

Construction Plant Inventory - Mitigated Scenario  
 Work Type 1 - Construction of Sewer (Open Cut Method)

Project Specific PME Item	Reference	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)	Total SWL, dB(A)
<b>Stage 1 - Breaking up of road surface</b>								
Breaker, hand-held, mass>10kg and <20kg	CNP 024	108	1	30%	-5	-10	93	-
Generator	BS C4/77	88	1	100%	0	-10	78	-
Total							93.0	0.0
<b>Stage 2 - Excavation of soil material</b>								
Backhoe (mini)	*EPD-GN	94	1	100%	0	-5	89	-
Generator	BS C4/77	88	1	100%	0	-10	-	78
Submersible Pump	CNP 283	85	1	100%	0	-10	-	75
Total							89.0	80.0
<b>Stage 3 - Steel fixing &amp; concreting of manholes</b>								
Bar bender and cutter (electric)	CNP 021	90	1	20%	-7	-10	-	73
Generator	BS C4/77	88	1	100%	0	-10	78	78
Poker, vibratory, hand-held	BS C4/34	97	1	50%	-3	-10	84	-
Total							85.0	79.0
<b>Stage 4 - Laying of bedding material</b>								
Generator	BS C4/77	88	1	100%	0	-10	-	78
Poker, vibratory, hand-held	BS C4/34	97	1	100%	0	-10	-	87
Total							0.0	88.0
<b>Stage 5 - Backfilling and soil compaction</b>								
Vibratory compactor	OPME EPD 00055	102	1	50%	-3	-10	89	-
Total							89.0	0.0
<b>Stage 6 - Reinstatement of road surface</b>								
Poker, vibratory, hand-held	BS C4/34	97	1	50%	-3	-10	84	-
Generator	BS C4/77	88	1	100%	0	-10	78	-
Total							85.0	0.0

Max Noise Level  
93.0

Work Type 2 - Construction of Sewer (Trenchless Method)

Project Specific PME Item	Reference	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)	Total SWL, dB(A)	Total SWL, dB(A)	Total SWL, dB(A)	
<b>Stage 1 - Excavation of Pits</b>											
Piling Rig	BS C3/14	111	1	100%	0	-10	101	-	-	-	
Hoist (electric)	CNP 122	95	1	100%	0	-10	85	-	-	-	
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	-5	-	108	-	-	
Excavator	BS C4/65	99	1	100%	0	-5	-	-	94	-	
Dumper (7 t)	BS C4/3	104	1	100%	0	-5	-	-	99	-	
Generator	BS C4/77	88	1	100%	0	-10	78	-	78	-	
Submersible Pump	CNP 283	85	2	100%	0	-10	-	-	78	-	
Grout Mixer	*EPD-GN	90	1	100%	0	-10	-	-	-	80	
Grout Pump	*EPD-GN	105	1	100%	0	-10	-	-	-	95	
Total							101.0	108.0	100.0	95.0	
<b>Stage 2 - Pipe Laid by Segmental Excavation</b>											
Rock Drill, hand-held (pneumatic)	CNP 183	116	1	100%	0	-10	106	-	-	-	
Air Compressor	BS D/24	95	1	100%	0	-10	85	-	-	-	
Generator	BS C4/77	88	1	100%	0	-10	78	-	-	-	
Dumper (7 t)	BS C4/3	104	1	70%	-2	-5	97	-	-	-	
Hoist (electric)	CNP 122	95	1	70%	-2	-10	83	-	-	-	
Ventilation Fan	CNP 241	108	2	100%	0	-10	101	-	-	-	
Grout Mixer	*EPD-GN	90	1	100%	0	-10	80	-	-	-	
Grout Pump	*EPD-GN	105	1	100%	0	-10	95	-	-	-	
Total							108.0	0.0	0.0	0.0	
<b>Stage 3 - Steel fixing and concreting of manholes</b>											
Bar bender and cutter (electric)	CNP 021	90	1	20%	-7	-10	73	-	-	-	
Generator	BS C4/77	88	1	100%	0	-10	-	78	-	-	
Poker, vibratory, hand-held	BS C4/34	97	1	20%	-7	-10	-	80	-	-	
Total							73.0	82.0	0.0	0.0	
<b>Stage 4 - Reinstatement of road surface with Bricks</b>											
No PME involved							Total	0.0	0.0	0.0	0.0

