

Appendix 4.13
Powered Mechanical Equipment (PME)
for the Different Construction Tasks during
Normal Daytime Working Hours
(With Mitigation Measures)

Appendix 4.13

Powered Mechanical Equipment (PME) for the Different Construction Tasks during Normal Daytime Working Hours (With Mitigation Measures)

1 Causeway Bay Reclamation

1.1 Temporary Relocation CBTS

1.1.1 Temporary Breakwater

1.1.1A Dredging, Filling and Armour Placing

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	4	0.0	100.0%	0.0
Total					117.1

1.1.1B Piling

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Piling Rig	CNP 164	2	115.0	100.0%	0.0	118.0
Generator*	EPD-00064**	2	96.0	100.0%	0.0	99.0
Water Pump#	CNP 281	2	88.0	100.0%	10.0	81.0
Air Compressor*#	Table C7/16	2	96.0	100.0%	10.0	89.0
Concrete Pump*#	Table C6/36	2	106.0	100.0%	10.0	99.0
Barge	-	2	0.0	100.0%	0.0	0.0
Total						118.1

1.2 CBTS Temporary Reclamation Stage 1

1.2.1 Dredging, Seawalls & Filling (TCBR1)

1.2.1A Dredging (TCBR1E)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	60.0%	110.8
Barges	-	4	0.0	100.0%	0.0
Total					116.4

1.2.1B Temporary Seawall (TCBR1E)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	60.0%	107.8
Crane*	Table C7/114	2	101.0	70.0%	102.5
Barges	-	2	0.0	100.0%	0.0
Total					111.1

1.2.1C Filling behind seawall (TCBR1E)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barge	-	2	0.0	100.0%	0.0
Tug Boat	CNP 221	2	110.0	60.0%	110.8
Bulldozer*	Table C9/2	2	104.0	100.0%	107.0
Total					113.4

*Use of QPME

#Use of Barrier

** EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

1.2.1D Dredging (TCBR1W)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	4	0.0	100.0%	0.0
Total					117.1

1.2.1E Temporary Seawall (TCBR1W)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane*	Table C7/114	2	101.0	100.0%	104.0
Barges	-	2	0.0	100.0%	0.0
Total					112.4

1.2.1F Filling behind seawall (TCBR1W)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barge	-	2	0.0	100.0%	0.0
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer*	Table C9/2	2	104.0	100.0%	107.0
Total					114.8

1.2.2 CWB Tunnel (TCBR1)

1.2.2A Diaphragm Wall (TCBR1E)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	4	101.0	70.0%	0.0	105.5
Excavator*#	Table C3/97	4	105.0	70.0%	5.0	104.5
Dump Truck*	Table C9/27	8	105.0	100.0%	0.0	114.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	4	100.0	100.0%	0.0	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.0	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.0	116.0
Total						119.1

1.2.2B Excavation (TCBR1E)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	Table C3/97	4	105.0	70.0%	5.0	104.5
Dump Truck*	Table C9/27	12	105.0	100.0%	0.0	115.8
Total						116.1

*Use of QPME

#Use of Barrier

** EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

1.2.2C Construction of Slabs (TCBR1E)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	2	101.0	70.0%	0.0	102.5
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	Table C6/32	4	100.0	70.0%	5.0	99.5
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	Table C7/16	4	96.0	100.0%	10.0	92.0
Total						110.9

1.2.2D Backfill (TCBR1E)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	Table C3/97	4	105.0	70.0%	5.0	104.5
Bulldozer*	Table C9/2	2	104.0	100.0%	0.0	107.0
Roller*	Table C8/27	2	104.0	100.0%	0.0	107.0
Dump Truck*	Table C9/27	4	105.0	100.0%	0.0	111.0
Total						114.1

1.2.2E Diaphragm Wall (TCBR1W)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	4	101.0	100.0%	0.0	107.0
Excavator*#	Table C3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	Table C9/27	8	105.0	100.0%	0.0	114.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	4	100.0	100.0%	0.0	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.0	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.0	116.0
Total						119.2

1.2.2F Excavation (TCBR1W)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	Table C3/97	8	105.0	100.0%	5.0	109.0
Dump Truck*	Table C9/27	24	105.0	100.0%	0.0	118.8
Total						119.2

1.2.2G Construction of Slabs (TCBR1W)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	Table C6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	Table C7/16	4	96.0	100.0%	10.0	92.0
Total						111.3

*Use of QPME

#Use of Barrier

** EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

1.2.2H Backfill (TCBR1W)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Bulldozer*#	TableC9/2	2	104.0	100.0%	0.0	107.0
Roller*	TableC8/27	2	104.0	100.0%	0.0	107.0
Trucks*	TableC9/27	4	105.0	100.0%	0.0	111.0
Total						114.3

1.2.3 CWB Tunnel (CHT)

1.2.3A Rock Blasting/Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Breaker, excavator mounted*#	Table C8/13	2	110.0	100.0%	5.0	108.0
Backhoe*#	Table C3/97	2	105.0	100.0%	5.0	103.0
Ventilation fan#	CNP241	2	108.0	100.0%	10.0	101.0
Rock Drill#	CNP182	2	123.0	100.0%	5.0	121.0
Truck*	Table C9/39	4	103.0	100.0%	0.0	109.0
Crane*	Table C7/114	1	101.0	100.0%	0.0	101.0
Total						121.6

1.2.3B Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	Table C6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	Table C7/16	4	96.0	100.0%	10.0	92.0
Total						111.3

1.3 CBTS Temporary Reclamation Stage 2

1.3.1 Dredging, Seawalls & Filling (TCBR2)

1.3.1A Dredging

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	4	0.0	100.0%	0.0
Total					117.1

1.3.1B Temporary Seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	0.0	107.0
Tug boat	CNP 221	1	110.0	100.0%	0.0	110.0
Crane*#	TableC7/114	2	101.0	100.0%	5.0	99.0
Barges	-	2	0.0	100.0%	0.0	0.0
Total						112.0

*Use of QPME

#Use of Barrier

** EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

1.3.1C Filling behind seawall

Powered Mechanical Equipment (PME)	EPD-00064** other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barge	-	2	0.0	100.0%	0.0
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer*#	TableC9/2	2	104.0	100.0%	107.0
Total					114.8

1.3.2 CWB Tunnel

1.3.2A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	4	101.0	100.0%	0.0	107.0
Excavator*#	Table C3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	Table C9/27	8	105.0	100.0%	0.0	114.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	4	100.0	100.0%	0.0	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.0	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.0	116.0
Total						119.2

1.3.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*	Table C3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	Table C9/27	12	105.0	100.0%	0.0	115.8
Total						116.2

1.3.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	Table C6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	Table C7/16	4	96.0	100.0%	10.0	92.0
Total						111.3

1.3.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	Table C3/97	4	105.0	100.0%	5.0	106.0
Bulldozer*	Table C9/2	2	104.0	100.0%	0.0	107.0
Roller*	Table C3/116	2	106.0	100.0%	0.0	109.0
Dump Truck*	Table C9/27	4	105.0	100.0%	0.0	111.0
Total						114.7

*Use of QPME

#Use of Barrier

** EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

1.4 CBTS Temporary Reclamation Stage 3

1.4.1 Dredging, Seawalls & Filling (TCBR3)

1.4.1A Dredging

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	4	0.0	100.0%	0.0
Total					117.1

1.4.1B Temporary Seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane*	TableC7/114	2	101.0	100.0%	104.0
Barges	-	2	0.0	100.0%	0.0
Total					112.4

1.4.1C Filling behind seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barge	-	2	0.0	100.0%	
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer*	TableC9/2	2	104.0	100.0%	107.0
Total					114.8

1.4.2 CWB Tunnel

1.4.2A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	4	101.0	100.0%	0.0	107.0
Excavator*#	Table C3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	Table C9/27	8	105.0	100.0%	0.0	114.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	4	100.0	100.0%	0.0	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.0	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.0	116.0
Total						119.2

