

**Appendix 4.5**  
**Powered Mechanical Equipment (PME)**  
**for the Different Construction Tasks**  
**during Normal Daytime Working Hours**  
**(Without Mitigation Measures)**

## Appendix 4.5

### Powered Mechanical Equipment (PME) for the Different Construction Tasks during Normal Daytime Working Hours (Without 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 %	Total SWL dB(A)
Piling Rig	CNP 164	2	115.0	100.0%	118.0
Generator	CNP 102	2	100.0	100.0%	103.0
Water Pump	CNP 281	2	88.0	100.0%	91.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Barge	-	2	0.0	100.0%	0.0
Total					119.2

#### 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	CNP 048	2	112.0	70.0%	113.5
Barges	-	2	0.0	100.0%	0.0
Total					115.2

##### 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%	3.0
Tug Boat	CNP 221	2	110.0	60.0%	110.8
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Total					119.0

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	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

### 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%	3.0
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Total					119.5

### 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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	70.0%	116.5
Excavator	CNP 081	4	112.0	70.0%	116.5
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.4

#### 1.2.2B Excavation (TCBR1E)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	70.0%	116.5
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.1

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 %	Total SWL dB(A)
Crane	CNP 048	2	112.0	70.0%	113.5
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	70.0%	117.5
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					122.5

1.2.2D Backfill (TCBR1E)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	70.0%	116.5
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.1

1.2.2E Diaphragm Wall (TCBR1W)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

1.2.2F Excavation (TCBR1W)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	8	112.0	100.0%	121.0
Dump Truck	CNP 067	24	117.0	100.0%	130.8
Total					131.2

1.2.2G Construction of Slabs (TCBR1W)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

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 %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

### 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 %	Total SWL dB(A)
Breaker	CNP 027	2	122.0	100.0%	125.0
Backhoe	CNP 081	2	112.0	100.0%	115.0
Ventilation fan	CNP241	2	108.0	100.0%	111.0
Rock Drill	CNP182	2	123.0	100.0%	126.0
Truck	CNP 067	4	117.0	100.0%	123.0
Crane	CNP 048	1	112.0	100.0%	112.0
Total					129.9

#### 1.2.3B Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

### 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 %	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	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

Note: No noise emits from barges during dredging.

### 1.3.1C 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	CNP 030	2	115.0	100.0%	118.0
Total					119.5

### 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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

#### 1.3.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

#### 1.3.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

#### 1.3.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

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	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

##### 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%	3.0
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Total					119.5

#### 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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

##### 1.4.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

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 %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

#### 1.4.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

### 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	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

##### 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%	3.0
Tug Boat	CNP 221	2	110.0	100.0%	113.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Total					119.5

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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Truck	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

### 1.5.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	8	112.0	100.0%	121.0
Dump Truck	CNP 067	24	117.0	100.0%	130.8
Total					131.2

### 1.5.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

### 1.5.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

## 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 %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Dump Truck	CNP 067	2	117.0	100.0%	120.0
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Compactor	CNP 050	1	105.0	100.0%	105.0
Total					124.2

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 %	Total SWL dB(A)
Pilling Rig	CNP 164	2	115.0	100.0%	118.0
Generator	CNP 102	2	100.0	100.0%	103.0
Water Pump	CNP 281	2	88.0	100.0%	91.0
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					124.4

### 1.9.2 At-grade Road

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Dump Truck	CNP 067	2	117.0	70.0%	118.5
Excavator	CNP 081	2	112.0	80.0%	114.0
Grader	CNP 104	2	113.0	80.0%	115.0
Loader	CNP 081	2	112.0	80.0%	114.0
Vibratory Roller	CNP 186	1	108.0	80.0%	107.0
Road Roller	CNP 185	1	108.0	80.0%	107.0
Asphalt Paver	CNP 004	2	109.0	80.0%	111.0
Planer	CNP 184	2	111.0	80.0%	113.0
Total					122.9

### 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 %	Total SWL dB(A)
Pilling Rig	CNP 164	2	115.0	100.0%	118.0
Generator	CNP 102	2	100.0	100.0%	103.0
Water Pump	CNP 281	2	88.0	100.0%	91.0
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					124.4

#### 1.9.3B Superstructure works

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

Note: No noise emits from barges during dredging.

