Distanced Based Assessment (Construction Scenario)

Please pick from drop-down list in orange cells

Noise area category		R1
RBL or L_{A90} Background level (dB(A))	Day	40
	Evening	35
	Night	30
$L_{Aeq(15minute)}$ Noise Mangement Level (dB(A))	Day	50
	Day (OOHW)	45
	Evening	40
	Night	35
Scenario		Paving / asphalting
Is there line of sight to receiver?		Yes

Steps for Screening Assessment:

1. Schedule noisy works to occur in standard hours where possible or before 11pm and implement Standard Measures.
2. Select the representative noise area category. The worksheet titled 'Representative Noise Environ.' provides a number of examples to help select the noise area category.
3. Select the scenario. If not found in drop-down list, refer to 'Source List' and select a representative scenario with similar plant combination.
4. Is there line of sight to receiver? Select the appropriate scenario from the drop down list .

Identify and implement standard mitigation measures where feasible and reasonable. Include any shielding implemented as part of the standard mitigation measures by changing the selection in the 'Is there line of sight to receiver' drop-down list. Solid barrier can be in the form of road cutting, solid construction hoarding, acoustic curtain, timber lapped and capped fence, shipping container, site office, etc. Please note that vegetation and trees are not considered to be a form of solid barrier and any gaps would compromise the acoustic integrity of the solid barrier.

6. Determine if there are any receivers (both residential and non-residential receivers) within the affected distance for each relevant time period . Consider background noise measurements to check assumption in Step #2 if:

(a) there are many affected receivers and the impact duration at any one receiver is more than 3 weeks; or
(b) there are a few affected receivers and the impact duration at any one receiver is more than 6 weeks.

Note that consideration need to be given to the construction staging plan when determining impact duration.

7. Identify if there are any receivers within the additional mitigation measures distances and identify feasible and reasonable measures at each receiver
8. Where night works are involved, identify sleep disturbance affected distance.
9. Document the outcomes of these steps.

(Note that suitable noise management levels for other noise-sensitive businesses not identified in the Construction Noise Estimator should be investigated on a project-by-project basis. Please contact a

Abbreviation	Measure
N	Notification
SN	Specific notifications
PC	Phone calls
IB	Individual briefings
RO	Respite offer
R1	Respite period 1
R2	Respite period 2
DR	Duration respite
AA	Alternative accommodation
V	Verification

Note that spot check verification of noise levels and individual briefings are not required for projects with less than 3 weeks impact duration

Residential receiver

			$L_{Aeq(15minute)}$ noise level above background (L_{A90})														$L_{Aeq(15minute)}$ 75 dB(A) or greater (Highly affected)			Sleep disurbance L_{Amax} 65 dB(A)
			5 to 10 dB(A)			10 to 20 dB(A)			20 to 30 dB(A)			> 30 dB(A)							
			Noticeable			Clearly audible			Moderately intrusive			Highly intrusive							
		Affected distance (m)	Measures	Within distance (m)	Mitigation level (dB(A))	Measures	Within distance (m)	Mitigation level (dB(A))	Measures	Within distance (m)	Mitigation level (dB(A))	Measures	Within distance (m)	Mitigation level (dB(A))	Measures	Within distance (m)	Mitigation level (dB(A))	Affected distance (m)
Undeveloped green fields, rural areas with isolated dwellings	Day	230							N	105	60	N	30	70	N, PC, RO	20	75	
	Day (OOHW)	335				N, R1, DR	230	50	N, R1, DR	105	60	N, R1, DR, PC, SN	30	70	N, PC, RO	20	75	
	Evening	485				N, R1, DR	335	45	N, R1, DR	155	55	N, R1, DR, PC, SN	55	65	N, PC, RO	20	75	
	Night	705	N	705	35	N, R2, DR	485	40	N, PC, SN, R2, DR	230	50	AA, N, PC, SN, R2, DR	105	60	N, PC, RO	20	75	270
	Highly Affected	20													N, PC, RO	20	75	
Developed settlements (urban and suburban)	Day	280							N	115	60	N	35	70	N, PC, RO	20	75	
	Day (OOHW)	425				N, R1, DR	280	50	N, R1, DR	115	60	N, R1, DR, PC, SN	35	70	N, PC, RO	20	75	
	Evening	635				N, R1, DR	425	45	N, R1, DR	180	55	N, R1, DR, PC, SN	70	65	N, PC, RO	20	75	
	Night	935	N	935	35	N, R2, DR	635	40	N, PC, SN, R2, DR	280	50	AA, N, PC, SN, R2, DR	115	60	N, PC, RO	20	75	330
	Highly Affected	20													N, PC, RO	20	75	
Propagation across a valley / over water	Day	365							N	140	60	N	40	70	N, PC, RO	20	75	
	Day (OOHW)	575				N, R1, DR	365	50	N, R1, DR	140	60	N, R1, DR, PC, SN	40	70	N, PC, RO	20	75	
	Evening	880				N, R1, DR	575	45	N, R1, DR	230	55	N, R1, DR, PC, SN	80	65	N, PC, RO	20	75	
	Night	1310	N	1310	35	N, R2, DR	880	40	N, PC, SN, R2, DR	365	50	AA, N, PC, SN, R2, DR	140	60	N, PC, RO	20	75	440
	Highly Affected	20													N, PC, RO	20	75	