1.4.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	Table C9/27	12	105.0	100.0%	0.0	115.8
Total						116.2

*Use of QPME

#Use of Barrier

** EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

1.4.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	Table C6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	Table C7/16	4	96.0	100.0%	10.0	92.0
Total						111.3

1.4.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	Table C3/97	4	105.0	100.0%	5.0	106.0
Bulldozer*	Table C9/2	2	104.0	100.0%	0.0	107.0
Roller*	Table C8/27	2	104.0	100.0%	0.0	107.0
Dump Truck*	Table C9/27	4	105.0	100.0%	0.0	111.0
Total						114.3

1.5 CBTS Temporary Reclamation Stage 4

1.5.1 Dredging, Seawalls & Filling (TCBR4)

1.5.1A Dredging

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	4	0.0	100.0%	0.0
Total					117.1

1.5.1B Temporary Seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane*	Table C7/114	2	101.0	100.0%	104.0
Barges	-	2	0.0	100.0%	0.0
Total					112.4

1.5.1C Filling behind seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barge	-	2	0.0	100.0%	0.0
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer*	Table C9/2	2	104.0	100.0%	107.0
Total					114.8

*Use of QPME

#Use of Barrier

** EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

1.5.2 CWB Tunnel

1.5.2A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	4	101.0	100.0%	0.0	107.0
Excavator*#	Table C3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	Table C9/27	8	105.0	100.0%	0.0	114.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	4	100.0	100.0%	0.0	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.0	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.0	116.0
Total						119.2

1.5.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	Table C3/97	8	105.0	100.0%	5.0	109.0
Dump Truck*	Table C9/27	24	105.0	100.0%	0.0	118.8
Total						119.2

1.5.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	Table C6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	Table C7/16	4	96.0	100.0%	10.0	92.0
Total						111.3

1.5.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	Table C3/97	4	105.0	100.0%	5.0	106.0
Bulldozer*	Table C9/2	2	104.0	100.0%	0.0	107.0
Roller*	Table C8/27	2	104.0	100.0%	0.0	107.0
Dump Truck*	Table C9/27	4	105.0	100.0%	0.0	111.0
Total						114.3

1.6 Temporary diversion of cooling system

1.6.1 Temporary cooling water pipeline

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	2	101.0	100.0%	0.0	104.0
Excavator*#	Table C3/97	2	105.0	100.0%	5.0	103.0
Dump Truck*	Table C9/27	2	105.0	100.0%	0.0	108.0
Concrete Lorry Mixer*	Table C6/35	2	100.0	100.0%	0.0	103.0
Poker Vibrator*#	Table C6/32	4	100.0	100.0%	5.0	101.0
Air Compressor#	Table C7/16	2	96.0	100.0%	10.0	89.0
Compactor	CNP 050	1	105.0	100.0%	0.0	105.0
Total						112.4

*Use of QPME

#Use of Barrier

** EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

1.9 Slip Road 8 & Victoria Park Reprovisioning

1.9.1 Slip Road 8 Tunnel

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Pilling Rig#	CNP 164	2	115.0	100.0%	5.0	113.0
Generator*#	EPD-00064**	2	96.0	100.0%	5.0	94.0
Water Pump#	CNP 281	2	88.0	100.0%	10.0	81.0
Crane*	Table C7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	Table C6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	Table C7/16	4	96.0	100.0%	10.0	92.0

Total 115.3

1.9.2 At-grade Road(Group 1 and Group 2 PME)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Dump Truck*	Table C9/27	2	105.0	70.0%	0.0	106.5
Excavator*	Table C3/97	2	105.0	80.0%	0.0	107.0
Grader*	Table C9/11	2	110.0	80.0%	0.0	112.0
Loader*	Table C3/97	2	105.0	80.0%	0.0	107.0
Vibratory Roller*	Table C3/116	1	106.0	80.0%	0.0	105.0
Road Roller*	Table C8/27	1	104.0	80.0%	0.0	103.0
Asphalt Paver*	Table C8/24	2	101.0	80.0%	0.0	103.0
Planer	CNP 184	2	111.0	80.0%	0.0	113.0

Total 117.6

1.9.2 At-grade Road(Group 1 PME)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Dump Truck*	Table C9/27	1	105.0	70.0%	0.0	103.5
Excavator*	Table C3/97	1	105.0	80.0%	0.0	104.0
Grader*	Table C9/11	1	110.0	80.0%	0.0	109.0
Loader*	Table C3/97	1	105.0	80.0%	0.0	104.0
Vibratory Roller*	Table C3/116	1	106.0	80.0%	0.0	105.0
Planer	CNP 184	1	111.0	80.0%	0.0	110.0

Total 114.6

1.9.2 At-grade Road(Group 2 PME)(For N11 &N13)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Dump Truck*	Table C9/27	1	105.0	50.0%	0.0	102.0
Loader*	Table C3/97	1	105.0	50.0%	0.0	102.0
Road Roller*	Table C8/27	1	104.0	60.0%	0.0	101.8
Asphalt Paver*	Table C8/24	1	101.0	60.0%	0.0	98.8

Total 107.3

*Use of QPME

#Use of Barrier

** EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

1.9.3 Landscape Deck

1.9.3A Substructure works

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Pilling Rig#	CNP 164	2	115.0	100.0%	5.0	113.0
Generator*#	EPD-00064**	2	96.0	100.0%	5.0	94.0
Water Pump#	CNP 281	2	88.0	100.0%	10.0	81.0
Crane*	Table C7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.0	92.0
Total						115.3

1.9.3B Superstructure works

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	Table C6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	Table C6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.0	92.0
Total						111.3

*Use of QPME

#Use of Barrier

** EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

Appendix 4.13

Powered Mechanical Equipment (PME) for the Different Construction Tasks during Normal Daytime Working Hours (With Mitigation Measures)

2 Wan Chai Reclamation

2.1 Wan Chai Reclamation Stage 1 (WCR1)

2.1.1 Dredging , Seawalls & Filling

2.1.1A Dredging(=Removal Temp. seawall)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	4	0.0	100.0%	0.0
Total					117.1

2.1.1B Seawall Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane*	TableC7/114	2	101.0	100.0%	104.0
Barges	-	2	0.0	100.0%	0.0
Total					112.4

2.1.1C Filling behind seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barge	-	2	0.0	100.0%	0.0
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer*	TableC9/2	2	104.0	100.0%	107.0
Total					114.8

2.1.2 Drainage Culverts (2 cell)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Dump Truck*	TableC9/27	4	105.0	100.0%	0.0	111.0
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.0	103.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.0	103.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.0	107.0
Roller	TableC3/116	2	106.0	100.0%	0.0	109.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	2	96.0	100.0%	10.0	89.0
Total						114.9

2.1.3 Cooling Water System

2.1.3A Cooling water intake chamber

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	104.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Barges	-	2	0.0	100.0%	0.0
Total					111.0

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

2.1.3B Pipeline works

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.0	104.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.0	103.0
Dump Truck*	TableC9/27	2	105.0	100.0%	0.0	108.0
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.0	103.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Air Compressor*#	TableC7/16	2	96.0	100.0%	10.0	89.0
Compactor	CNP 050	1	105.0	100.0%	0.0	105.0
Total						112.4

2.1.4 CWB Tunnel

2.1.4A Diaphragm Wall (WCR1)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	4	101.0	100.0%	0.0	107.0
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	TableC9/27	8	105.0	100.0%	0.0	114.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Truck*	TableC6/35	4	100.0	100.0%	0.0	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.0	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.0	116.0
Total						119.2

2.1.4B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Dump Trucks*	TableC9/27	12	105.0	100.0%	0.0	115.8
Total						116.2

2.1.4C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Compressor*#	TableC7/16	4	96.0	100.0%	10.0	92.0
Total						111.3

2.1.4D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.0	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.0	109.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.0	111.0
Total						114.7