Max Noise Level  
108.0

Work Type 3 - Upgrading of Existing Sewer

Project Specific PME Item	Reference	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)	Total SWL, dB(A)
<b>Stage 1 - Breaking up of road surface</b>								
Generator	BS C4/77	88	1	100%	0	-10	78	-
Breaker, hand-held, mass>10kg and <20kg	CNP 024	108	1	30%	-5	-10	93	-
Total							93.0	0.0
<b>Stage 2 - Excavation of soil material</b>								
Backhoe (mini)	CNP 082	94	1	100%	0	-5	89	-
Generator	BS C4/77	88	1	100%	0	-10	-	78
Submersible pump (electric)	CNP 283	85	1	100%	0	-10	-	75
Total							89.0	80.0
<b>Stage 3 - Removal of existing sewers and laying of new sewers</b>								
Backhoe (mini)	CNP 082	94	1	100%	0	-5	89	-
Total							89.0	0.0
<b>Stage 4 - Steel fixing and concreting of manholes</b>								
Bar Bender and cutter (electric)	CNP 021	90	1	20%	-7	-10	73	-
Generator	BS C4/77	88	1	100%	0	-10	-	78
Poker, vibratory, hand-held	BS C4/34	97	1	50%	-3	-10	-	84
Total							73.0	85.0
<b>Stage 5 - Laying of bedding material</b>								
Poker, vibratory, hand-held	BS C4/34	97	1	100%	0	-10	87	-
Generator	BS C4/77	88	1	100%	0	-10	78	-
Total							88.0	0.0
<b>Stage 6 - Backfilling and soil compaction</b>								
Vibratory compactor	OPME EPD 00055	102	1	50%	-3	-10	89	-
Total							89.0	0.0
<b>Stage 7 - Reinstatement of road surface</b>								
Poker, vibratory, hand-held	BS C4/34	97	1	50%	-3	-10	84	-
Generator	BS C4/77	88	1	100%	0	-10	78	-
Total							85.0	0.0

Max Noise Level  
93.0

Work Type 6 - Rehabilitation of Existing Sewers

Project Specific PME Item	Reference	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)
<b>Stage 1 - Rehabilitation of Existing Sewers</b>							
Generator	BS C4/77	88	1	100%	0	-10	78
Submersible Pump	CNP 283	85	1	100%	0	-10	75
Winch (electric)	CNP 262	95	1	100%	0	-10	85
Grinder, hand held (electric)	CNP 065	98	1	100%	0	-10	88
Air Compressor	BS D/24	95	1	100%	0	-10	85
Total							91.0

Max Noise Level  
91.0

Remarks:

\*EPD-GN - EPD Guidance Note on Sound Power Level on Other Commonly Use PME ([http://www.epd.gov.hk/epd/english/application\\_for\\_licenses/guidance/files/OtherSWL\\_e.pdf](http://www.epd.gov.hk/epd/english/application_for_licenses/guidance/files/OtherSWL_e.pdf))  
 Due to space constraint, concrete will be delivered manually from the temporary working area for the construction of trunk sewer, sewer and rising main; and upgrading of existing sewer in the villages.  
 Certain PMEs will be operated on site for a short period of time for the proposed works tasks. A 20, 30 and 50 percentage on-time has been given accordingly.