Non-residential receiver
Undeveloped green fields, rural areas with isolated dwellings

				$L_{Aeq(15minute)}$ noise level above NML						LAeq(15minute) 75 dB(A) or greater (Highly affected)		
	Standard hours			<10 dB(A)			10 to 20 dB(A)					
	Period	NML	Affected distance (m)	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))
Classroom at schools and other educational institutions	Day	55	155				N	55	65	N, PC, RO	20	75
Hospital wards and operating theatres	Day	65	55							N, PC, RO	20	75
Place of worship	Day	55	155				N	55	65	N, PC, RO	20	75
Active recreation	Day	65	55							N, PC, RO	20	75
Passive recreation	Day	60	105				N	30	70	N, PC, RO	20	75
Industrial premise	Day	75	20							N, PC, RO	20	75
Offices, retail outlets	Day	70	30							N, PC, RO	20	75

				$L_{Aeq(15minute)}$ noise level above NML												
	OOHW			< 5 dB(A)			5 to 15 dB(A)			15 to 25 dB(A)			> 25 dB(A)		
	Period	NML	Affected distance (m)	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))
Hospital wards and operating theatres	Evening	65	55				N, R1, DR	30	70	N, R1, DR	11	80	N, R1, DR, PC, SN	4	90
	Night	65	55	N	55	65	N, R2, NR	30	70	N, PC, SN, R2, DR	11	80	AA, N, PC, SN, R2, DR	4	90
Place of worship	Evening	55	155				N, R1, DR	105	60	N, R1, DR	30	70	N, R1, DR, PC, SN	11	80
	Night	55	155	N	155	55	N, R2, NR	105	60	N, PC, SN, R2, DR	30	70	AA, N, PC, SN, R2, DR	11	80
Active recreation	Evening	65	55				N, R1, DR	30	70	N, R1, DR	11	80	N, R1, DR, PC, SN	4	90
Passive recreation	Evening	60	105				N, R1, DR	55	65	N, R1, DR	20	75	N, R1, DR, PC, SN	6	85
Industrial premise	Evening	75	20				N, R1, DR	11	80	N, R1, DR	4	90	N, R1, DR, PC, SN	1	100
	Night	75	20	N	20	75	N, R2, NR	11	80	N, PC, SN, R2, DR	4	90	AA, N, PC, SN, R2, DR	1	100
Offices, retail outlets	Evening	70	30				N, R1, DR	20	75	N, R1, DR	6	85	N, R1, DR, PC, SN	2	95
	Night	70	30	N	30	70	N, R2, NR	20	75	N, PC, SN, R2, DR	6	85	AA, N, PC, SN, R2, DR	2	95

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Non-residential receiver
Developed settlements (urban and suburban)

				$L_{Aeq(15minute)}$ noise level above NML						LAeq(15minute) 75 dB(A) or greater (Highly affected)		
	Standard hours			<10 dB(A)			10 to 20 dB(A)					
	Period	NML	Affected distance (m)	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))
Classroom at schools and other educational institutions	Day	55	180				N	70	65	N, PC, RO	20	75
Hospital wards and operating theatres	Day	65	70							N, PC, RO	20	75
Place of worship	Day	55	180				N	70	65	N, PC, RO	20	75
Active recreation	Day	65	70							N, PC, RO	20	75
Passive recreation	Day	60	115				N	35	70	N, PC, RO	20	75
Industrial premise	Day	75	20							N, PC, RO	20	75
Offices, retail outlets	Day	70	35							N, PC, RO	20	75