2.2 Wan Chai Reclamation Stage 2 (WCR2)

2.2.1 Dredging, Seawalls & Filling

2.2.1A Dredging(=Removal Temp. seawall)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	4	0.0	100.0%	0.0
Total					117.1

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

2.2.1B Seawall Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane*	TableC7/114	2	101.0	100.0%	104.0
Barges	-	2	0.0	100.0%	0.0
Total					112.4

2.2.1C Filling behind seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barge	-	2	0.0	100.0%	0.0
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer*	TableC9/2	2	104.0	100.0%	107.0
Total					114.8

2.2.2 CWB Tunnel

2.2.2A Diaphragm Wall (WCR2)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	4	101.0	100.0%	0.0	107.0
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	TableC9/27	8	105.0	100.0%	0.0	114.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	4	100.0	100.0%	0.0	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.0	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.0	116.0
Total						119.2

2.2.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	TableC9/27	12	105.0	100.0%	0.0	115.8
Total						116.2

2.2.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.0	92.0
Total						111.3

2.2.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.00	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.00	109.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.00	111.0
Total						114.7

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

2.3 Wan Chai Reclamation Stage 3 (WCR3)

2.3.1 Dredging, Seawalls & Filling

2.3.1A Dredging

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	6	0.0	100.0%	0.0
Total					117.1

2.3.1B Seawall Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane*	TableC7/114	2	101.0	100.0%	104.0
Barges	-	2	0.0	100.0%	
Total					112.4

2.3.1C Filling behind Seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barge	-	2	0.0	100.0%	0.0
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer*	TableC9/2	2	104.0	100.0%	107.0
Total					114.8

2.3.2 CWB Tunnel (WCR3)

2.3.2A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	8	101.0	100.0%	0.0	110.0
Excavator*#	TableC3/97	8	105.0	100.0%	5.0	109.0
Dump Truck*	TableC9/27	16	105.0	100.0%	0.0	117.0
Concrete Pump*#	TableC6/36	8	106.0	100.0%	10.0	105.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.0	109.0
Bentonite Plants#	CNP 162	8	105.0	100.0%	5.0	109.0
Bar Bender#	CNP 021	4	90.0	100.0%	10.0	86.0
Diaphragm Wall Rigs#	CNP 164	8	115.0	100.0%	5.0	119.0
Total						122.3

2.3.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Dump Truck*	TableC9/27	12	105.0	100.0%	0.00	115.8
Total						116.2

2.3.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	5.0	107.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	5.0	97.0
Total						112.4

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

2.3.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.0	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.0	109.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.0	111.0
Total						114.7

2.4 Wan Chai Reclamation Stage 4 (WCR4)

2.4.1 Dredging, Seawalls & Filling

2.4.1A Dredging

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	6	0.0	100.0%	0.0
Total					117.1

2.4.1B Seawall Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane*	TableC7/114	2	101.0	100.0%	104.0
Barges	-	2	0.0	100.0%	0.0
Total					112.4

2.4.1C Filling behind Seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barge	-	2	0.0	100.0%	0.0
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer*	TableC9/2	2	104.0	100.0%	107.0
Total					114.8

2.4.2 Drainage Culvert

Powered Mechanical Equipment (PME)	TableC3/97 other Ref.	No. Items	105 dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Dump Truck*	TableC9/27	4	105.0	100.0%	0.0	111.0
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.0	103.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.0	103.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Bulldozer*	Table C9/2	2	104.0	100.0%	0.0	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.0	109.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	2	96.0	100.0%	10.0	89.0
Total						114.9

2.4.3 CWB Tunnel

2.4.3A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	4	101.0	100.0%	0.00	107.0
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Dump Truck*	TableC9/27	8	105.0	100.0%	0.00	114.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.00	102.0
Concrete Lorry Mixer*	TableC6/35	4	100.0	100.0%	0.00	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.00	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.00	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.00	116.0
Total						119.2

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

2.4.3B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Dump Truck*	TableC9/27	12	105.0	100.0%	0.00	115.8
Total						116.2

2.4.3C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.0	92.0
Total						111.3

2.4.3D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.0	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.0	109.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.0	111.0
Total						114.7

2.5 Temporary Reclamation at PCWA Stage 1

2.5.1 Dredging, Seawalls & Filling (TPCWAE)

2.5.1A Dredging

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	4	0.0	100.0%	0.0
Total					117.1

2.5.1B Temporary Seawall Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP221	1	110.0	100.0%	110.0
Crane*	TableC7/114	2	101.0	100.0%	104.0
Barges	-	2	0.0	100.0%	0.0
Total					112.4

2.5.1C Filling behind seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barge	-	2	0.0	100.0%	0.0
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer*	TableC9/2	2	104.0	100.0%	107.0
Total					114.8

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

2.5.2 CWB Tunnel (TPCWAE)

2.5.2A Diaphragm Wall

(PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	5 Reduction	Total SWL dB(A)
Crane*	TableC7/114	4	101.0	100.0%	0.0	107.0
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	TableC9/27	8	105.0	100.0%	0.0	114.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	4	100.0	100.0%	0.0	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.0	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.0	116.0
Total						119.2

2.5.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	TableC9/27	12	105.0	100.0%	0.0	115.8
Total						116.2

2.5.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.0	92.0
Total						111.3

2.5.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.0	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.0	109.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.0	111.0
Total						114.7

2.6 Temporary Reclamation at PCWA Stage 2

2.6.1 Dredging, Seawalls & Filling (TPCWA W)

2.6.1A Dredging

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	4	0.0	100.0%	0.0
Total					117.1

2.6.1B Temporary Seawall Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane*	TableC7/114	2	101.0	100.0%	104.0
Barges	-	2	0.0	100.0%	0.0
Total					112.4

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

2.6.1C Filling behind seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barge	-	2	0.0	100.0%	0.0
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer*	Table C9/2	2	104.0	100.0%	107.0
Total					114.8

2.6.2 CWB Tunnel (TPCWAW)

2.6.2A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	4	101.0	100.0%	0.0	107.0
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	TableC9/27	8	105.0	100.0%	0.0	114.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	4	100.0	100.0%	0.0	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.0	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.0	116.0
Total						119.2

2.6.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	TableC9/27	12	105.0	100.0%	0.0	115.8
Total						116.2

2.6.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.0	92.0
Total						111.3

2.6.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.0	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.0	109.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.0	111.0
Total						114.7

2.7 Ferry Pier Re provisioning

2.7.1 Temporary Ferry Pier

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Pilling rig#	CNP 164	1	115.0	100.0%	5.0	110.0
Generator*#	EPD-00064**	1	96.0	100.0%	5.0	91.0
Water Pump#	CNP 281	1	88.0	100.0%	10.0	78.0
Crane*	TableC7/114	1	101.0	100.0%	0.0	101.0
Concrete Pump*#	TableC6/36	2	106.0	100.0%	10.0	99.0
Concrete Lorry Mixer*	TableC6/35	4	100.0	100.0%	0.0	106.0
Derrick Barge	CNP061	1	104.0	100.0%	0.0	104.0
Poker Vibrator*#	TableC6/32	2	100.0	100.0%	5.0	98.0
Bar Bender#	CNP 021	1	90.0	100.0%	10.0	80.0
Air Compressor*#	TableC7/16	2	96.0	100.0%	10.0	89.0
Total						112.9

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

2.7.2 New Ferry Pier

2.7.2A Piling, Deck construction, & Superstructure

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Pilling rig#	CNP 164	1	115.0	100.0%	5.0	110.0
Generator*#	EPD-00064**	1	96.0	100.0%	5.0	91.0
Water Pump#	CNP 281	1	88.0	100.0%	10.0	78.0
Crane*	TableC7/114	1	101.0	100.0%	0.0	101.0
Concrete Pump*#	TableC6/36	2	106.0	100.0%	10.0	99.0
Concrete Lorry Mixer*	TableC6/35	4	100.0	100.0%	0.0	106.0
Derrick Barge	CNP 061	1	104.0	100.0%	0.0	104.0
Poker Vibrator*#	TableC6/32	2	100.0	100.0%	5.0	98.0
Bar Bender#	CNP 021	1	90.0	100.0%	10.0	80.0
Air Compressor*#	TableC7/16	2	96.0	100.0%	10.0	89.0
Total						112.9