Work Type 5 - Upgrading of Cheung Chau Sewage Treatment Works

Project Specific PME Item	Reference	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)	Total SWL, dB(A)	Total SWL, dB(A)
<b>Stage 1 &amp; 2 - Demolish the abandoned filter beds &amp; modification of pipework</b>									
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	0	113	-	-
Dumper (7 t)	BS C4/3	104	1	100%	0	0	104	-	-
Excavator	BS C4/65	99	1	100%	0	0	99	-	-
Generator	BS C4/77	88	1	100%	0	0	88	-	-
Total							114.0	0.0	0.0
<b>Stage 3 - Construction and upgrading of treatment facilities</b>									
Piling, grab and chisel	CNP 164	115	1	100%	0	0	115	-	-
Piling, oscillator	CNP 165	115	1	100%	0	0	115	-	-
Piling, reverse circulation drill	CNP 166	100	1	100%	0	0	100	-	-
Air Compressor	BS D/24	95	1	100%	0	0	95	-	-
Welding Machine	*AEIAR 2	78	1	60%	-2	0	76	-	-
Tracked Mobile Crane	BS C4/50	99	1	100%	0	0	99	99	99
Generator	BS C4/77	88	1	100%	0	0	88	88	88
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	0	-	113	-
Excavator	BS C4/65	99	1	100%	0	0	-	99	-
Dumper (7 t)	BS C4/3	104	1	60%	-2	0	-	102	-
Bar Bender and Cutter	CNP 021	90	1	20%	-7	0	-	-	83
Concrete Pump	BS C3/25	106	2	100%	0	0	-	-	109
Derrick Barge	CNP 061	104	1	100%	0	0	-	-	104
Saw, circular, wood	CNP 201	108	1	100%	0	0	-	-	108
Poker, vibratory, handheld	BS C4/34	97	2	100%	0	0	-	-	100
Submersible Pump	CNP 283	85	1	100%	0	0	-	-	85
Total							118.0	114.0	113.0
<b>Stage 4 - Demolish existing air blower room and construction of the new pump house</b>									
Crane, mobile mounted	BS C4/50	99	1	100%	0	0	99	99	-
Generator	BS C4/77	88	1	100%	0	0	88	88	-
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	0	113	-	-
Excavator	BS C4/65	99	1	100%	0	0	99	-	-
Dumper (7 t)	BS C4/3	104	1	100%	0	0	104	-	-
Bar Bender and Cutter	CNP 021	90	1	20%	-7	0	-	-	83
Concrete Pump	BS C3/25	106	1	100%	0	0	-	-	106
Saw, circular, wood	CNP 201	108	1	100%	0	0	-	-	108
Derrick Barge	CNP 061	104	1	100%	0	0	-	-	104
Poker, vibratory, handheld	BS C4/34	97	2	100%	0	0	-	-	100
Total							114.0	112.0	0.0
<b>Stage 5 - Demolish of the primary sediment tanks and sludge digester, laying of new pipeworks</b>									
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	0	113	-	-
Excavator	BS C4/65	99	1	100%	0	0	99	-	-
Generator	BS C4/77	88	1	100%	0	0	88	88	-
Dumper (7 t)	BS C4/3	104	1	60%	-2	0	102	-	-
Compactor, vibratory	QPME EPD 00055	102	1	80%	-1	0	-	-	101
Total							113.0	101.0	0.0
<b>Stage 6 - Construction of the new storm tanks and workshop, demolish existing preliminary treatment works</b>									
Piling, grab and chisel	CNP 164	115	1	100%	0	0	115	-	-
Piling, oscillator	CNP 165	115	1	100%	0	0	115	-	-
Piling, reverse circulation drill	CNP 166	100	1	100%	0	0	100	-	-
Air Compressor	BS D/24	95	1	100%	0	0	95	-	-
Welding Machine	*AEIAR 2	78	1	60%	-2	0	76	-	-
Crane, mobile mounted	BS C4/50	99	1	100%	0	0	99	99	99
Generator	BS C4/77	88	1	100%	0	0	88	88	88
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	0	-	113	-
Excavator	BS C4/65	99	1	100%	0	0	-	99	-
Dumper (7 t)	BS C4/3	104	1	100%	0	0	104	104	-
Bar Bender and Cutter	CNP 021	90	1	20%	-7	0	-	-	83
Concrete Pump	BS C3/25	106	1	100%	0	0	-	-	106
Saw, circular, wood	CNP 201	108	1	100%	0	0	-	-	108
Derrick Barge	CNP 061	104	1	100%	0	0	-	-	104
Poker, vibratory, handheld	BS C4/34	97	2	100%	0	0	-	-	100
Submersible Pump	CNP 283	85	1	100%	0	0	-	-	85
Total							118.0	114.0	112.0

