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TQ102-01F01 Noise Monitoring Report (r1).docx

Battery Recyclers Pty Ltd

Neil Sher

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30 Tattersall Road, Kings Park - Noise Monitoring Report

Noise Monitoring Report

1. Introduction Renzo Tonin and Associates was engaged to conduct attended noise measurements of the activities associated with the Battery Recyclers facility in Kings Park.

2. Site Address 30 Tattersall Road, Kings Park

3. Applicable Noise Limits The noise criteria are taken from the Environment Protection Licence (EPL) No. 21989 for the subject site. The relevant noise limits, taken from Clause L3.1 of the EPL, are reproduced in the table below:

Table 1 – Noise Limits, dB(A)

Location	Day LAeq(15 minute)	Evening LAeq(15 minute)	Night LAeq(15 minute)	Night LA _{Fmax}
Residential	40	35	35	52

It is noted that the subject site operates only during the day period and therefore, only the day noise limit is applicable.

4. Measurement Date	Tuesday 9 th December 2025
5. Survey Period	Attended noise measurements of the site activities were conducted between 10:00am and 11:30am.
6. Weather Conditions	During the measurement periods the temperature was warm, with no wind and little cloud cover. The weather conditions would not have adversely affected the results and were conducive for measuring noise under typical conditions.
7. Methodology	External noise measurements were carried out generally in accordance with Australian Standard AS1055-1997, EPA's 'Noise Policy for Industry' and EPA's 'Approved methods for measurement and analysis of environmental noise in NSW'.
8. Instrumentation	A NTi Audio Type XL2 precision sound level analyser was used to measure statistical noise levels. The meter complies with Australian Standard 1259.2-1990 "Acoustics - Sound Level Meters" and is designated as a Type 1 instrument having accuracy suitable for field and laboratory use.
9. Field Calibration Checks	The calibration of the meter was checked in the field immediately before and after the noise measurements using a Brüel & Kjær Type 4231 calibrator and no drift in calibration was observed.
10. Noise Sources	Noise originating from the subject site including loading activities, use of battery sorting system and mechanical plant. The subject site was operating at typical capacity during the day of testing. It is noted that during typical operations the roller doors to the facility remain closed.

11. Measurement Locations **Table 2 – Measurement Locations**

Location	Address	Description
M1	14 Charles Street, Blacktown	Attended noise measurements were undertaken at both the eastern and western boundary of the residential property at 14 Charles Street approximately 420 m to the southeast of the subject site. <i>NB. This location is nominated in Clause L3.1 of the EPL.</i>
M2	Intermediate location on Tattersalls Road	Attended noise measurements were undertaken along Tattersall Road approximately 100 m to the west of the subject site. In the EIS noise report, this location was shown as the extent of the 40 dB(A) operational noise contour.

12. Measurement**Results**

The results of the measured noise levels at the measurement locations from activities at the subject site are presented below in Table 3. It is noted that during all measurements, noise from the subject site was inaudible, and the measured noise levels were due to noise from nearby industrial facilities and traffic noise not associated with the subject site.

Table 3 – Measured Noise Levels, dB(A)

ID	Location	Date & Time	EPL Criteria	Measured Noise Levels			Estimated Noise Level from Subject Site, LAeq, 15min	Comply?	Comments
				LAeq, 15min	LA90, 15min	LAmin, 15min			
1	M2 – Intermediate location	9/12/25 10:13am – 10:28am	40	61	53	51	<40	Yes	Noise environment dominated by nearby industrial sites, traffic noise from Tattersall Road and traffic noise from Sunnyholt Road. The subject site was inaudible at this location
2	M1 – 14 Charles Street, Blacktown (Western boundary)	9/12/25 11:47am – 11:02am	40	61	56	47	<40	Yes	Noise environment dominated by traffic noise from Sunnyholt Road. The subject site was inaudible at this location
3	M1 – 14 Charles Street, Blacktown (Eastern boundary)	9/12/25 11:12am – 11:27am	40	49	42	39	<40	Yes	Noise environment dominated by traffic noise from Sunnyholt Road. The subject site was inaudible at this location