				$L_{Aeq(15minute)}$ noise level above NML												
	OOHW			< 5 dB(A)			5 to 15 dB(A)			15 to 25 dB(A)			> 25 dB(A)		
	Period	NML	Affected distance (m)	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))
Hospital wards and operating theatres	Evening	65	70				N, R1, DR	35	70	N, R1, DR	11	80	N, R1, DR, PC, SN	4	90
	Night	65	70	N	70	65	N, R2, NR	35	70	N, PC, SN, R2, DR	11	80	AA, N, PC, SN, R2, DR	4	90
Place of worship	Evening	55	180				N, R1, DR	115	60	N, R1, DR	35	70	N, R1, DR, PC, SN	11	80
	Night	55	180	N	180	55	N, R2, NR	115	60	N, PC, SN, R2, DR	35	70	AA, N, PC, SN, R2, DR	11	80
Active recreation	Evening	65	70				N, R1, DR	35	70	N, R1, DR	11	80	N, R1, DR, PC, SN	4	90
Passive recreation	Evening	60	115				N, R1, DR	70	65	N, R1, DR	20	75	N, R1, DR, PC, SN	6	85
Industrial premise	Evening	75	20				N, R1, DR	11	80	N, R1, DR	4	90	N, R1, DR, PC, SN	1	100
	Night	75	20	N	20	75	N, R2, NR	11	80	N, PC, SN, R2, DR	4	90	AA, N, PC, SN, R2, DR	1	100
Offices, retail outlets	Evening	70	35				N, R1, DR	20	75	N, R1, DR	6	85	N, R1, DR, PC, SN	2	95
	Night	70	35	N	35	70	N, R2, NR	20	75	N, PC, SN, R2, DR	6	85	AA, N, PC, SN, R2, DR	2	95

Non-residential receiver
Propagation across a valley / over water

				$L_{Aeq(15minute)}$ noise level above NML						LAeq(15minute) 75 dB(A) or greater (Highly affected)		
	Standard hours			<10 dB(A)			10 to 20 dB(A)					
	Period	NML	Affected distance (m)	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))
Classroom at schools and other educational institutions	Day	55	230				N	70	65	N, PC, RO	20	75
Hospital wards and operating theatres	Day	65	80							N, PC, RO	20	75
Place of worship	Day	55	230				N	70	65	N, PC, RO	20	75
Active recreation	Day	65	80							N, PC, RO	20	75
Passive recreation	Day	60	140				N	35	70	N, PC, RO	20	75
Industrial premise	Day	75	20							N, PC, RO	20	75
Offices, retail outlets	Day	70	40							N, PC, RO	20	75

				$L_{Aeq(15minute)}$ noise level above NML												
	OOHW			< 5 dB(A)			5 to 15 dB(A)			15 to 25 dB(A)			> 25 dB(A)		
	Period	NML	Affected distance (m)	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))	Measure	Within distance (m)	Mitigation level (dB(A))
Hospital wards and operating theatres	Evening	65	80				N, R1, DR	40	70	N, R1, DR	11	80	N, R1, DR, PC, SN	4	90
	Night	65	80	N	80	65	N, R2, NR	40	70	N, PC, SN, R2, DR	11	80	AA, N, PC, SN, R2, DR	4	90
Place of worship	Evening	55	230				N, R1, DR	140	60	N, R1, DR	35	70	N, R1, DR, PC, SN	11	80
	Night	55	230	N	230	55	N, R2, NR	140	60	N, PC, SN, R2, DR	35	70	AA, N, PC, SN, R2, DR	11	80
Active recreation	Evening	65	80				N, R1, DR	40	70	N, R1, DR	11	80	N, R1, DR, PC, SN	4	90
Passive recreation	Evening	60	140				N, R1, DR	80	65	N, R1, DR	20	75	N, R1, DR, PC, SN	6	85
Industrial premise	Evening	75	20				N, R1, DR	10	80	N, R1, DR	4	90	N, R1, DR, PC, SN	1	100
	Night	75	20	N	20	75	N, R2, NR	10	80	N, PC, SN, R2, DR	4	90	AA, N, PC, SN, R2, DR	1	100
Offices, retail outlets	Evening	70	40				N, R1, DR	20	75	N, R1, DR	6	85	N, R1, DR, PC, SN	2	95
	Night	70	40	N	40	70	N, R2, NR	20	75	N, PC, SN, R2, DR	6	85	AA, N, PC, SN, R2, DR	2	95