## Appendix 4.5

### Powered Mechanical Equipment (PME) for the Different Construction Tasks during Normal Daytime Working Hours (Without Mitigation Measures)

#### 2 Wan Chai Reclamation

##### 2.1 Wan Chai Reclamation Stage 1 (WCRI)

##### 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	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

##### 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	CNP 030	2	115.0	100.0%	118.0
Total					119.5

##### 2.1.2 Drainage Culverts (2 cell)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Dump Trunk	CNP 067	4	117.0	100.0%	123.0
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Total					126.1

##### 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	CNP 048	2	112.0	100.0%	115.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Barges	-	2	0.0	100.0%	0.0
Total					116.2

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 %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Dump Truck	CNP 067	2	117.0	100.0%	120.0
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Compressor	CNP 002	2	102.0	100.0%	105.0
Compactor	CNP 050	1	105.0	100.0%	105.0
Total					124.2

### 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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

#### 2.1.4B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

#### 2.1.4C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

#### 2.1.4D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

## 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

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	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

### 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	CNP 030	2	115.0	100.0%	118.0
Total					119.5

### 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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

#### 2.2.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

#### 2.2.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

#### 2.2.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

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	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

#### 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	CNP 030	2	115.0	100.0%	118.0
Total					119.5

### 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 %	Total SWL dB(A)
Crane	CNP 048	8	112.0	100.0%	121.0
Excavator	CNP 081	8	112.0	100.0%	121.0
Dump Truck	CNP 067	16	117.0	100.0%	129.0
Concrete Pump	CNP 047	8	109.0	100.0%	118.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Bentonite Plants	CNP 162	8	105.0	100.0%	114.0
Bar Bender	CNP 021	4	90.0	100.0%	96.0
Diaphragm Wall Rigs	CNP 164	8	115.0	100.0%	124.0
Total					131.6

#### 2.3.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

#### 2.3.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

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 %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

## 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	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

#### 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	CNP 030	2	115.0	100.0%	118.0
Total					119.5

### 2.4.2 Drainage Culvert (WCR4)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Dump Trunk	CNP 067	4	117.0	100.0%	123.0
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Total					126.1

### 2.4.3 CWB Tunnel (WCR4)

#### 2.4.3A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

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 %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

### 2.4.3C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

### 2.4.3D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

## 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	CNP 221	1	110.0	100.0%	110.0
Crane	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

#### 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	CNP 221	2	115.0	100.0%	118.0
Total					119.5

Note: No noise emits from barges during dredging.



## 2.5.2 CWB Tunnel (TPCWAE)

### 2.5.2A Diaphragm Wall

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

### 2.5.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

### 2.5.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

### 2.5.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

## 2.6 Temporary Reclamation at PCWA Stage 2

### 2.6.1 Dredging , Seawalls & Filling (TPCWAW)

#### 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	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

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	CNP 030	2	115.0	100.0%	118.0
Total					119.5

### 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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

#### 2.6.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

#### 2.6.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

#### 2.6.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

## 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 %	Total SWL dB(A)
Pilling rig	CNP 164	1	115.0	100.0%	115.0
Generator	CNP 102	1	100.0	100.0%	100.0
Water Pump	CNP 281	1	88.0	100.0%	88.0
Crane	CNP 048	1	112.0	100.0%	112.0
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Barge	CNP 061	1	104.0	100.0%	104.0
Poker Vibrator	CNP 170	2	113.0	100.0%	116.0
Bar Bender	CNP 021	1	90.0	100.0%	90.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Total					121.5

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 %	Total SWL dB(A)
Pilling rig	CNP 164	1	115.0	100.0%	115.0
Generator	CNP 102	1	100.0	100.0%	100.0
Water Pump	CNP 281	1	88.0	100.0%	88.0
Crane	CNP 048	1	112.0	100.0%	112.0
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Barge	CNP 061	1	104.0	100.0%	104.0
Poker Vibrator	CNP 170	2	113.0	100.0%	116.0
Bar Bender	CNP 021	1	90.0	100.0%	90.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Total					121.5

### 2.7.2B Demolition of Structure

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Breaker	CNP 027	2	122.0	100.0%	125.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Hand-held Breaker	CNP 026	6	114.0	100.0%	121.8
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Barge	CNP 061	2	104.0	100.0%	107.0
Crane	CNP 048	1	112.0	100.0%	112.0
Total					128.9

