

Appendix 4.8 Maximum Allowable SWL Calculation for Fixed Plant Noise at LT Side

NSR	Noise Criteria ANL-5	Contributing Noise Sources	Propagation Dist, m	Corrections, dB(A)			Permissible SWL, dB(A)	
				Facade	Dist	Ton		
N1204	Daytime	65	TKO-LT Tunnel Ventilation Building	147	3	-51	3	105
		65	Proposed Sewerage Pumping Station	470	3	-61	3	116
		65	Proposed Drainage Pumping Station	361	3	-59	3	113
	Night-time	55	TKO-LT Tunnel Ventilation Building	147	3	-51	3	94
		55	Proposed Sewerage Pumping Station	470	3	-61	3	105
		55	Proposed Drainage Pumping Station	361	3	-59	3	103
N2202	Daytime	65	TKO-LT Tunnel Ventilation Building	226	3	-55	3	109
		65	Proposed Sewerage Pumping Station	372	3	-59	3	114
		65	Proposed Drainage Pumping Station	280	3	-57	3	111
	Night-time	55	TKO-LT Tunnel Ventilation Building	226	3	-55	3	97
		55	Proposed Sewerage Pumping Station	372	3	-59	3	102
		55	Proposed Drainage Pumping Station	280	3	-57	3	100

Permissible SWL for Fixed Plant Noise Sources on LT Side

Noise Source	Day time & Evening time (dB(A))	Night time (dB(A))
TKO-LT Tunnel Ventilation Building	105	94
Proposed Sewerage Pumping Station	114	102
Proposed Drainage Pumping Station	111	100

Appendix 4.8 Maximum Allowable SWL Calculation for Fixed Plant Noise at TKO Side

NSR	Noise Criteria ANL-5	Contributing Noise Sources	Propagation Dist, m	Corrections, dB(A)			Permissible SWL, dB(A)	
				Facade	Dist	Ton		
N5012	Daytime	60	Proposed P2 Pumping Station	153	3	-52	3	106
	Night-time	50	Proposed P2 Pumping Station	153	3	-52	3	96
N5031	Daytime	60	TKO Ventilation Building	356	3	-59	3	113
	Night-time	50	TKO Ventilation Building	356	3	-59	3	103

Permissible SWL for Fixed Plant Noise Sources on TKO Side

Noise Source	Day time & Evening time (dB(A))	Night time (dB(A))
TKO-LT Tunnel Ventilation Building	113	103
Proposed P2 Pumping Station	106	96

Appendix 4.8 Predicted Operation Fixed Plant Noise Levels

Lam Tin Interchange

NSR AP: N1204

Day Time & Evening Time

Noise Source	SWL dB(A)	Qty	Total SWL	Horizontal Distance, m	Correction, dB(A)			Silencer / Acoustics Treatment	Noise Level at NSR, dB(A)
					Façade	Distance	Tonality		
TKO-LT Tunnel Ventilation Building	105	1	94	147	3	-51	3	0	60
LTI Drainage Pumping station	111	1	100	361	3	-59	3	0	58
LTI Sewerage Pumping Station	114	1	102	470	3	-61	3	0	59
T2 Ventilation Building ⁽¹⁾	104	1	104	490	3	-62	3	0	48
Total									64
Criteria									65

(1) Information provided by T2 Project Consultant

Night Time

Noise Source	SWL dB(A)	Qty	Total SWL	Horizontal Distance, m	Correction, dB(A)			Silencer / Acoustics Treatment	Noise Level at NSR, dB(A)
					Façade	Distance	Tonality		
TKO-LT Tunnel Ventilation Building	94	1	94	147	3	-51	3	0	49
LTI Drainage Pumping station	100	1	100	361	3	-59	3	0	47
LTI Sewerage Pumping Station	102	1	102	470	3	-61	3	0	47
T2 Ventilation Building ⁽¹⁾	104	1	104	490	3	-62	3	0	48
Total									54
Criteria									55

(1) Information provided by T2 Project Consultant

NSR AP: N2202

Day Time & Evening Time

Noise Source	SWL dB(A)	Qty	Total SWL	Horizontal Distance, m	Correction, dB(A)			Silencer / Acoustics Treatment	Noise Level at NSR, dB(A)
					Façade	Distance	Tonality		
TKO-LT Tunnel Ventilation Building	105	1	94	226	3	-55	3	0	56
LTI Drainage Pumping station	111	1	100	280	3	-57	3	0	60
LTI Sewerage Pumping Station	114	1	102	372	3	-59	3	0	61
T2 Ventilation Building ⁽¹⁾	104	1	104	360	3	-59	3	0	51
Total									64
Criteria									65

(1) Information provided by T2 Project Consultant

Night Time

Noise Source	SWL dB(A)	Qty	Total SWL	Horizontal Distance, m	Correction, dB(A)			Silencer / Acoustics Treatment	Noise Level at NSR, dB(A)
					Façade	Distance	Tonality		
TKO-LT Tunnel Ventilation Building	94	1	94	226	3	-55	3	0	45
LTI Drainage Pumping station	100	1	100	280	3	-57	3	0	49
LTI Sewerage Pumping Station	102	1	102	372	3	-59	3	0	49
T2 Ventilation Building ⁽¹⁾	104	1	104	360	3	-59	3	0	51
Total									55
Criteria									55

(1) Information provided by T2 Project Consultant

Tseung Kwan O

NSR AP: N5012

Day Time & Evening Time

Noise Source	SWL dB(A)	Qty	Total SWL	Horizontal Distance, m	Correction, dB(A)			Silencer / Acoustics Treatment	Noise Level at NSR, dB(A)
					Façade	Distance	Tonality		
Road P2 Pumping Station	106	1	88	153	3	-52	3	0	60
Total									60
Criteria									60

Night Time

Noise Source	SWL dB(A)	Qty	Total SWL	Horizontal Distance, m	Correction, dB(A)			Silencer / Acoustics Treatment	Noise Level at NSR, dB(A)
					Façade	Distance	Tonality		
Road P2 Pumping Station	96	1	96	153	3	-52	3	0	50
Total									50
Criteria									50

NSR AP: N5031

Day Time & Evening Time

Noise Source	SWL dB(A)	Qty	Total SWL	Horizontal Distance, m	Correction, dB(A)			Silencer / Acoustics Treatment	Noise Level at NSR, dB(A)
					Façade	Distance	Tonality		
TKO-LT Tunnel Ventilation Building	113	1	100	356	3	-59	3	0	60
Total									60
Criteria									60

Night Time

Noise Source	SWL dB(A)	Qty	Total SWL	Horizontal Distance, m	Correction, dB(A)			Silencer / Acoustics Treatment	Noise Level at NSR, dB(A)
					Façade	Distance	Tonality		
TKO-LT Tunnel Ventilation Building	103	1	100	356	3	-59	3	0	50
Total									50
Criteria									50