072	1	50%	110	107	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	50%	112	109	
V) Works Area IV								
15	River Excavation (Sediment)	Bulldozer	CNP 030	1	75%	115	114	119
		Excavator/loader, wheeled/tracked	CNP 081	2	75%	112	114	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	3	50%	105	107	
		Drill rig, rotary type (diesel)	CNP 072	1	50%	110	107	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	50%	112	109	
		Concrete lorry mixer	CNP 044	1	50%	109	106	
		Concrete pump, stationary/lorry mounted	BS C6 36	1	50%	106	103	
		Drill/grinder, hand-held (electric)	CNP 065	1	50%	98	95	
16	Haul Road	Bulldozer	CNP 030	1	75%	115	114	116
		Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
17	Excavation and River Training	Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	115
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
		Breaker, hand-held, mass > 20kg and < 35kg	CNP 025	2	50%	111	111	
		Concrete mixer (petrol)	CNP 046	1	50%	96	93	
		Concrete pump, stationary/lorry mounted	CNP 047	1	50%	109	106	
18	Landscaping	Bulldozer	CNP 030	1	75%	115	114	117
		Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
		Drill rig, rotary type (diesel)	CNP 072	1	50%	110	107	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	50%	112	109	
VI) Others								
19	Reprovisioning Works	Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	114
		Crane, mobile/barge mounted (diesel)	CNP 048	1	50%	112	109	
		Concrete lorry mixer	CNP 044	2	50%	109	109	
VII) Advanced Works								
20	Backfilling	Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	112
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
		Generator, standard	CNP 101	1	50%	108	105	
		Water pump (electric)	CNP 281	1	50%	88	85	
21	Road Construction	Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	112
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
		Road roller	CNP 185	1	50%	108	105	
22	Fence Installation	Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	107
		Generator, standard	CNP 101	1	50%	108	105	
		Drill/grinder, hand-held (electric)	CNP 065	1	50%	98	95	
23	Drainage / Sinage Works	Excavator/loader, wheeled/tracked	CNP 081	1	75%	112	111	115
		Lorry, with crane/grab, 5.5 tonne < gross vehicle weight ≤ 38 tonne	EPD/PME/36	1	50%	105	102	
		Breaker, hand-held, mass > 20kg and < 35kg	CNP 025	2	50%	111	111	
		Concrete mixer (petrol)	CNP 046	1	50%	96	93	
		Concrete pump, stationary/lorry mounted	CNP 047	1	50%	109	106	

Concurrent Project :

Construction of a Secondary Boundary Fence and New Sections of Primary Boundary Fence and Boundary Patrol Road (AEIAR-136/2009)

Maximum SWLs for Activities 24 and 25 were extracted from the approved EIA Report (AEIAR-136/2009)

24	Construction Activities (Section 3 - Ng Tung River to Ping Yuen River)	104
25	Construction Activities (Section 3 - Pak Fu Shan to Lin Ma Hang Road)	104

Notes:

- [1] BS - British Standard BS 5228:1997, Part 1 Noise and Vibration Control on Construction and Open Sites
SWLs of EPD/PME items refer to the document prepared by the Noise Control Authority (http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)
- [2] The figures are rounded-up to a whole number.