

Agreement CE 63/2008 (CE)
Providing Sufficient Water Depth for Kwai Tsing Container Basin and its Approach Channel

Appendix 10.2a Construction Plant Inventory

Scenario N1

Powered Mechanical Equipment	TM Ref. / Other Ref.	SWL, dB(A)	Quantity	% on time	Total SWL, dB(A)
Works Area A					
Grab Dredger	CNP063	112	1	100%	112
Tug Boat	CNP221	110	1	100%	110
Barge / Derrick Barge*	CNP061	104	2	50%	104
Overall					115
Works Area B					
Grab Dredger	CNP063	112	1	100%	112
Tug Boat	CNP221	110	1	100%	110
Barge / Derrick Barge*	CNP061	104	2	50%	104
Overall					115
Works Area C					
Grab Dredger	CNP063	112	1	100%	112
Tug Boat	CNP221	110	1	100%	110
Barge / Derrick Barge	CNP061	104	2	50%	104
Overall					115

Scenario N2

Powered Mechanical Equipment	TM Ref. / Other Ref.	SWL, dB(A)	Quantity	% on time	Total SWL, dB(A)
Works Area B					
Grab Dredger	CNP063	112	1	100%	112
Tug Boat	CNP221	110	1	100%	110
Barge / Derrick Barge*	CNP061	104	2	50%	104
Overall					115
Works Area D					
Use of cutter suction dredger					
Cutter Suction Dredger	CNP070	103	1	100%	103
Tug Boat	CNP221	110	1	100%	110
Barge / Derrick Barge*	CNP061	104	2	50%	104
Overall					112
Use of grab dredger					
Grab Dredger	CNP063	112	1	100%	112
Tug Boat	CNP221	110	1	100%	110
Barge / Derrick Barge*	CNP061	104	2	50%	104
Overall					115
Maximum SWL in Works Area D					
Overall					115
Works Area E					
Grab Dredger	CNP063	112	1	100%	112
Tug Boat	CNP221	110	1	100%	110
Barge / Derrick Barge*	CNP061	104	2	50%	104
Overall					115

Scenario N3

Powered Mechanical Equipment	TM Ref. / Other Ref.	SWL, dB(A)	Quantity	% on time	Total SWL, dB(A)
Works Area A					
Grab Dredger	CNP063	112	1	100%	112
Tug Boat	CNP221	110	1	100%	110
Barge / Derrick Barge*	CNP061	104	2	50%	104
Overall					115
Works Area B					
Grab Dredger	CNP063	112	1	100%	112
Tug Boat	CNP221	110	1	100%	110
Barge / Derrick Barge*	CNP061	104	2	50%	104
Overall					115
Works Area E					
Grab Dredger	CNP063	112	1	100%	112
Tug Boat	CNP221	110	1	100%	110
Barge / Derrick Barge*	CNP061	104	2	50%	104
Overall					115

Note(*) Only 1 barge would be in operation at any time. Hence the %on-time is 50%.

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Appendix 10.2b Construction Noise Impact Associated with Dredging Activity

NSR: Cheung Ching Estate - Ching Tao House (CTH)
 Land Use: Residential

Scenario N1

Noise Impact from Works Area	Total SWL, dB(A)	Distance between NSR and noise source, m [#]	Distance Correction	Facade Correction	Predicted SPL at NSR
A	115	575	-63	3	54
B	115	2384	-76	3	42
C	115	6235	-84	3	34

Overall Noise Impact : dB(A)

Scenario N2

Noise Impact from Works Area	Total SWL, dB(A)	Distance between NSR and noise source, m [#]	Distance Correction	Facade Correction	Predicted SPL at NSR
B	115	2384	-76	3	42
D	115	720	-65	3	52
E	115	1562	-72	3	46

Overall Noise Impact : dB(A)

Scenario N3

Noise Impact from Works Area	Total SWL, dB(A)	Distance between NSR and noise source, m [#]	Distance Correction	Facade Correction	Predicted SPL at NSR
A	115	575	-63	3	54
B	115	2384	-76	3	42
E	115	1562	-72	3	46

Overall Noise Impact : dB(A)

Overall Noise Impact Against Relevant Noise Criteria

	Noise Criteria, dB(A)	Scenario			
		N1	N2	N3	
Day time period ¹	0700 - 1900	75	Comply	Comply	Comply
Evening time period ²	1900 - 2300	70	Comply	Comply	Comply
Night time period ³	2300 - 0700	55	Comply	Comply	Comply

Note[#] Horizontal distance to the notional noise source position in the Works Area
 Note¹ 0700 to 1900 on any day not being a Sunday or general holiday
 Note² All days during 1900 to 2300, and general holidays including Sundays during 0700 to 2300
 Note³ All days during 2300 to 0700