## 2.8 Helipad Re provisioning at HKCEC

### 2.8.1 Re provisioning at HKCEC

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Breaker, excavator mounted	CNP 027	2	122	100.0%	125.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Pilling rig	CNP 164	1	115.0	100.0%	115.0
Generator	CNP 102	1	100.0	100.0%	100.0
Water Pump	CNP 281	1	88.0	100.0%	88.0
Crane	CNP 048	1	112.0	100.0%	112.0
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Barge	-	1	0.0	100.0%	0.0
Poker Vibrator	CNP 170	2	113.0	100.0%	116.0
Bar Bender	CNP 021	1	90.0	100.0%	90.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Total					128.4

## 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	CNP 048	2	112.0	100.0%	115.0
Dredger	CNP 063	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	
Total					118.7

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 %	Total SWL dB(A)
Crane	CNP 048	1	112.0	100.0%	112.0
Breaker, excavator mounted	CNP027	1	122.0	100.0%	122.0
Excavator	CNP 081	1	112.0	100.0%	112.0
Dump Truck	CNP 067	2	117.0	100.0%	120.0
Concrete Lorry Mixer	CNP 044	1	109.0	100.0%	109.0
Poker Vibrator	CNP 170	2	113.0	100.0%	116.0
Compactor, vibratory	CNP 050	1	105.0	100.0%	105.0
Air Compressor	CNP 002	1	100.0	100.0%	100.0
Total					125.3

## 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 %	Total SWL dB(A)
Crane	CNP 048	1	112.0	100.0%	112.0
Breaker, excavator mounted	CNP027	1	122.0	100.0%	122.0
Excavator	CNP 081	1	112.0	100.0%	112.0
Dump Truck	CNP 067	2	117.0	100.0%	120.0
Concrete Lorry Mixer	CNP 044	1	109.0	100.0%	109.0
Poker Vibrator	CNP 170	2	113.0	100.0%	116.0
Compactor, vibratory	CNP 050	1	105.0	100.0%	105.0
Air Compressor	CNP 002	1	100.0	100.0%	100.0
Total					125.3

### 2.10B Construction of new pumping station

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

## 2.11 Roads

### 2.11A Roadworks

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Dump Truck	CNP 067	2	117.0	100.0%	120.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Grader	CNP 104	2	113.0	100.0%	116.0
Loader	CNP 081	2	112.0	100.0%	115.0
Vibratory Roller	CNP 186	1	108.0	100.0%	108.0
Road Roller	CNP 185	1	108.0	100.0%	108.0
Asphalt Paver	CNP 004	2	109.0	100.0%	112.0
Planer	CNP 184	2	111.0	100.0%	114.0
Total					124.1

Note: No noise emits from barges during dredging.

## Appendix 4.5

### Powered Mechanical Equipment (PME) for the Different Construction Tasks during Normal Daytime Working Hours (Without 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	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

##### 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	CNP030	2	111.0	100.0%	114.0
Total					117.0

##### 3.1.2 Cooling Water Systems

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Breaker, excavator mounted	CNP 027	2	122.0	100.0%	125.0
Dump Truck	CNP 067	2	117.0	100.0%	120.0
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Compactor	CNP 050	1	105.0	100.0%	105.0
Total					127.6

##### 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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

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 %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

### 3.1.3C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

### 3.1.3D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

## 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	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

#### 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	100.0%	107.0
Barges	-	2	0	100.0%	0
Tug Boat	CNP221	2	110	100.0%	113.0
Bulldozer	CNP030	2	115.0	100.0%	118.0
Total					119.5

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 %	Total SWL dB(A)
Breaker	CNP 027	2	122.0	100.0%	125.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Crane	CNP 048	1	112.0	100.0%	112.0
Total					128.0

### 3.2.2 Drainage Culverts (2 cell)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Dump Trunk	CNP 067	4	117.0	100.0%	123.0
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Total					126.1

### 3.2.4 Cooling Water Systems - Intakes Pipeline

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Breaker, excavator mounted	CNP 027	2	122.0	100.0%	125.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Dump Truck	CNP 067	2	117.0	100.0%	120.0
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Compactor	CNP 050	1	105.0	100.0%	105.0
Total					127.6