2.7.2B Demolition of Structure

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Breaker, excavator mounted*#	TableC8/13	2	110.0	100.0%	5.0	108.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.0	103.0
Bulldozer*	Table C9/2	2	104.0	100.0%	0.0	107.0
Hand-held Breaker*#	Table C2/10	6	110.0	100.0%	5.0	112.8
Dump Truck*	TableC9/27	4	105.0	100.0%	0.0	111.0
Derrick Barge	CNP 061	2	104.0	100.0%	0.0	107.0
Crane*	TableC7/114	1	101.0	100.0%	0.0	101.0
Total						117.1

2.8 Helipad Reprovisioning at HKCEC

2.8.1 Reprovisioning at HKCEC

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Breaker, excavator mounted*#	TableC8/13	2	110.0	100.0%	5.0	108.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.0	103.0
Dump Truck*	TableC9/27	2	105.0	100.0%	0.0	108.0
Pilling rig#	CNP 164	1	115.0	100.0%	5.0	110.0
Generator*#	EPD-00064**	1	100.0	100.0%	5.0	95.0
Water Pump#	CNP 281	1	88.0	100.0%	10.0	78.0
Crane*	TableC7/114	1	101.0	100.0%	0.0	101.0
Concrete Pump*#	TableC6/36	2	106.0	100.0%	10.0	99.0
Concrete Lorry Mixer*	TableC6/35	4	100.0	100.0%	0.0	106.0
Derrick Barge	CNP061	1	104.0	100.0%	0.0	104.0
Poker Vibrator*#	TableC6/32	2	100.0	100.0%	5.0	98.0
Bar Bender#	CNP 021	1	90.0	100.0%	10.0	80.0
Air Compressor*#	TableC7/16	2	96.0	100.0%	10.0	89.0
Total						115.3

2.9 Sewage Outfall

2.9.1 Marine Section

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane*	TableC7/114	2	101.0	100.0%	104.0
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.5

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

2.9.2 Land Section

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	1	101.0	100.0%	0.0	101.0
Breaker, excavator mounted*#	TableC8/13	1	110.0	100.0%	5.0	105.0
Excavator*#	Table C3/97	1	105.0	100.0%	5.0	100.0
Dump Truck*	TableC9/27	2	105.0	100.0%	0.0	108.0
Concrete Lorry Mixer*	TableC6/35	1	100.0	100.0%	0.0	100.0
Poker Vibrator*#	TableC6/32	2	100.0	100.0%	5.0	98.0
Compactor, vibratory#	CNP 050	1	105.0	100.0%	5.0	100.0
Air Compressor*#	TableC7/16	1	96.0	100.0%	10.0	86.0
Total						111.6

2.10 WSD's Salt Water Pumping Station

2.10A Diversion of Intake/Connection back to existing system

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	1	101.0	100.0%	0.0	101.0
Breaker, excavator mounted*#	TableC8/13	1	110.0	100.0%	5.0	105.0
Excavator*#	Table C3/97	1	105.0	100.0%	5.0	100.0
Dump Truck*	TableC9/27	2	105.0	100.0%	0.0	108.0
Concrete Lorry Mixer*	TableC6/35	1	100.0	100.0%	0.0	100.0
Poker Vibrator*#	TableC6/32	2	100.0	100.0%	5.0	98.0
Compactor, vibratory#	CNP 050	1	105.0	100.0%	5.0	100.0
Air Compressor*#	TableC7/16	1	96.0	100.0%	10.0	86.0
Total						111.6

2.10B Construction of new pumping station

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.0	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.0	92.0
Total						111.3

2.11 Roads

2.11A Roadworks

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Dump Truck*	TableC9/27	2	105.0	100.0%	0.0	108.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.0	103.0
Grader*#	TableC9/11	2	110.0	100.0%	5.0	108.0
Loader*#	TableC3/97	2	105.0	100.0%	5.0	103.0
Vibratory Roller*	Table C3/116	1	106.0	100.0%	0.0	106.0
Road Roller*	TableC8/27	1	104.0	100.0%	0.0	104.0
Asphalt Paver*	TableC8/24	2	101.0	100.0%	0.0	104.0
Planer	CNP 184	2	111.0	100.0%	0.0	114.0
Total						117.1

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

Appendix 4.13

Powered Mechanical Equipment (PME) for the Different Construction Tasks during Normal Daytime Working Hours (With Mitigation Measures)

3 Hong Kong Convention and Exhibition Centre (HKCEC) Reclamation

3.1 HKCEC Reclamation Stage 1 (Water Channel)

3.1.1 Dredging, Seawalls & Filling

3.1.1A Dredging

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	4	0.0	100.0%	0.0
Total					117.1

3.1.1B Seawall Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane*	TableC7/114	2	101.0	100.0%	104.0
Barges	-	2	0.0	100.0%	0.0
Total					112.4

3.1.1C Filling behind Seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104	100.0%	107.0
Barges	-	2	0	100.0%	0
Tug Boat	CNP221	2	110	100.0%	113.0
Bulldozer*	TableC9/2	2	104.0	100.0%	107.0
Total					114.8

3.1.2 Cooling Water Systems

Powered Mechanical Equipment (PME)	TableC3/97 other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.00	104.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.00	103.0
Breaker, excavator mounted*#	TableC8/13	2	110.0	100.0%	5.00	108.0
Dump Truck*	TableC9/27	2	105.0	100.0%	0.00	108.0
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.00	103.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.00	101.0
Air Compressor*#	TableC7/16	2	96.0	100.0%	10.00	89.0
Compactor#	CNP 050	1	105.0	100.0%	5.00	100.0
Total						113.3

3.1.3 CWB Tunnel

3.1.3A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	4	101.0	100.0%	0.00	107.0
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Dump Truck*	TableC9/27	8	105.0	100.0%	0.00	114.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.00	102.0
Concrete Lorry Mixer*	TableC6/35	4	100.0	100.0%	0.00	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.00	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.0	116.0
Total						119.2

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

3.1.3B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Dump Truck*	TableC9/27	12	105.0	100.0%	0.00	115.8
Total						116.2

3.1.3C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.00	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.00	102.0
Concrete Lorry Mixer*	Table C6/35	8	100.0	100.0%	0.00	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.00	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.00	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.00	92.0
Total						111.3

3.1.3D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.00	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.00	109.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.00	111.0
Total						114.7

3.2 HKCEC Reclamation Stage 2

3.2.1 Dredging, Seawalls & Filling

3.2.1A Dredging

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	4	0.0	100.0%	0.0
Total					117.1

3.2.1B Seawall Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane *	TableC7/114	2	101.0	100.0%	104.0
Barges	-	2	0.0	100.0%	0.0
Total					112.4

3.2.1C Filling behind Seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barges	-	2	0.0	100.0%	0
Tug Boat	CNP221	2	110.0	100.0%	113.0
Bulldozer*	TableC9/2	2	104.0	100.0%	107.0
Total					114.8

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

3.2.1D Demolition of Structure

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Breaker, excavator mounted*#	TableC8/13	2	110.0	100.0%	5.00	108.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.00	103.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.00	107.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.00	111.0
Crane *	TableC7/114	1	101.0	100.0%	0.00	101.0
Total						114.4

3.2.2 Drainage Culverts (2 cell)

Powered Mechanical Equipment (PME)	TM Ref./ TableC2/10	No. Items	SWL/Item 110 dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Dump Truck*	TableC9/27	4	105.0	100.0%	0.00	111.0
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.00	103.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.00	103.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.00	101.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.00	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.00	109.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.00	83.0
Air Compressor*#	TableC7/16	2	96.0	100.0%	10.00	89.0
Total						114.9