Max Noise Level  
118.0

Remarks:

AEIAR-052/2002: Noise level of PME extracted from the Approved EIA Report in the Register: AEIAR-052/2002  
Due to space constraint, concrete will be delivered manually from the temporary working area for the construction of trunk sewer, sewer and rising main; and upgrading of existing sewer in the villages.  
Certain PMEs will be operated on site for a short period of time for the proposed works tasks. A 20, 60 and 80 percentage on-time has been given accordingly.

Work Type 4 - Upgrading of Pak She Sewage Pumping Station

Project Specific PME Item	Reference	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)	Total SWL, dB(A)
<b>Stage 1 - Partial removal of existing structure</b>								
Crane, mobile mounted	BS C4/50	99	1	100%	0	-5	94	-
Generator	BS C4/77	88	1	100%	0	-5	83	83
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	-5	108	-
Excavator	BS C4/65	99	1	100%	0	-5	-	94
Dumper (7 t)	BS C4/3	104	1	60%	-2	-5	-	97
Submersible Pump	CNP 283	85	2	100%	0	-5	-	83
Total							108.0	99.0
<b>Stage 2 - Partial reconstruction of structures</b>								
Crane, mobile mounted	BS C4/50	99	1	100%	0	-5	94	-
Generator	BS C4/77	88	1	100%	0	-5	83	-
Bar Bender and Cutter	CNP 021	90	1	100%	0	-5	85	-
Concrete Pump	BS C3/25	106	2	100%	0	-5	104	-
Saw, circular, wood	CNP 201	108	1	100%	0	-5	103	-
Poker, vibratory, handheld	BS C4/34	97	2	100%	0	-5	95	-
Total							107.0	0.0
<b>Stage 3 - Replacement of E&amp;M equipments</b>								
Crane, mobile mounted	BS C4/50	99	1	100%	0	-5	94	-
Generator	BS C4/77	88	1	100%	0	-5	83	-
Winch (electric)	CNP 262	95	1	100%	0	-5	90	-
Drill/grinder, hand-held	CNP 065	98	1	100%	0	-5	93	-
Total							97.0	0.0

Max Noise Level  
108.0

Remarks:

a -5 dB(A) screening correction is assumed for site hoardings  
Certain PMEs will be operated on site for a short period of time for the proposed works tasks. A 60 percentage on-time has been given accordingly.

Construction Plant Inventory - Mitigated Scenario  
 Work Type 1 - Construction of Sewer (Open Cut Method)