### 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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

#### 3.2.3B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

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 %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

### 3.2.3D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

## 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 %	Total SWL dB(A)
Piling Rig	CNP 164	2	115.0	100.0%	118.0
Generator	CNP 102	2	100.0	100.0%	103.0
Water Pump	CNP 281	2	88.0	100.0%	91.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Barge	-	2	0.0	100.0%	0.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Total					119.7

#### 3.3.1B Pilling for deck

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Piling Rig	CNP 164	2	115.0	100.0%	118.0
Generator	CNP 102	2	100.0	100.0%	103.0
Water Pump	CNP 281	2	88.0	100.0%	91.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Barge	-	2	0.0	100.0%	0.0
Tug boat	CNP 221	1	110.0	100.0%	110.0
Total					119.7

### 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	CNP 048	6	112.0	100.0%	119.8
Barges		6	0.0	100.0%	0.0
Tug Boat	CNP 221	3	110.0	100.0%	114.8
Total					121.0

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 %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Total					123.2

### 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	CNP 048	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					116.7

##### 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	CNP030	2	115.0	100.0%	118.0
Total					119.5

##### 3.4.2 Demolition of Structure

East Bridge

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Breaker, excavator mounted	CNP 027	2	122.0	100.0%	125.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Crane	CNP 048	1	112.0	100.0%	112.0
Total					128.0

##### 3.4.3 Drainage Culverts (2 cell)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Dump Trunk	CNP 067	4	117.0	100.0%	123.0
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Total					126.1

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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

#### 3.4.4B Excavation

HKCEC3Ea

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

#### 3.4.4C Construction of slabs

HKCEC3Ea

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

#### 3.4.4D Backfill

HKCEC3Ea

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

#### 3.4.4E Diaphragm Wall

HKCEC3W & Eb

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

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 %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

### 3.4.4G Construction of slabs

HKCEC3W & Eb

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

### 3.4.4H Backfill

HKCEC3W & Eb

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

## 3.5 Roads

### 3.5 Roadworks

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Dump Truck	CNP 067	2	117.0	100.0%	120.0
Excavator	CNP 081	2	112.0	100.0%	115.0
Grader	CNP 104	2	113.0	100.0%	116.0
Loader	CNP 081	2	112.0	100.0%	115.0
Vibratory Roller	CNP 186	1	108.0	100.0%	108.0
Road Roller	CNP 185	1	108.0	100.0%	108.0
Asphalt Paver	CNP 004	2	109.0	100.0%	112.0
Planer	CNP 184	2	111.0	100.0%	114.0
Total					124.1

Note: No noise emits from barges during dredging.

## Appendix 4.5

### Powered Mechanical Equipment (PME) for the Different Construction Tasks during Normal Daytime Working Hours (Without 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	CNP 048	2	112.0	100.0%	115.0
Dredger	CNP 063	2	112.0	100.0%	115.0
Barges	-	2	0.0	100.0%	0.0
Total					118.7

###### 4.2 Land Section

###### 4.2 Land Section

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	1	112.0	100.0%	112.0
Breaker, excavator mounted	CNP 027	1	122.0	100.0%	122.0
Excavator	CNP 081	1	112.0	100.0%	112.0
Dump Truck	CNP 067	2	117.0	100.0%	120.0
Concrete Lorry Mixer	CNP 044	1	109.0	100.0%	109.0
Poker Vibrator	CNP 170	2	113.0	100.0%	116.0
Compactor, vibratory	CNP 050	1	105.0	100.0%	105.0
Air Compressor	CNP 002	1	100.0	100.0%	100.0
Total					125.3

Note: No noise emits from barges during dredging.