3.2.4 Cooling Water Systems - Intakes Pipeline

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.00	104.0
Breaker, excavator mounted*#	TableC8/13	2	110.0	100.0%	5.00	108.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.00	103.0
Dump Truck*	TableC9/27	2	105.0	100.0%	0.00	108.0
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.00	103.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.00	101.0
Air Compressor*#	TableC7/16	2	96.0	100.0%	10.00	89.0
Compactor#	CNP 050	1	105.0	100.0%	5.00	100.0
Total						113.3

3.2.3 CWB Tunnel

3.2.3A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	4	101.0	100.0%	0.00	107.0
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Dump Truck*	TableC9/27	8	105.0	100.0%	0.00	114.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.00	102.0
Concrete Lorry Mixer*	TableC6/35	4	100.0	100.0%	0.00	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.00	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.00	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.00	116.0
Total						119.2

3.2.3B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Dump Truck*	TableC9/27	12	105.0	100.0%	0.00	115.8
Total						116.2

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

3.2.3C Construction of slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.00	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.00	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.00	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.00	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.00	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.00	92.0
Total						111.3

3.2.3D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	101.0	100.0%	5.00	102.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.00	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.00	109.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.00	111.0
Total						114.4

3.3 MTR Tunnel Crossing

3.3.1 Pilling

3.3.1A Pilling for CWB tunnel unit

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Piling Rig*#	CNP 164	2	115.0	100.0%	5.00	113.0
Generator*#	EPD-00064**	2	96.0	100.0%	5.00	94.0
Water Pump#	CNP 281	2	88.0	100.0%	10.00	81.0
Air Compressor*#	TableC7/16	2	96.0	100.0%	10.00	89.0
Concrete Pump*#	TableC6/36	2	106.0	100.0%	10.00	99.0
Barge	-	2	0.0	100.0%	0.00	0.0
Tug Boat	CNP 221	1	110.0	100.0%	0.0	110.0
Total						114.9

3.3.1B Pilling for deck

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Piling Rig#	CNP 164	2	115.0	100.0%	5.00	113.0
Generator*#	EPD-00064**	2	96.0	100.0%	5.00	94.0
Water Pump#	CNP 281	2	88.0	100.0%	10.00	81.0
Air Compressor*#	TableC7/16	2	96.0	100.0%	10.00	89.0
Concrete Pump*#	TableC6/36	2	106.0	100.0%	10.00	99.0
Barge	-	2	0.0	100.0%	0.00	0.0
Tug Boat	CNP 221	1	110.0	100.0%	0.0	110.0
Total						114.9

3.3.2 Tunnel & Deck Construction

3.3.2A Place precast CWB Tunnel Unit

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Cranes*	TableC7/114	6	101.0	100.0%	108.8
Barges		6	0.0	100.0%	0.0
Tug Boat	CNP 221	3	110.0	100.0%	114.8
Total					115.7

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

3.3.2B Deck Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.00	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.00	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.00	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.00	101.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.00	92.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.00	83.0
Total						111.3

3.4 HKCEC Reclamation Stage 3

3.4.1 Dredging, Seawalls & Filling

3.4.1A Dredging

HKCEC3W, 3Ea & 3Eb

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	100.0%	113.0
Barges	-	6	0.0	100.0%	0.0
Total					117.1

3.4.1B Seawall Construction

HKCEC3W & 3Eb

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane*	TableC7/114	2	101.0	100.0%	104.0
Barges	-	2	0.0	100.0%	0.0
Total					112.4

3.4.1C Filling behind Seawall

HKCEC3W, 3Ea & 3Eb

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104	100.0%	107.0
Barges	-	2	0	100.0%	0
Tug Boat	CNP221	2	110	100.0%	113.0
Bulldozer*	TableC9/2	2	104.0	100.0%	107.0
Total					114.8

3.4.2 Demolition of Structure

East Bridge

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Breaker, excavator mounted*#	Table C8/13	2	110.0	100.0%	5.00	108.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.00	103.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.00	107.0
Dump Truck*	Table C9/27	4	105.0	100.0%	0.00	111.0
Crane *	TableC7/114	1	101.0	100.0%	0.00	101.0
Total						114.4

3.4.3 Drainage Culverts (2 cell)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Dump Truck*	TableC9/27	4	105.0	100.0%	0.00	111.0
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.00	103.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.00	103.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.00	101.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.00	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.00	109.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.00	83.0
Air Compressor*#	TableC7/16	2	96.0	100.0%	10.00	89.0
Total						114.9

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

3.4.4 CWB Tunnel

3.4.4A Diaphragm Wall

HKCEC3Ea

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	4	101.0	100.0%	0.00	107.0
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Dump Truck*	TableC9/27	8	105.0	100.0%	0.00	114.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.00	102.0
Concrete Lorry Mixer*	TableC6/35	4	100.0	100.0%	0.00	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.00	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.00	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.00	116.0
Total						119.2

3.4.4B Excavation

HKCEC3Ea

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	101 dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Dump Truck*	TableC9/27	12	105.0	100.0%	0.00	115.8
Total						116.2

3.4.4C Construction of slabs

HKCEC3Ea

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.00	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.00	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.00	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.00	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.00	83.0
Air Compressor*#	TableC6/32	4	96.0	100.0%	10.00	92.0
Total						111.3

3.4.4D Backfill

HKCEC3Ea

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	101.0	100.0%	5.00	102.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.00	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.00	109.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.00	111.0
Total						114.4

3.4.4E Diaphragm Wall

HKCEC3W & Eb

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	4	101.0	100.0%	0.00	107.0
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Dump Truck*	TableC9/27	8	105.0	100.0%	0.00	114.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.00	102.0
Concrete Lorry Mixer*	TableC6/35	4	100.0	100.0%	0.00	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.00	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.00	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.00	116.0
Total						119.2

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

3.4.4F Excavation

HKCEC3W & Eb

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.00	106.0
Dump Truck*	TableC9/27	12	105.0	100.0%	0.00	115.8
Total						116.2

3.4.4G Construction of slabs

HKCEC3W & Eb

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	100.0%	0.00	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.00	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.00	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.00	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.00	83.0
Air Compressor*#	TableC6/32	4	96.0	100.0%	10.00	92.0
Total						111.3

3.4.4H Backfill

HKCEC3W & Eb

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	101.0	100.0%	5.00	102.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.00	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.00	109.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.00	111.0
Total						114.4

3.5 Roads

3.5 Roadworks

Powered Mechanical Equipment	TM Ref./ other Ref.	No. Items	101 101	On-time %	Noise Barrier 500.0%	Total SWL dB(A)
Dump Truck*#	TableC9/27	2	105.0	100.0%	5.00	103.0
Excavator*#	TableC3/97	2	105.0	100.0%	5.00	103.0
Grader*#	TableC9/11	2	110.0	100.0%	5.00	108.0
Loader*#	TableC3/97	2	105.0	100.0%	5.00	103.0
Vibratory Roller	CNP 186	1	108.0	100.0%	0.00	108.0
Road Roller*	TableC8/30	1	101.0	100.0%	0.00	101.0
Asphalt Paver*	TableC8/24	2	101.0	100.0%	0.00	104.0
Planer	CNP 184	2	111.0	100.0%	0.00	114.0
Total						116.8

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

Appendix 4.13

Powered Mechanical Equipment (PME) for the Different Construction Tasks during Normal Daytime Working Hours (With Mitigation Measures)

4 Cross Harbour Watermains

4.1 Submarine Pipeline

4.1 Marine Section

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Tug boat	CNP 221	1	110.0	100.0%	110.0
Crane*	Table C7/114	2	101.0	100.0%	104.0
Dredger	CNP 063	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.5