Project Specific PME Item	Reference	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)	Total SWL, dB(A)
<b>Stage 1 - Breaking up of road surface</b>								
Breaker, hand-held, mass>10kg and <20kg	CNP 024	108	1	30%	-5	-10	93	-
Generator	BS C4/77	88	1	100%	0	-10	78	-
Total							93.0	0.0
<b>Stage 2 - Excavation of soil material</b>								
Backhoe (mini)	*EPD-GN	94	1	100%	0	-5	89	-
Generator	BS C4/77	88	1	100%	0	-10	-	78
Submersible Pump	CNP 283	85	1	100%	0	-10	-	75
Total							89.0	80.0
<b>Stage 3 - Steel fixing &amp; concreting of manholes</b>								
Bar bender and cutter (electric)	CNP 021	90	1	20%	-7	-10	-	73
Generator	BS C4/77	88	1	100%	0	-10	78	78
Poker, vibratory, hand-held	BS C4/34	97	1	50%	-3	-10	84	-
Total							85.0	79.0
<b>Stage 4 - Laying of bedding material</b>								
Generator	BS C4/77	88	1	100%	0	-10	-	78
Poker, vibratory, hand-held	BS C4/34	97	1	100%	0	-10	-	87
Total							0.0	88.0
<b>Stage 5 - Backfilling and soil compaction</b>								
Vibratory compactor	QPME EPD 00055	102	1	50%	-3	-10	89	-
Total							89.0	0.0
<b>Stage 6 - Reinstatement of road surface</b>								
Poker, vibratory, hand-held	BS C4/34	97	1	50%	-3	-10	84	-
Generator	BS C4/77	88	1	100%	0	-10	78	-
Total							85.0	0.0

<b>Max Noise Level</b>
35.0

Remarks:

\*EPD-GN - EPD Guidance Note on Sound Power Level on Other Commonly Use PME ([http://www.epd.gov.hk/epd/english/application\\_for\\_licences/guidance/files/OtherSWLe.pdf](http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf))  
 Due to space constraint, concrete will be delivered manually from the temporary working area for the construction of trunk sewer, sewer and rising main; and upgrading of existing sewer in the villages.  
 Certain PMEs will be operated on site for a short period of time for the proposed works tasks. A 20, 30 and 50 percentage on-time has been given accordingly.

Construction Plant Inventory - Mitigated Scenario  
 Work Type 2 - Construction of Sewer (Trenchless Method)

Project Specific PME Item	e	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)	Total SWL, dB(A)	Total SWL, dB(A)	Total SWL, dB(A)
<b>Stage 1 - Excavation of Pits</b>										
Piling Rig	BS C3/14	111	1	100%	0	-10	101	-	-	-
Hoist (electric)	CNP 122	95	1	100%	0	-10	85	-	-	-
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	-5	-	108	-	-
Excavator	BS C4/65	99	1	100%	0	-5	-	-	94	-
Dumper (7 t)	BS C4/3	104	1	100%	0	-5	-	-	99	-
Generator	BS C4/77	88	1	100%	0	-10	78	-	78	-
Submersible Pump	CNP 283	85	2	100%	0	-10	-	-	78	-
Grout Mixer	*EPD's	90	1	100%	0	-10	-	-	-	80
Grout Pump	*EPD's	105	1	100%	0	-10	-	-	-	95
Total							101.0	108.0	100.0	95.0
<b>Stage 2 - Pipe Laid by Segmental Excavation</b>										
Rock Drill, hand-held (pneumatic)	CNP 183	116	1	100%	0	-10	106	-	-	-
Air Compressor	BS D7/24	95	1	100%	0	-10	85	-	-	-
Generator	BS C4/77	88	1	100%	0	-10	78	-	-	-
Dumper (7 t)	BS C4/3	104	1	70%	-2	-5	97	-	-	-
Hoist (electric)	CNP 122	95	1	70%	-2	-10	83	-	-	-
Ventilation Fan	CNP 241	108	2	100%	0	-10	101	-	-	-
Grout Mixer	*EPD's	90	1	100%	0	-10	80	-	-	-
Grout Pump	*EPD's	105	1	100%	0	-10	95	-	-	-
Total							108.0	0.0	0.0	0.0
<b>Stage 3 - Steel fixing and concreting of manholes</b>										
Bar bender and cutter (electric)	CNP 021	90	1	20%	-7	-10	73	-	-	-
Generator	BS C4/77	88	1	100%	0	-10	-	78	-	-
Poker, vibratory, hand-held	BS C4/34	97	1	50%	-3	-10	-	84	-	-
Total							73.0	85.0	0.0	0.0
<b>Stage 4 - Reinstatement of road surface with Bricks</b>										
No PME involved										
Total							0.0	0.0	0.0	0.0