## Appendix 4.5

### Powered Mechanical Equipment (PME) for the Different Construction Tasks during Normal Daytime Working Hours (Without 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	CNP 048	2	112.0	70.0%	113.5
Barges	-	2	0.0	100.0%	0.0
Total					115.2

##### 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	100.0%	107.0
Barges	-	2	0	100.0%	0
Tug Boat	CNP221	2	110	60.0%	110.8
Bulldozer	CNP030	2	115.0	100.0%	118.0
Total					119.0

##### 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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	70.0%	116.5
Excavator	CNP 081	4	112.0	70.0%	116.5
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.4

##### 5.1.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	70.0%	116.5
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.1

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 %	Total SWL dB(A)
Crane	CNP 048	2	112.0	70.0%	113.5
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	70.0%	117.5
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					122.5

### 5.1.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	70.0%	116.5
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.1

## 5.2 North Point Reclamation Stage 2

### 5.2.1 Dredging, Seawalls & Filling

#### 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	110.0	60.0%	107.8
Crane	CNP 048	2	112.0	70.0%	113.5
Barges	-	2	0.0	100.0%	0.0
Total					115.2

#### 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	CNP030	2	115.0	100.0%	118.0
Total					119.0

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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	70.0%	116.5
Excavator	CNP 081	4	112.0	70.0%	116.5
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.4

### 5.2.2B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	70.0%	116.5
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.1

### 5.2.2C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	70.0%	113.5
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	70.0%	117.5
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					122.5

### 5.2.2D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	70.0%	116.5
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.1

### 5.2.2E Foundation of East Vent Building

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	70.0%	113.5
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	70.0%	117.5
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					122.5

Note: No noise emits from barges during dredging.

## Appendix 4.5

### Powered Mechanical Equipment (PME) for the Different Construction Tasks during Normal Daytime Working Hours (Without Mitigation Measures)

#### 6.0 Construction of IECL

#### 6.2 IEC Connection Work

##### 6.2A Substructures

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	2	113.0	70.0%	114.5
Crane	CNP 048	1	112.0	70.0%	110.5
Air Compressor	CNP 002	5	100.0	100.0%	107.0
Excavator	CNP 081	2	112.0	70.0%	113.5
Water Pump	CNP 281	6	88.0	100.0%	95.8
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Piling, Large diameter bored	CNP 164	1	115.0	100.0%	115.0
Total					121.1

##### 6.2B Superstructures

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Concrete Lorry Mixer	CNP 044	2	100.0	100.0%	103.0
Poker Vibrator	CNP 170	2	100.0	70.0%	101.5
Crane	CNP 048	1	101.0	70.0%	99.5
Compressor	CNP 002	5	96.0	100.0%	103.0
Excavator	CNP 081	2	105.0	70.0%	106.5
Water Pump	CNP 281	6	88.0	100.0%	95.8
Concrete Pump	CNP 047	2	100.0	100.0%	103.0
Bar Bender	CNP 164	2	100.0	100.0%	103.0
Total					111.8

##### 6.2A Substructures(For Marine Works)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	2	113.0	70.0%	114.5
Crane	CNP 048	1	112.0	70.0%	110.5
Air Compressor	CNP 002	5	100.0	100.0%	107.0
Water Pump	CNP 281	6	88.0	100.0%	95.8
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Piling, Large diameter bored	CNP 164	1	115.0	100.0%	115.0
Tug Boat	CNP 221	1	110.0	50.0%	107.0
Barges	-	2	0.0	100.0%	0.0
Total					120.5

##### 6.2B Superstructures(For Marine Works)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Concrete Lorry Mixer	CNP 044	2	100.0	100.0%	103.0
Poker Vibrator	CNP 170	2	100.0	70.0%	101.5
Crane	CNP 048	1	101.0	70.0%	99.5
Compressor	CNP 002	5	96.0	100.0%	103.0
Excavator	CNP 081	2	105.0	70.0%	106.5
Water Pump	CNP 281	6	88.0	100.0%	95.8
Concrete Pump	CNP 047	2	100.0	100.0%	103.0
Bar Bender	CNP 164	2	100.0	100.0%	103.0
Tug Boat	CNP 221	1	110.0	50.0%	107.0
Barges	-	2	0.0	100.0%	0.0
Total					112.3



### 6.2C Demolition of Structure

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Backhoe	CNP 081	2	112.0	70.0%	113.5
Breaker, excavator mounted	CNP 027	2	122.0	80.0%	124.0
Hand-held Breaker	CNP 026	2	114.0	100.0%	117.0
Dump Truck	CNP 067	4	117.0	70.0%	121.5
Crane	CNP 048	1	101.0	100.0%	101.0
Total					126.7

