

Appendix 4.3
***Construction Plant Inventory during Non-
Restricted Hours (Unmitigated Scenario)***

Appendix 4.3 Construction Plant Inventory during Non-Restricted Hours (Unmitigated Scenario)

Scenario: Unmitigated ▼

Activity

1 - Site Clearance / Set-up / Plant Mobilization / Tree Felling and Transplanting Works

PME	TM Ref./ other Ref ^{[1][2]}	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
Excavator, wheeled/tracked	CNP 081	2	112	100%	0	-	115
Saw, circular, wood	CNP 201	1	108	100%	0	-	108
Crane, mobile	CNP 048	1	112	100%	0	-	112
Loader	CNP 081	1	112	100%	0	-	112
Lorry	CNP 141	1	112	100%	0	-	112
Total SWL							119

2 - Utilities Protection and Diversion Works

PME	TM Ref./ other Ref ^{[1][2]}	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
Excavator, wheeled/tracked	CNP 081	2	112	100%	0	-	115
Crane, mobile	CNP 048	1	112	100%	0	-	112
Loader	CNP 081	1	112	100%	0	-	112
Lorry	CNP 141	1	112	100%	0	-	112
Total SWL							119

3 - Slopework

PME	TM Ref./ other Ref ^{[1][2]}	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
Excavator, wheeled/tracked	CNP 081	2	112	100%	0	-	115
Generator, Silenced	CNP 102	2	100	100%	0	-	103
Air Compressor	CNP 002	2	102	100%	0	-	105
Drill rig, rotary type (diesel)	OCUPME-15	2	110	100%	0	-	113
Grout Mixer	OCUPME-21	2	90	100%	0	-	93
Grout Pump	OCUPME-22	2	105	100%	0	-	108
Lorry	CNP 141	2	112	100%	0	-	115
Total SWL							120

4 - Piling Works

PME	TM Ref./ other Ref ^{[1][2]}	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
General							
Generator, Silenced	CNP 102	2	100	100%	0	-	103
Air Compressor	CNP 002	1	102	100%	0	-	102
Water Pump, submersible (electric)	CNP 283	1	85	100%	0	-	85
Crane, mobile	CNP 048	1	112	100%	0	-	112
SWL (General)							113
Group A ^[3]							
Drill rig, rotary type (diesel)	OCUPME-15	1	110	80%	0	-	109
Dump Truck	CNP 067	1	117	70%	0	-	115
SWL (Group)							116
Group B ^[3]							
Concrete lorry mixer	CNP 044	1	109	70%	0	-	107
Concrete mixer	CNP 045	1	96	70%	0	-	94
Concrete Pump	CNP 047	1	109	70%	0	-	107
Poker, vibratory, hand-held	CNP 170	2	113	70%	0	-	114
SWL (Group)							116
Total SWL (General + Group A)							118

5 - Pile Caps and Piers

PME	TM Ref./ other Ref ^{[1][2]}	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
General							
Generator, Silenced	CNP 102	2	100	100%	0	-	103
Air Compressor	CNP 002	1	102	100%	0	-	102
Crane, mobile	CNP 048	1	112	100%	0	-	112
Breaker, hand-held, mass <= 10kg	CNP 023	1	108	100%	0	-	108
Lorry	CNP 141	1	112	70%	0	-	110
Excavator, wheeled/tracked	CNP 081	1	112	100%	0	-	112
Piling, vibration hammer	OCUPME-26	1	115	100%	0	-	115
SWL (General)							119
Group A ^[3]							
Bar bender and cutter (electric)	CNP 021	1	90	100%	0	-	90
Saw, circular, wood	CNP 201	1	108	100%	0	-	108
SWL (Group)							108
Group B ^[3]							
Concrete lorry mixer	CNP 044	1	109	70%	0	-	107
Concrete Pump	CNP 047	1	109	70%	0	-	107
Poker, vibratory, hand-held	CNP 170	1	113	70%	0	-	111
SWL (Group)							114
Total SWL (General + Group B)							120

