
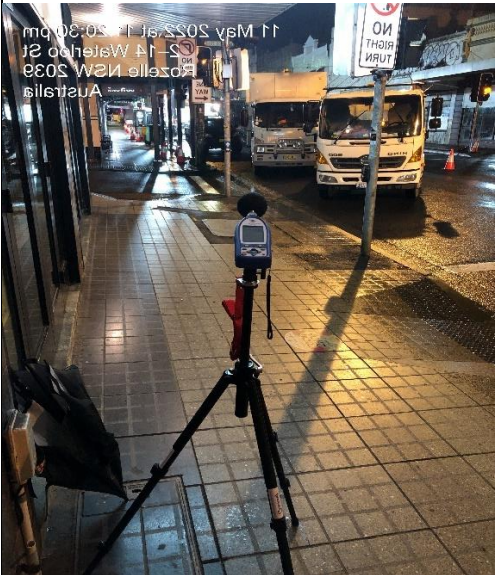


Project	Power Enabling Works, 33kV Rozelle	Report No.	050	Date Collected	11/05/2022	Time Collected	22:10-23:34
Data & Report By:	D. Mutkins	Works	Preparation for cable pull works		Purpose of Data Collection	Ongoing monitoring / model validation	
Location of construction activity (see Attachment)			Monitoring locations				
			<ol style="list-style-type: none"> 2A Belmore Street 6 Hancock Lane 126 Victoria Road (Hancock Ln side) 694 Darling Street 714 Darling Street 				
Observed construction activity			 				
Preparation excavation for cable pull works, communications conduits movements from CAT pit.							
Meteorological conditions							
Wind	Light SE						
Temperature (°C)	16	Cloud Cover:	Cloudy with rain				
Instrumentation details	Rion NL-42 - Sound Level Meter	Calibration valid until	March 2023				

Instrumentation and method

Monitoring was performed with sound level meter Rion NL-42 fixed to a tripod at a height of approx. 1.5m above the ground surface. The sound level meter was pre calibrated with a valid certificate until March 2023. A field calibrator was also used prior to taking the first recording and after the monitoring session to ensure device was within required range. Monitoring was conducted over multiple 15-minute periods in five locations. LAeq, LA90 and Lmax parameters were recorded in all cases.

Monitoring locations were selected to represent nearest affected receivers. See attachment monitoring locations and KNOWnoise maps.

Results

Particulars			Actual Recording(s)			KNOWnoise Prediction(s)
Location	Time	Observations	LAeq	LA90	Lmax	LAeq
1	22:10-22:25	13t machine operating, very heavy rain recording taken under umbrella noticeable increase in LAeq as rain becomes heavier. Cars passing within 3 m of monitor and idling while parking. Resident emptying rubbish into steel bin ~15m away. ~LAeq 66-68dB when rain is heavy Noticeable reduction when rain eases ~62dB	68	57	74	63
2	22:27-22:42	13t still operating, rain is continuous throughout recording though not as heavily, umbrella likely increasing LAeq value 60dB. Vehicle movements still frequent.	60	54	72	57
3	22:43-22:58	13t mucking into bogie, rain continuous at beginning of recording and starting to ease at 8min in. Vehicle movements around monitor still apparent though not as frequent. Slightly less LAeq 59dB	59	53	68	60
4	23:01-23:16	Bus movements through puddled water increasing recording levels, ~76-78 LAeq when 5 t is required to rip asphalt. Lmax generated from bus brakes gas release in front of monitoring device ~85dBA	78	72	85	79
5	23:19-23:34	Bogie movements around site at beginning of recording, 13t not active for the first half of recording period. Pedestrian traffic past monitor, some loud laughing past monitor ~83 Lmax. ~LAeq 67-68 noting vehicles passing through puddles likely increasing recordings levels.	68	62	83	63

Result Summary

Recording periods were taken underneath an umbrella and awnings along darling street during significant rainfall which was very heavy during most of the recording periods. The predicted values were close to actual recordings in most instances, it is noted that during the first recording the noise from rain hitting the umbrella got noticeably louder and the LAeq increased from ~62-63 up to ~67-68dB. The final recording taken underneath the awning had elevated levels which are again likely influenced from heavy rainfall and passing vehicles through puddled water. The work activity triggers AA for some nearby residents and remains to be noise intrusive at close distances.

Attachment 1