### 6.2C Demolition of Structure(For Marine Works)

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Backhoe	CNP 081	2	112.0	70.0%	113.5
Breaker, excavator mounted	CNP 027	2	122.0	80.0%	124.0
Hand-held Breaker	CNP 026	2	114.0	100.0%	117.0
Dump Truck	CNP 067	4	117.0	70.0%	121.5
Crane	CNP 048	1	101.0	100.0%	101.0
Tug Boat	CNP 221	1	110.0	100.0%	110.0
Barges	-	2	0.0	100.0%	0.0
Total					126.8

### 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 %	Total SWL dB(A)
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	2	113.0	70.0%	114.5
Crane	CNP 048	1	112.0	70.0%	110.5
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Excavator	CNP 081	2	112.0	70.0%	113.5
Water Pump	CNP 281	6	88.0	100.0%	95.8
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Piling, Large diameter bored	CNP 164	1	115.0	100.0%	115.0
Total					121.1

#### 6.3.2 Retaining Structures

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	2	113.0	70.0%	114.5
Crane	CNP 048	1	112.0	70.0%	110.5
Air Compressor	CNP 002	5	100.0	100.0%	107.0
Excavator	CNP 081	2	112.0	70.0%	113.5
Water Pump	CNP 281	6	88.0	100.0%	95.8
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Piling, Large diameter bored	CNP 164	1	115.0	100.0%	115.0
Total					121.1

#### 6.3.3 Demolition of Structure

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Backhoe	CNP 081	2	112.0	70.0%	113.5
Breaker, excavator mounted	CNP 027	2	122.0	80.0%	124.0
Hand-held Breaker	CNP 026	2	114.0	100.0%	117.0
Dump Truck	CNP 067	4	117.0	70.0%	121.5
Crane	CNP 048	1	112.0	70.0%	110.5
Total					126.8

## 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 %	Total SWL dB(A)
Lorry	CNP 141	1	112.0	100.0%	112.0
Dump Truck	CNP 067	6	117.0	100.0%	124.8
Excavator	CNP 081	2	112.0	70.0%	113.5
Grader	CNP 104	1	113.0	100.0%	113.0
Roller	CNP 185	2	108.0	100.0%	111.0
Loader	CNP 081	1	112.0	100.0%	112.0
Total					125.9

### 7.1.2 Road Pavement + misc

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-Time %	Total SWL dB(A)
Vibratory Roller	CNP 186	1	108.0	100.0%	108.0
Road Roller	CNP 185	1	108.0	100.0%	108.0
Asphalt paver	CNP 004	1	109.0	100.0%	109.0
Dump Trunk	CNP 067	4	117.0	100.0%	123.0
Total					123.4

### 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 %	Total SWL dB(A)
Lorry	CNP 141	4	112.0	100.0%	118.0
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Bentonite Filtering Plant	CNP 162	1	105.0	100.0%	105.0
Piling, Large diameter bored	CNP 164	1	115.0	100.0%	115.0
Excavator	CNP 081	2	112.0	70.0%	113.5
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Water Pump	CNP 281	2	88.0	100.0%	91.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Total					123.7

### 7.1.4 Building Superstructure

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-Time %	Total SWL dB(A)
Crane	CNP 048	1	112.0	70.0%	110.5
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Concrete Lorry Mixer	CNP 044	1	109.0	100.0%	109.0
Concrete Pump	CNP 047	1	109.0	100.0%	109.0
Poker Vibrator	CNP 170	2	113.0	70.0%	114.5
Total					117.4

### 7.1.5 Tunnel Construction - Diaphragm Walls

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	70.0%	113.5
Dump Truck	CNP 067	2	117.0	100.0%	120.0
Excavator	CNP 081	1	112.0	70.0%	110.5
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Bentonite Plant	CNP 162	2	105.0	100.0%	108.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rig	CNP 164	2	115.0	100.0%	118.0
Total					123.7

#### 7.1.6 Excavation between walls

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-Time %	Total SWL dB(A)
Excavator	CNP 081	2	112.0	70.0%	113.5
Bulldozer	CNP 030	1	115.0	100.0%	115.0
Dump Truck	CNP 067	6	117.0	100.0%	124.8
Total					125.5