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Scenario: Unmitigated ▼

Activity

6 - Bridge Deck

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
General							
Generator, Silenced	CNP 102	4	100	100%	0	-	106
Crawler Crane, mobile (diesel)	BS C7/112 [5]	1	102	100%	0	-	102
Crane, mobile	CNP 048	1	112	100%	0	-	112
Breaker, hand-held, mass <= 10kg	CNP 023	1	108	100%	0	-	108
Lorry	CNP 141	1	112	70%	0	-	110
SWL (General)							116
Group A [3]							
Bar bender and cutter (electric)	CNP 021	1	90	100%	0	-	90
Saw, circular, wood	CNP 201	1	108	100%	0	-	108
SWL (Group)							108
Group B [3]							
Concrete lorry mixer	CNP 044	1	109	70%	0	-	107
Concrete mixer	CNP 045	1	96	70%	0	-	94
Concrete Pump	CNP 047	1	109	70%	0	-	107
Poker, vibratory, hand-held	CNP 170	2	113	70%	0	-	114
SWL (Group)							116
Total SWL (General + Group B)							119

7 - Roadworks, Drainage & Utilities

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
Excavator, wheeled/tracked	CNP 081	1	112	100%	0	-	112
Generator, Silenced	CNP 102	2	100	100%	0	-	103
Crane, mobile	CNP 048	1	112	100%	0	-	112
Lorry	CNP 141	1	112	100%	0	-	112
Total SWL							117

8 - Pavement

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
General							
Generator, Silenced	CNP 102	2	100	100%	0	-	103
Crane, mobile	CNP 048	1	112	100%	0	-	112
Lorry	CNP 141	1	112	100%	0	-	112
Loader	CNP 081	1	112	100%	0	-	112
Asphalt Paver	CNP 004	1	109	100%	0	-	109
Roller, vibratory	CNP 186	1	108	100%	0	-	108
Paint line marker	CNP 161	1	90	100%	0	-	90
Total SWL							118

9 - Modification of Existing Bridge Structure of Tsuen Wan Road for Connection

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
Generator, Silenced	CNP 102	2	100	100%	0	-	103
Air Compressor	CNP 002	2	102	100%	0	-	105
Crane, mobile	CNP 048	1	112	100%	0	-	112
Hydraulic Crusher	[9]	1	94	100%	0	-	94
Breaker, hand-held, mass >10kg and < 20kg	CNP 024	1	108	100%	0	-	108
Dump truck with grab	CNP 067	1	117	100%	0	-	117
Total SWL							119

10 - Demolition of Existing Downramp

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
Generator, Silenced	CNP 102	2	100	100%	0	-	103
Crane, mobile	CNP 048	1	112	100%	0	-	112
Hydraulic Crusher	[9]	1	94	100%	0	-	94
Breaker, hand-held, mass >10kg and < 20kg	CNP 024	1	108	100%	0	-	108
Dump truck with grab	CNP 067	1	117	100%	0	-	117
Total SWL							119

11 - Noise Barriers / Enclosures

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
Cherry Picker	BS C4/54 [7]	1	107	100%	0	-	107
Lorry	CNP 141	2	112	100%	0	-	115
Crane, mobile	CNP 048	2	112	100%	0	-	115
Welding Set	[4]	2	78	100%	0	-	81
Total SWL							118

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Scenario:

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Activity

12 - Modification of Underpass

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Barrier Type	Sub-total SWL
General							
Generator, Silenced	CNP 102	6	100	100%	0	-	108
Crawler Crane, mobile (diesel)	BS C7/112 [5]	1	102	100%	0	-	102
Water Pump, submersible (electric)	CNP 283	6	85	100%	0	-	93
Breaker, hand-held, mass <= 10kg	CNP 023	2	108	100%	0	-	111
Lorry	CNP 141	1	112	100%	0	-	112
SWL (General)							116
Group A [3]							
Bar bender and cutter (electric)	CNP 021	4	90	100%	0	-	96
Saw, circular, wood	CNP 201	2	108	100%	0	-	111
SWL (Group)							111
Group B [3]							
Concrete lorry mixer	CNP 044	1	109	100%	0	-	109
Concrete mixer	CNP 045	1	96	100%	0	-	96
Concrete Pump	CNP 047	1	109	100%	0	-	109
Poker, vibratory, hand-held	CNP 170	2	113	100%	0	-	116
SWL (Group)							117
Total SWL (General + Group B)							120

13 - Modification of Footbridge

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Barrier Type	Sub-total SWL
General							
Generator, Silenced	CNP 102	6	100	100%	0	-	108
Crawler Crane, mobile (diesel)	BS C7/112 [5]	1	102	100%	0	-	102
Water Pump, submersible (electric)	CNP 283	6	85	100%	0	-	93
Breaker, hand-held, mass <= 10kg	CNP 023	2	108	100%	0	-	111
Lorry	CNP 141	1	112	100%	0	-	112
SWL (General)							116
Group A [3]							
Bar bender and cutter (electric)	CNP 021	4	90	100%	0	-	96
Saw, circular, wood	CNP 201	2	108	100%	0	-	111
SWL (Group)							111
Group B [3]							
Concrete lorry mixer	CNP 044	1	109	100%	0	-	109
Concrete mixer	CNP 045	1	96	100%	0	-	96
Concrete Pump	CNP 047	1	109	100%	0	-	109
Poker, vibratory, hand-held	CNP 170	2	113	100%	0	-	116
SWL (Group)							117
Total SWL (General + Group B)							120

14 - Retaining Structures for At -grade Road

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item dB(A)	On- time %	Barrier Correction	Barrier Type	Sub-total SWL
General							
Generator, Silenced	CNP 102	4	100	100%	0	-	106
Crane, mobile	CNP 048	1	112	100%	0	-	112
Breaker, hand-held, mass <= 10kg	CNP 023	2	108	100%	0	-	111
Lorry	CNP 141	1	112	100%	0	-	112
Water Pump, submersible (electric)	CNP 283	4	85	100%	0	-	91
SWL (General)							117
Group A [3]							
Bar bender and cutter (electric)	CNP 021	2	90	100%	0	-	93
Saw, circular, wood	CNP 201	1	108	100%	0	-	108
SWL (Group)							108
Group B [3]							
Concrete lorry mixer	CNP 044	1	109	100%	0	-	109
Concrete mixer	CNP 045	1	96	100%	0	-	96
Concrete Pump	CNP 047	1	109	100%	0	-	109
Poker, vibratory, hand-held	CNP 170	2	113	100%	0	-	116
SWL (Group)							117
Total SWL (General + Group B)							120

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Activity

15 - Removal of Existing Noise Barrier along Tsing Tsuen Road

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
Generator, Silenced	CNP 102	3	100	100%	0	-	105
Air Compressor	CNP 002	2	102	100%	0	-	105
Crane, mobile	CNP 048	1	112	100%	0	-	112
Hydraulic Crusher	[9]	1	94	100%	0	-	94
Breaker, hand-held, mass >10kg and < 20kg	CNP 024	2	108	100%	0	-	111
Lorry	CNP 141	1	112	100%	0	-	112
Total SWL							117

16 - Dismantling Existing Parapet and Installation of New Profile Barrier

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
General							
Generator, Silenced	CNP 102	2	100	100%	0	-	103
Crane, mobile	CNP 048	1	112	100%	0	-	112
Lorry	CNP 141	1	112	100%	0	-	112
Dump truck with grab	CNP 067	1	117	100%	0	-	117
Loader	CNP 081	1	112	100%	0	-	112
Asphalt Paver	CNP 004	1	109	100%	0	-	109
Roller, vibratory	CNP 186	1	108	100%	0	-	108
Paint line marker	CNP 161	1	90	100%	0	-	90
SWL (Group)							121

17 - Modification of Tsuen Tsing Interchange Roundabout

PME	TM Ref./ other Ref [1][2]	No. of Items	SWL/ Item dB(A)	On-time %	Barrier Correction	Barrier Type	Sub-total SWL
Paint line marker	CNP 161	1	90	100%	0	-	90
Total SWL							90

Remarks

- [1] Reference of CNP refers to Table 3 of EPD's Technical Memorandum on Noise from Construction Work Other Than Percussive Piling.
- [2] Reference of OCUPME refer to EPD's guidance "Sound power levels of other commonly used PME" (https://www.epd.gov.hk/epd/sites/default/files/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf).
- [3] Only one PME Group will be operating at the same time.
- [4] Reference is made to the approved EIA Report of Road Works at West Kowloon (EIA-175/2009).
- [5] Reference is made to the approved EIA Report of West Island Line (EIA-153/2008).
- [6] Reference is made to the approved EIA Report of Revised Trunk Road T4 in Sha Tin (EIA-273/2021).
- [7] Reference is made to the approved EIA Report of Sha Tin Cavern Sewage Treatment Works (EIA-240/2016).
- [8] Reference is made to EPD website on "Quieter Construction Methods" (https://www.epd.gov.hk/epd/misc/construction_noise/contents/index.php/en/home2/quieter-construction-equipment/item/27-press-in-method.html)
- [9] Reference is made to EPD website on "Quiet Construction Equipment" (https://www.epd.gov.hk/epd/misc/construction_noise/contents/index.php/en/home2/quieter-construction-equipment.html)