4.2 Land Section

4.2 Land Section

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	Table C7/114	1	101.0	100.0%	0.0	101.0
Breaker, excavator mounted*#	Table C8/13	1	110.0	100.0%	5.0	105.0
Excavator*#	Table C3/97	1	105.0	100.0%	5.0	100.0
Dump Truck*	Table C9/27	2	105.0	100.0%	0.0	108.0
Concrete Lorry Mixer*	Table C6/35	1	100.0	100.0%	0.0	100.0
Poker Vibrator*#	Table C6/35	2	100.0	100.0%	5.0	98.0
Compactor, vibratory	CNP 050	1	105.0	100.0%	0.0	105.0
Air Compressor*#	Table C6/35	1	96.0	100.0%	10.0	86.0
Total						112.2

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

Appendix 4.13

Powered Mechanical Equipment (PME) for the Different Construction Tasks during Normal Daytime Working Hours (With Mitigation Measures)

5 North Point Reclamation

5.1 North Point Reclamation Stage 1

5.1.1 Dredging, Seawalls & Filling

5.1.1A Dredging

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	60.0%	110.8
Barges	-	4	0.0	100.0%	0.0
Total					116.4

5.1.1B Seawall Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	110.0	60.0%	107.8
Crane*	TableC7/114	2	101.0	70.0%	102.5
Barges	-	2	0.0	100.0%	0.0
Total					111.1

5.1.1C Filling behind Seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Barges	-	2	0.0	100.0%	0
Tug Boat	CNP221	2	110.0	60.0%	110.8
Bulldozer*	TableC9/2	2	104.0	100.0%	107.0
Total					113.4

5.1.2 CWB Tunnel

5.1.2A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*#	TableC7/114	4	101.0	70.0%	10.0	95.5
Excavator*#	TableC3/97	4	105.0	70.0%	10.0	99.5
Dump Truck*#	TableC9/27	8	105.0	100.0%	10.0	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*#	TableC6/35	4	100.0	100.0%	10.0	96.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	10.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP164	4	115.0	100.0%	10.0	111.0
Total						112.9

5.1.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	70.0%	5.0	104.5
Dump Truck*	TableC9/27	12	105.0	100.0%	0.0	115.8
Total						116.1

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

5.1.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	70.0%	0.0	102.5
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	TableC6/32	4	100.0	70.0%	5.0	99.5
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.0	92.0
Total						110.9

5.1.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	70.0%	5.0	104.5
Bulldozer*	TableC9/2	2	104.0	100.0%	0.0	107.0
Roller*	TableC8/27	2	104.0	100.0%	0.0	107.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.0	111.0
Total						114.1

5.2 North Point Reclamation Stage 2

5.2.1 Dredging, Seawalls & Filling(NPR2E)

5.2.1A Dredging

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Grab Dredger	CNP 063	2	112.0	100.0%	115.0
Tug boat	CNP 221	2	110.0	60.0%	110.8
Barges	-	4	0.0	100.0%	0.0
Total					116.4

5.2.1B Seawall Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104.0	100.0%	107.0
Tug boat	CNP 221	1	101.0	60.0%	98.8
Crane*	TableC7/114	2	101.0	70.0%	102.5
Barges	-	2	0.0	100.0%	0.0
Total					108.8

5.2.1C Filling behind Seawall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Derrick Barge	CNP 061	2	104	100.0%	107.0
Barges	-	2	0	100.0%	0
Tug Boat	CNP221	2	110	60.0%	110.8
Bulldozer*	Table C9/2	2	104.0	100.0%	107.0
Total					113.4

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

5.2.2 CWB Tunnel (NPR2W)

5.2.2A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*#	TableC7/114	4	101.0	70.0%	10.0	95.5
Excavator*#	TableC3/97	4	105.0	70.0%	10.0	99.5
Dump Truck*#	TableC9/27	8	105.0	100.0%	10.0	104.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*#	TableC6/35	4	100.0	100.0%	10.0	96.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	10.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	10.0	111.0
Total						112.9

5.2.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	70.0%	5.0	104.5
Dump Truck*	TableC9/27	12	105.0	100.0%	0.0	115.8
Total						116.1

5.2.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	2	101.0	70.0%	0.0	102.5
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	TableC6/32	4	100.0	70.0%	5.0	99.5
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.0	92.0
Total						110.9

5.2.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	70.0%	5.0	104.5
Bulldozer*	TableC9/2	2	104.0	100.0%	0.0	107.0
Roller*	TableC3/116	2	106.0	100.0%	0.0	109.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.0	111.0
Total						114.5

5.2.2E Foundation of East Vent Building

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*#	TableC7/114	2	101.0	70.0%	10.0	92.5
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*#	TableC6/35	8	100.0	100.0%	10.0	99.0
Poker Vibrator*#	TableC6/32	4	100.0	70.0%	10.0	94.5
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.0	92.0
Total						104.8

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging.

Appendix 4.13

Powered Mechanical Equipment (PME) for the Different Construction Tasks during Normal Daytime Working Hours (With Mitigation Measures)

6.0 Construction of IECL

6.2 IEC Connection Work

6.2A Substructures(Group 1 and 2 PME)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Concrete Lorry Mixer*#	Table C6/35	2	100.0	100.0%	10.0	93.0
Poker Vibrator*#	TableC6/32	2	100.0	70.0%	10.0	91.5
Crane*#	TableC7/114	1	101.0	70.0%	10.0	89.5
Air Compressor*#	TableC7/16	5	96.0	100.0%	10.0	93.0
Excavator*#	TableC3/97	2	105.0	70.0%	10.0	96.5
Water Pump#	CNP 281	6	88.0	100.0%	10.0	85.8
Concrete Pump*#	TableC6/35	2	100.0	100.0%	10.0	93.0
Piling, Large diameter bored#	CNP 164	1	115.0	100.0%	10.0	105.0
Total						106.5

6.2A Substructures(Group 1 PME)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Concrete Lorry Mixer*#	TableC6/35	1	100.0	70.0%	10.0	88.5
Poker Vibrator*#	TableC6/32	1	100.0	70.0%	10.0	88.5
Crane*#	TableC7/114	1	101.0	70.0%	10.0	89.5
Compressor*#	TableC7/16	1	96.0	100.0%	10.0	86.0
Concrete Pump*#	TableC6/36	1	106.0	100.0%	10.0	96.0
Total						98.2

6.2A Substructures(Group 2 PME)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*#	TableC7/114	1	101.0	70.0%	10.0	89.5
Excavator*#	TableC3/97	1	105.0	50.0%	10.0	92.0
Water Pump#	CNP 281	1	88.0	100.0%	10.0	78.0
Piling, Large diameter bored#	CNP 164	1	115.0	100.0%	10.0	105.0
Total						105.3

6.2B Superstructures

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Concrete Lorry Mixer#	TableC6/35	2	100.0	100.0%	0.0	103.0
Poker Vibrator*#	TableC6/32	2	100.0	70.0%	5.0	96.5
Crane*	TableC7/114	1	101.0	70.0%	0.0	99.5
Compressor*#	TableC7/16	5	96.0	100.0%	10.0	93.0
Excavator*#	TableC3/97	2	105.0	70.0%	5.0	101.5
Water Pump#	CNP 281	6	88.0	100.0%	10.0	85.8
Concrete Pump*#	TableC6/35	2	100.0	100.0%	10.0	93.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Total						107.1

6.2A Substructures(Group 1 and 2 PME)(For Marine Works)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Concrete Lorry Mixer*#	Table C6/35	2	100.0	100.0%	0.0	103.0
Poker Vibrator*#	TableC6/32	2	100.0	70.0%	5.0	96.5
Crane*#	TableC7/114	1	101.0	70.0%	0.0	99.5
Air Compressor*#	TableC7/16	5	96.0	100.0%	10.0	93.0
Water Pump#	CNP 281	6	88.0	100.0%	10.0	85.8
Concrete Pump*#	TableC6/35	2	100.0	100.0%	10.0	93.0
Piling, Large diameter bored#	CNP 164	1	115.0	100.0%	5.0	110.0
Tug boat	CNP 221	1	110.0	50.0%	0.0	107.0
Barges	-	2	0.0	100.0%	0.0	0.0
Total						112.7

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging

6.2A Substructures(Group 1 PME)(For Marine Works)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Concrete Lorry Mixer*#	TableC6/35	1	100.0	70.0%	0.0	98.5
Poker Vibrator*#	TableC6/32	1	100.0	70.0%	5.0	93.5
Crane*#	TableC7/114	1	101.0	70.0%	0.0	99.5
Compressor*#	TableC7/16	1	96.0	100.0%	10.0	86.0
Concrete Pump*#	TableC6/36	1	106.0	100.0%	10.0	96.0
Tug boat	CNP 221	1	110.0	50.0%	0.0	107.0
Barges	-	1	0.0	100.0%	0.0	0.0
Total						108.6

6.2A Substructures(Group 2 PME)(For Marine Works)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*#	TableC7/114	1	101.0	70.0%	0.0	99.5
Water Pump#	CNP 281	1	88.0	100.0%	10.0	78.0
Piling, Large diameter bored#	CNP 164	1	115.0	100.0%	5.0	110.0
Tug boat	CNP 221	1	110.0	50.0%	0.0	107.0
Barges	-	1	0.0	100.0%	0.0	0.0
Total						112.0

6.2B Superstructures(For Marine Works)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Concrete Lorry Mixer#	TableC6/35	2	100.0	100.0%	0.0	103.0
Poker Vibrator*#	TableC6/32	2	100.0	70.0%	5.0	96.5
Crane*	TableC7/114	1	101.0	70.0%	0.0	99.5
Compressor*#	TableC7/16	5	96.0	100.0%	10.0	93.0
Excavator*#	TableC3/97	2	105.0	70.0%	5.0	101.5
Water Pump#	CNP 281	6	88.0	100.0%	10.0	85.8
Concrete Pump*#	TableC6/35	2	100.0	100.0%	10.0	93.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Tug boat	CNP 221	1	110.0	50.0%	0.0	107.0
Barges	-	2	0.0	100.0%	0.0	0.0
Total						110.1

6.2C Demolition of Structure (For IEC E/B)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Breaker, excavator mounted*#	TableC8/13	2	110.0	80.0%	5.0	107.0
Hand-held Breaker*#	Table C2/10	2	110.0	100.0%	5.0	108.0
Backhoe*	TableC3/97	2	105.0	70.0%	5.0	101.5
Dump Truck*	TableC9/27	4	105.0	70.0%	0.0	109.5
Crane*	TableC7/114	1	101.0	100.0%	0.0	101.0
Total						113.6

6.2C Demolition of Structure (For IEC W/B)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Breaker, excavator mounted*#	TableC8/13	1	110.0	80.0%	5.0	104.0
Hand-held Breaker*#	Table C2/10	1	110.0	100.0%	5.0	105.0
Backhoe*	TableC3/97	1	105.0	70.0%	5.0	98.5
Dump Truck*	TableC9/27	2	105.0	70.0%	0.0	106.5
Crane*	TableC7/114	1	101.0	100.0%	0.0	101.0
Total						110.8

6.2C Demolition of Structure (For IEC E/B)(For Marine Works)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Breaker, excavator mounted*#	TableC8/13	2	110.0	80.0%	5.0	107.0
Hand-held Breaker*#	Table C2/10	2	110.0	100.0%	5.0	108.0
Backhoe*	TableC3/97	2	105.0	70.0%	5.0	101.5
Dump Truck*	TableC9/27	4	105.0	70.0%	0.0	109.5
Tug boat	CNP 221	1	110.0	100.0%	0.0	110.0
Barges	-	2	0.0	100.0%	0.0	0.0
Crane*	TableC7/114	1	101.0	100.0%	0.0	101.0
Total						115.2

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging

6.2C Demolition of Structure (For IEC W/B)(For Marine Works)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Breaker, excavator mounted*#	TableC8/13	1	110.0	80.0%	5.0	104.0
Hand-held Breaker*#	Table C2/10	1	110.0	100.0%	5.0	105.0
Backhoe*	TableC3/97	1	105.0	70.0%	5.0	98.5
Dump Truck*	TableC9/27	2	105.0	70.0%	0.0	106.5
Tug boat	CNP 221	1	110.0	100.0%	0.0	110.0
Barges	-	2	0.0	100.0%	0.0	0.0
Crane*	TableC7/114	1	101.0	100.0%	0.0	101.0
Total						113.4

6.3 East Portal and IEC Connection Work

6.3.1 Substructures

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	10.0	93.0
Poker Vibrator*#	TableC6/32	2	100.0	70.0%	10.0	91.5
Crane*	TableC7/114	1	101.0	70.0%	10.0	89.5
Air Compressor*#	TableC7/16	5	96.0	100.0%	10.0	93.0
Excavator*#	TableC3/97	2	105.0	70.0%	10.0	96.5
Water Pump#	CNP 281	6	88.0	100.0%	10.0	85.8
Concrete Pump*#	TableC6/36	2	106.0	100.0%	10.0	99.0
Piling, Large diameter bored#	CNP 164	1	115.0	100.0%	10.0	105.0
Total						107.0

6.3.2 Retaining Structures

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Concrete Lorry Mixer*#	TableC6/35	2	100.0	100.0%	0.0	103.0
Poker Vibrator*#	TableC6/32	2	100.0	70.0%	5.0	96.5
Crane*#	TableC7/114	1	101.0	70.0%	0.0	99.5
Air Compressor*#	TableC7/16	5	96.0	100.0%	10.0	93.0
Excavator*#	TableC3/97	2	105.0	70.0%	5.0	101.5
Water Pump#	CNP 281	6	88.0	100.0%	10.0	85.8
Concrete Pump*#	TableC6/36	2	106.0	100.0%	10.0	99.0
Piling, Large diameter bored#	CNP 164	1	115.0	100.0%	5.0	110.0
Total						112.0

6.3.3 Demolition of Structure

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Breaker, excavator mounted*#	TableC8/13	2	110.0	70.0%	5.0	106.5
Excavator*#	TableC3/97	2	105.0	80.0%	5.0	102.0
Hand-held Breaker*#	TableC2/10	2	110.0	100.0%	5.0	108.0
Dump Truck*	TableC9/27	4	105.0	70.0%	0.0	109.5
Crane*	TableC7/114	1	101.0	100.0%	0.0	101.0
Total						113.5

7.0 Construction of Central Interchange

7.1.1 Road Formation & Earthworks

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Lorry	CNP 141	1	112.0	100.0%	0.0	112.0
Dump Truck*	TableC9/31	6	110.0	100.0%	0.0	117.8
Excavator*#	TableC3/97	2	105.0	70.0%	5.0	101.5
Grader*#	TableC9/11	1	110.0	100.0%	5.0	105.0
Roller*	TableC3/116	2	106.0	100.0%	0.0	109.0
Loader*#	TableC3/97	1	105.0	100.0%	5.0	100.0
Total						119.5

7.1.2 Road Pavement + misc

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-Time %	Noise Barrier Reduction	Total SWL dB(A)
Vibratory Roller*	TableC3/116	1	106.0	100.0%	0.0	106.0
Roller*	TableC3/116	1	106.0	100.0%	0.0	106.0
Asphalt paver*#	TableC8/24	1	101.0	100.0%	5.0	96.0
Dump Truck*	TableC9/2	4	105.0	100.0%	0.0	111.0
Total						113.2

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging

7.1.3 Building Construction for west ventilation building - Building Foundation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Lorry	CNP 141	4	112.0	100.0%	0.0	118.0
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.0	103.0
Bentonite Filtering Plant#	CNP 162	1	105.0	100.0%	5.0	100.0
Piling, Large diameter bored#	CNP 164	1	115.0	100.0%	5.0	110.0
Excavator*##	TableC3/97	2	105.0	70.0%	5.0	101.5
Concrete Pump*##	TableC6/36	2	106.0	100.0%	10.0	99.0
Water Pump#	CNP 281	2	88.0	100.0%	10.0	81.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Poker Vibrator*##	TableC6/32	4	100.0	70.0%	5.0	99.5
Total						119.0

7.1.4 Building Superstructure

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-Time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	1	101.0	70.0%	0.0	99.5
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Concrete Lorry Mixer*	TableC6/35	1	100.0	100.0%	0.0	100.0
Concrete Pump*##	TableC6/36	1	106.0	100.0%	10.0	96.0
Poker Vibrator*##	Table C6/32	2	100.0	100.0%	5.0	98.0
Total						104.6

7.1.5 Tunnel Construction - Diaphragm Walls

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*##	TableC7/114	2	101.0	70.0%	10.0	92.5
Dump Truck*##	TableC9/27	2	105.0	100.0%	10.0	98.0
Excavator*##	TableC3/97	1	105.0	70.0%	10.0	93.5
Concrete Pump*##	TableC6/36	2	106.0	100.0%	10.0	99.0
Concrete Lorry Mixer*##	TableC6/35	2	100.0	100.0%	10.0	93.0
Bentonite Plant#	CNP 162	2	105.0	100.0%	10.0	98.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rig#	CNP 164	2	115.0	100.0%	10.0	108.0
Total						109.5

7.1.6 Excavation between walls

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-Time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*##	TableC3/97	2	105.0	70.0%	5.0	101.5
Bulldozer*	TableC9/2	1	104.0	100.0%	0.0	104.0
Dump Truck*	TableC9/27	6	105.0	100.0%	0.0	112.8
Total						113.6

7.1.7 RC Slab Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-Time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	1	101.0	70.0%	0.0	99.5
Concrete Pumps*##	TableC6/36	2	106.0	100.0%	10.0	99.0
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.0	103.0
Poker Vibrator*##	Table C6/32	2	100.0	100.0%	5.0	98.0
Bar Bender#	CNP 021	1	90.0	100.0%	10.0	80.0
Air Compressor*##	TableC7/16	1	96.0	100.0%	10.0	86.0
Total						106.4

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging

7.1.8 Tunnel Modification at Road D5 Junction

Powered Mechanical Equipment	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Piling, Large diameter bored#	CNP 164	1	115.0	100.0%	5.0	110.0
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.0	103.0
Concrete Pump*#	TableC6/36	2	106.0	100.0%	10.0	99.0
Excavator*#	TableC3/97	1	105.0	70.0%	5.0	98.5
Dump Trucks*	TableC9/31	2	110.0	100.0%	0.0	113.0
Water Pump#	CNP 281	2	88.0	100.0%	10.0	81.0
Crane*	TableC7/114	1	101.0	70.0%	0.0	99.5
Total						115.4

7.1.9 Deck Formation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.0	103.0
Poker Vibrator*#	TableC6/32	2	100.0	70.0%	5.0	96.5
Crane*	TableC7/114	1	101.0	70.0%	0.0	99.5
Air Compressor#	CNP 002	2	96.0	100.0%	10.0	89.0
Concrete Pump*#	TableC6/36	2	106.0	100.0%	10.0	99.0
Total						106.2

7.1.10 Road Pavement for Deck

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-Time %	Noise Barrier Reduction	Total SWL dB(A)
Vibratory Roller*	TableC3/116	1	106.0	100.0%	0.0	106.0
Roller*	TableC8/27	1	104.0	100.0%	0.0	104.0
Asphalt paver*#	TableC8/24	1	101.0	100.0%	5.0	96.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.0	111.0
Total						112.9

7.1.11 Foundation Work for Road

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.0	103.0
Poker Vibrator*#	TableC6/32	2	100.0	70.0%	5.0	96.5
Crane*	TableC7/114	1	101.0	70.0%	0.0	99.5
Air Compressor*#	TableC7/16	5	96.0	100.0%	10.0	93.0
Excavator*#	TableC3/97	2	105.0	70.0%	5.0	101.5
Water Pump#	CNP 281	6	88.0	100.0%	10.0	85.8
Concrete Pump*#	TableC6/36	2	106.0	100.0%	10.0	99.0
Piling, Large diameter bored#	CNP 164	1	115.0	100.0%	5.0	110.0
Total						112.0

8.0 Construction of CWB Tunnel under CRIII

8.0 Construction of CWB Tunnel under CRIII at Initial Reclamation Area East, Final Reclamation Area West, & Final Reclamation Area East

8.0A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Crane*	TableC7/114	4	101.0	100.0%	0.0	107.0
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	TableC9/27	8	105.0	100.0%	0.0	114.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	4	100.0	100.0%	0.0	106.0
Bentonite Plants#	CNP 162	4	105.0	100.0%	5.0	106.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Diaphragm Wall Rigs#	CNP 164	4	115.0	100.0%	5.0	116.0
Total						119.2

8.0B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Dump Truck*	TableC9/29	12	105.0	105.0%	0.0	116.0
Total						116.4

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging

8.0C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Diaphragm Wall Rigs#	CNP164	2	115.0	100.0%	5.0	113.0
Concrete Pump*#	TableC6/36	4	106.0	100.0%	10.0	102.0
Concrete Lorry Mixer*	TableC6/35	8	100.0	100.0%	0.0	109.0
Poker Vibrator*#	TableC6/32	4	100.0	100.0%	5.0	101.0
Bar Bender#	CNP 021	2	90.0	100.0%	10.0	83.0
Air Compressor*#	TableC7/16	4	96.0	100.0%	10.0	92.0
Total						114.9

8.0D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Excavator*#	TableC3/97	4	105.0	100.0%	5.0	106.0
Bulldozer*	TableC9/2	2	104.0	100.0%	0.0	107.0
Roller*	TableC8/27	2	104.0	100.0%	5.0	102.0
Dump Truck*	TableC9/27	4	105.0	100.0%	0.0	111.0
Total						113.7

9.0 Tunnel Building and Installation

9.0 Tunnel Building and Installation at East Ventilation Building, Administration Building, & Central Ventilation Building, West Ventilation Building

9.0A Substructures

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.0	103.0
Poker Vibrator*#	TableC6/32	2	100.0	70.0%	5.0	96.5
Crane*	TableC7/114	1	101.0	70.0%	0.0	99.5
Compressor*#	TableC7/16	5	96.0	100.0%	10.0	93.0
Excavator*#	TableC3/97	2	105.0	70.0%	5.0	101.5
Water Pump#	CNP 281	6	88.0	100.0%	10.0	85.8
Concrete Pump*#	TableC6/35	2	100.0	100.0%	10.0	93.0
Piling, Large diameter bored#	CNP 164	1	115.0	100.0%	5.0	110.0
Total						111.8

9.0B Superstructures

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
Concrete Lorry Mixer*	TableC6/35	2	100.0	100.0%	0.0	103.0
Poker Vibrator*	TableC6/32	2	100.0	70.0%	5.0	96.5
Crane*	TableC7/114	1	101.0	70.0%	0.0	99.5
Compressor*#	TableC7/16	5	96.0	100.0%	10.0	93.0
Excavator*#	TableC3/97	2	105.0	70.0%	5.0	101.5
Water Pump#	CNP 281	6	88.0	100.0%	10.0	85.8
Concrete Pump*#	TableC6/35	2	100.0	100.0%	10.0	93.0
Piling, Large diameter bored#	CNP 164	1	115.0	100.0%	5.0	110.0
Total						111.8

*Use of QPME

#Use of Barrier

**EPD website (www.epd.gov.hk/cgi-bin/npg/qpme/search.gen.pl)

Note: No noise emits from barges during dredging