<b>Max Noise Level</b>
108.0

Remarks:

\*EPD-GN - EPD Guidance Note on Sound Power Level on Other Commonly Use PME ([http://www.epd.gov.hk/epd/english/application\\_for\\_licences/guidance/files/OtherSWLe.pdf](http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf))  
 Due to space constraint, concrete will be delivered manually from the temporary working area for the construction of trunk sewer, sewer and rising main; and upgrading of existing sewer in the villages.  
 Certain PMEs will be operated on site for a short period of time for the proposed works tasks. A 20 and 70 percentage on-time has been given accordingly.

Construction Plant Inventory - Mitigated Scenario  
 Work Type 3 - Upgrading of Existing Sewer

Project Specific PME Item	ce	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)	Total SWL, dB(A)
<b>Stage 1 - Breaking up of road surface</b>								
Generator	BS C4/77	88	1	100%	0	-10	78	-
Breaker, hand-held, mass>10kg and <20kg	CNP 024	108	1	30%	-5	-10	93	-
Total							93.0	0.0
<b>Stage 2 - Excavation of soil material</b>								
Backhoe (mini)	CNP 082	94	1	100%	0	-5	89	-
Generator	BS C4/77	88	1	100%	0	-10	-	78
Submersible pump (electric)	CNP 283	85	1	100%	0	-10	-	75
Total							89.0	80.0
<b>Stage 3 - Removal of existing sewers and laying of new sewers</b>								
Backhoe (mini)	CNP 082	94	1	100%	0	-5	89	-
Total							89.0	0.0
<b>Stage 4 - Steel fixing and concreting of manholes</b>								
Bar Bender and cutter (electric)	CNP 021	90	1	20%	-7	-10	73	-
Generator	BS C4/77	88	1	100%	0	-10	-	78
Poker, vibratory, hand-held	BS C4/34	97	1	50%	-3	-10	-	84
Total							73.0	85.0
<b>Stage 5 - Laying of bedding material</b>								
Poker, vibratory, hand-held	BS C4/34	97	1	100%	0	-10	87	-
Generator	BS C4/77	88	1	100%	0	-10	-	78
Total							88.0	0.0
<b>Stage 6 - Backfilling and soil compaction</b>								
Vibratory compactor	QPME EPD 00055	102	1	50%	-3	-10	89	-
Total							89.0	0.0
<b>Stage 7 - Reinstatement of road surface</b>								
Poker, vibratory, hand-held	BS C4/34	97	1	50%	-3	-10	84	-
Generator	BS C4/77	88	1	100%	0	-10	-	78
Total							85.0	0.0

<b>Max Noise Level</b>
93.0

Remarks:

\*EPD-GN - EPD Guidance Note on Sound Power Level on Other Commonly Use PME ([http://www.epd.gov.hk/epd/english/application\\_for\\_licences/guidance/files/OtherSWLe.pdf](http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf))  
 Due to space constraint, concrete will be delivered manually from the temporary working area for the construction of trunk sewer, sewer and rising main; and upgrading of existing sewer in the villages.  
 Certain PMEs will be operated on site for a short period of time for the proposed works tasks. A 20, 30 and 50 percentage on-time has been given accordingly.