13. Discussion of Results	Noise levels emitted from the subject site were inaudible at the two measurement locations and found to be within the nominated EPL criteria.
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14. Conclusion	Attended measurements of noise emissions from the Battery Recyclers facility at 30 Tattersall Road, Kings Park were conducted by Renzo Tonin & Associates. Measured noise levels indicate compliance with the nominated EPL criteria.
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Document control

Date	Revision history	Non-issued revision	Issued revision	Prepared	Instructed	Reviewed / Authorised
12.12.2025	Generate report	0	1	W. Chan	-	M. Chung
12.12.2025	Update	-	2	W. Chan	-	M. Chung
File Path: \\192.168.168.249\data\AssocSydProjects\TQ101-TQ150\TQ102 wc 30 Tattersall Rd Kings Park\1 Docs\TQ102-01F01 Noise Monitoring Report (r1).docx						

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APPENDIX A Glossary of terminology

The following is a brief description of the technical terms used to describe noise to assist in understanding the technical issues presented.

Adverse weather	Weather effects that enhance noise (that is, wind and temperature inversions) that occur at a site for a significant period of time (that is, wind occurring more than 30% of the time in any assessment period in any season and/or temperature inversions occurring more than 30% of the nights in winter).
Ambient noise	The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far.
Assessment period	The period in a day over which assessments are made.
Assessment point	A point at which noise measurements are taken or estimated. A point at which noise measurements are taken or estimated.
Background noise	Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation, when extraneous noise is removed. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the L90 noise level (see below).
Decibel [dB]	The units that sound is measured in. The following are examples of the decibel readings of every day sounds: 0dB The faintest sound we can hear 30dB A quiet library or in a quiet location in the country 45dB Typical office space. Ambience in the city at night 60dB CBD mall at lunch time 70dB The sound of a car passing on the street 80dB Loud music played at home 90dB The sound of a truck passing on the street 100dB The sound of a rock band 120dB Deafening
dB(A)	A-weighted decibels. The A-weighting noise filter simulates the response of the human ear at relatively low levels, where the ear is not as effective in hearing low frequency sounds as it is in hearing high frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the "A" filter. A sound level measured with this filter switched on is denoted as dB(A). Practically all noise is measured using the A filter.
dB(C)	C-weighted decibels. The C-weighting noise filter simulates the response of the human ear at relatively high levels, where the human ear is nearly equally effective at hearing from mid-low frequency (63Hz) to mid-high frequency (4kHz), but is less effective outside these frequencies.
Frequency	Frequency is synonymous to pitch. Sounds have a pitch which is peculiar to the nature of the sound generator. For example, the sound of a tiny bell has a high pitch and the sound of a bass drum has a low pitch. Frequency or pitch can be measured on a scale in units of Hertz or Hz.
Impulsive noise	Having a high peak of short duration or a sequence of such peaks. A sequence of impulses in rapid succession is termed repetitive impulsive noise.
Intermittent noise	The level suddenly drops to that of the background noise several times during the period of observation. The time during which the noise remains at levels different from that of the ambient is one second or more.
L _{Max}	The maximum sound pressure level measured over a given period.
L _{Min}	The minimum sound pressure level measured over a given period.

L ₁	The sound pressure level that is exceeded for 1% of the time for which the given sound is measured.
L ₁₀	The sound pressure level that is exceeded for 10% of the time for which the given sound is measured.
L ₉₀	The level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L90 noise level expressed in units of dB(A).
L _{eq}	The “equivalent noise level” is the summation of noise events and integrated over a selected period of time.
Reflection	Sound wave changed in direction of propagation due to a solid object obscuring its path.
SEL	Sound Exposure Level (SEL) is the constant sound level which, if maintained for a period of 1 second would have the same acoustic energy as the measured noise event. SEL noise measurements are useful as they can be converted to obtain L _{eq} sound levels over any period of time and can be used for predicting noise at various locations.
Sound	A fluctuation of air pressure which is propagated as a wave through air.
Sound absorption	The ability of a material to absorb sound energy through its conversion into thermal energy.
Sound level meter	An instrument consisting of a microphone, amplifier and indicating device, having a declared performance and designed to measure sound pressure levels.
Sound pressure level	The level of noise, usually expressed in decibels, as measured by a standard sound level meter with a microphone.
Sound power level	Ten times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power.
Tonal noise	Containing a prominent frequency and characterised by a definite pitch.