#### 7.1.7 RC Slab Construction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-Time %	Total SWL dB(A)
Crane	CNP 048	1	112.0	70.0%	110.5
Concrete Pumps	CNP 047	2	109.0	100.0%	112.0
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	2	113.0	100.0%	116.0
Bar Bender	CNP 021	1	90.0	100.0%	90.0
Air Compressor	CNP 002	1	100.0	100.0%	100.0
Total					119.2

#### 7.1.8 Tunnel Modification at Road D5 Junction

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Piling, Large diameter bored	CNP 164	1	115.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Excavator	CNP 081	1	112.0	70.0%	110.5
Dump Trucks	CNP 067	2	117.0	100.0%	120.0
Water Pump	CNP 281	2	88.0	100.0%	91.0
Crane	CNP 048	1	112.0	70.0%	110.5
Total					122.7

#### 7.1.9 Deck Formation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	2	113.0	70.0%	114.5
Crane	CNP 048	1	112.0	70.0%	110.5
Air Compressor	CNP 002	2	100.0	100.0%	103.0
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Total					118.6

#### 7.1.10 Road Pavement for Deck

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-Time %	Total SWL dB(A)
Vibratory Roller	CNP 186	1	108.0	100.0%	108.0
Road Roller	CNP 185	1	108.0	100.0%	108.0
Asphalt paver	CNP 004	1	109.0	100.0%	109.0
Dump Trunk	CNP 067	4	117.0	100.0%	123.0
Total					123.4

#### 7.1.11 Foundation Work for Road

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	2	113.0	70.0%	114.5
Crane	CNP 048	1	112.0	70.0%	110.5
Air Compressor	CNP 002	5	100.0	100.0%	107.0
Excavator	CNP 081	2	112.0	70.0%	113.5
Water Pump	CNP 281	6	88.0	100.0%	95.8
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Piling, Large diameter bored	CNP 164	1	115.0	100.0%	115.0
Total					121.1

## 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 %	Total SWL dB(A)
Crane	CNP 048	4	112.0	100.0%	118.0
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	8	117.0	100.0%	126.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	4	109.0	100.0%	115.0
Bentonite Plants	CNP 162	4	105.0	100.0%	111.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Diaphragm Wall Rigs	CNP 164	4	115.0	100.0%	121.0
Total					128.6

### 8.0B Excavation

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Dump Truck	CNP 067	12	117.0	100.0%	127.8
Total					128.2

### 8.0C Construction of Slabs

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Crane	CNP 048	2	112.0	100.0%	115.0
Concrete Pump	CNP 047	4	109.0	100.0%	115.0
Concrete Lorry Mixer	CNP 044	8	109.0	100.0%	118.0
Poker Vibrator	CNP 170	4	113.0	100.0%	119.0
Bar Bender	CNP 021	2	90.0	100.0%	93.0
Air Compressor	CNP 002	4	100.0	100.0%	106.0
Total					123.2

### 8.0D Backfill

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Excavator	CNP 081	4	112.0	100.0%	118.0
Bulldozer	CNP 030	2	115.0	100.0%	118.0
Roller	CNP 186	2	108.0	100.0%	111.0
Dump Truck	CNP 067	4	117.0	100.0%	123.0
Total					125.3

## 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 %	Total SWL dB(A)
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	2	113.0	70.0%	114.5
Crane	CNP 048	1	112.0	70.0%	110.5
Air Compressor	CNP 002	5	100.0	100.0%	107.0
Excavator	CNP 081	2	112.0	70.0%	113.5
Water Pump	CNP 281	6	88.0	100.0%	95.8
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Piling, Large diameter bored	CNP 164	1	115.0	100.0%	115.0
Total					121.1

### 9.0B Superstructures

Powered Mechanical Equipment (PME)	TM Ref./ other Ref.	No. Items	SWL/Item dB(A)	On-time %	Total SWL dB(A)
Concrete Lorry Mixer	CNP 044	2	109.0	100.0%	112.0
Poker Vibrator	CNP 170	2	113.0	70.0%	114.5
Crane	CNP 048	1	112.0	70.0%	110.5
Air Compressor	CNP 002	5	100.0	100.0%	107.0
Excavator	CNP 081	2	112.0	70.0%	113.5
Water Pump	CNP 281	6	88.0	100.0%	95.8
Concrete Pump	CNP 047	2	109.0	100.0%	112.0
Piling, Large diameter bored	CNP 164	1	115.0	100.0%	115.0
Total					121.1