Construction Plant Inventory - Mitigated Scenario

Work Type 4 - Upgrading of Pak She Sewage Pumping Station

Project Specific PME Item	ce	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)	Total SWL, dB(A)
<b>Stage 1 - Partial removal of existing structure</b>								
Crane, mobile mounted	BS C4/50	99	1	100%	0	-5	94	-
Generator	BS C4/77	88	1	100%	0	-5	83	83
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	-5	108	-
Excavator	BS C4/65	99	1	100%	0	-5	-	94
Dumper (7 t)	BS C4/3	104	1	60%	-2	-5	-	97
Submersible Pump	CNP 283	85	2	100%	0	-5	-	83
Total							108.0	99.0
<b>Stage 2 - Partial reconstruction of structures</b>								
Crane, mobile mounted	BS C4/50	99	1	100%	0	-5	94	-
Generator	BS C4/77	88	1	100%	0	-5	83	-
Bar Bender and Cutter	CNP 021	90	1	100%	0	-5	85	-
Concrete Pump	BS C3/25	106	2	100%	0	-5	104	-
Saw, circular, wood	CNP 201	108	1	100%	0	-5	103	-
Poker, vibratory, handheld	BS C4/34	97	2	100%	0	-5	95	-
Total							107.0	0.0
<b>Stage 3 - Replacement of E&amp;M equipments</b>								
Crane, mobile mounted	BS C4/50	99	1	100%	0	-5	94	-
Generator	BS C4/77	88	1	100%	0	-5	83	-
Winch (electric)	CNP 262	95	1	100%	0	-5	90	-
Drill/grinder, hand-held	CNP 065	98	1	100%	0	-5	93	-
Total							97.0	0.0

<b>Max Noise Level</b>
108.0

Remarks:

a -5 dB(A) screening correction is assumed for site hoardings

Certain PMEs will be operated on site for a short period of time for the proposed works tasks. A 60 percentage on-time has been given accordingly.

Construction Plant Inventory - Mitigated Scenario

Work Type 5 - Upgrading of Cheung Chau Sewage Treatment Works

Project Specific PME Item	ce	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)	Total SWL, dB(A)	Total SWL, dB(A)
<b>Stage 1 &amp; 2 - Demolish the abandoned filter beds &amp; modification of pipework</b>									
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	0	113	-	-
Dumper (7 t)	BS C4/3	104	1	100%	0	0	104	-	-
Excavator	BS C4/65	99	1	100%	0	0	99	-	-
Generator	BS C4/77	88	1	100%	0	0	88	-	-
Total							114.0	0.0	0.0
<b>Stage 3 - Construction and upgrading of treatment facilities</b>									
Piling, grab and chisel	CNP 164	115	1	100%	0	0	115	-	-
Piling, oscillator	CNP 165	115	1	100%	0	0	115	-	-
Piling, reverse circulation drill	CNP 166	100	1	100%	0	0	100	-	-
Air Compressor	BS D7/24	95	1	100%	0	0	95	-	-
Welding Machine	*AEIAR 052/2002	78	1	100%	0	0	78	-	-
Tracked Mobile Crane	BS C4/50	99	1	100%	0	0	99	99	99
Generator	BS C4/77	88	1	100%	0	0	88	88	88
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	0	-	113	-
Excavator	BS C4/65	99	2	100%	0	0	-	102	-
Dumper (7 t)	BS C4/3	104	1	100%	0	0	104	104	-
Bar Bender and Cutter	CNP 021	90	1	100%	0	0	-	-	90
Concrete Pump	BS C3/25	106	2	100%	0	0	-	-	109
Derrick Barge	CNP 061	104	1	100%	0	0	-	-	104
Saw, circular, wood	CNP 201	108	1	100%	0	0	-	-	108
Poker, vibratory, handheld	BS C4/34	97	2	100%	0	0	-	-	100
Submersible Pump	CNP 283	85	2	100%	0	0	-	88	-
Total							118.0	114.0	113.0
<b>Stage 4 - Demolish existing air blower room and construction of the new pump house</b>									
Crane, mobile mounted	BS C4/50	99	1	100%	0	0	99	99	-
Generator	BS C4/77	88	1	100%	0	0	88	88	-
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	0	113	-	-
Excavator	BS C4/65	99	1	100%	0	0	99	-	-
Dumper (7 t)	BS C4/3	104	1	100%	0	0	104	-	-
Bar Bender and Cutter	CNP 021	90	1	100%	0	0	-	90	-
Concrete Pump	BS C3/25	106	2	100%	0	0	-	109	-
Saw, circular, wood	CNP 201	108	1	100%	0	0	-	108	-
Derrick Barge	CNP 061	104	1	100%	0	0	-	104	-
Poker, vibratory, handheld	BS C4/34	97	2	100%	0	0	-	100	-
Total							114.0	113.0	0.0
<b>Stage 5 - Demolish of the primary sediment tanks and sludge digester, laying of new pipeworks</b>									
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	0	113	-	-
Excavator	BS C4/65	99	1	100%	0	0	99	-	-
Generator	BS C4/77	88	1	100%	0	0	88	88	-
Dumper (7 t)	BS C4/3	104	1	100%	0	0	104	-	-
Compactor, vibratory	QPME EPD 00055	102	1	100%	0	0	-	102	-
Total							114.0	102.0	0.0
<b>Stage 6 - Construction of the new storm tanks and workshop, demolish existing preliminary treatment works</b>									
Piling, grab and chisel	CNP 164	115	1	100%	0	0	115	-	-
Piling, oscillator	CNP 165	115	1	100%	0	0	115	-	-
Piling, reverse circulation drill	CNP 166	100	1	100%	0	0	100	-	-
Air Compressor	BS D7/24	95	1	100%	0	0	95	-	-
Welding Machine	*AEIAR 052/2002	78	1	100%	0	0	78	-	-
Crane, mobile mounted	BS C4/50	99	1	100%	0	0	99	99	99
Generator	BS C4/77	88	1	100%	0	0	88	88	88
Breaker, excavator mounted (hydraulic)	BS C9/12	113	1	100%	0	0	-	113	-
Excavator	BS C4/65	99	2	100%	0	0	-	102	-
Dumper (7 t)	BS C4/3	104	1	100%	0	0	104	104	-
Bar Bender and Cutter	CNP 021	90	1	100%	0	0	-	-	90
Concrete Pump	BS C3/25	106	2	100%	0	0	-	-	109
Saw, circular, wood	CNP 201	108	1	100%	0	0	-	-	108
Derrick Barge	CNP 061	104	1	100%	0	0	-	-	104
Poker, vibratory, handheld	BS C4/34	97	2	100%	0	0	-	-	100
Submersible Pump	CNP 283	85	2	100%	0	0	-	88	-
Total							118.0	114.0	113.0

<b>Max Noise Level</b>
118.0

Remarks:

AEIAR-052/2002: Noise level of PME extracted from the Approved EIA Report in the Register: AEIAR-052/2002

Due to space constraint, concrete will be delivered manually from the temporary working area for the construction of trunk sewer, sewer and rising main; and upgrading of existing sewer in the villages. Certain PMEs will be operated on site for a short period of time for the proposed works tasks. A 20, 60 and 80 percentage on-time has been given accordingly.

Construction Plant Inventory - Mitigated Scenario  
 Work Type 6 - Rehabilitation of Existing Sewers

Project Specific PME Item	Source	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)
<b>Stage 1 - Rehabilitation of Existing Sewers</b>							
Generator	BS C4/77	88	1	100%	0	-10	78
Submersible Pump	CNP 283	85	1	100%	0	-10	75
Winch (electric)	CNP 262	95	1	100%	0	-10	85
Grinder, hand held (electric)	CNP 065	98	1	100%	0	-10	88
Air Compressor	BS D7/24	95	1	100%	0	-10	85
Total							91.0

<b>Max Noise Level</b>
91.0

Remarks:



Construction Plant Inventory - Mitigated Scenario  
 Work Type 7 - Temporary Concrete Mixing

Project Specific PME Item	Source	dB(A)	Items	On-time %	On-time Cor.	Barrier Cor.	Total SWL, dB(A)	Total SWL, dB(A)
Stage 1 - Operation of concrete mixer								
Concrete mixer (petrol)	CNP 046	96	1	100%	0	0	96	-
Total							96.0	0.0

<b>Max Noise Level</b>
96.0

Remarks: