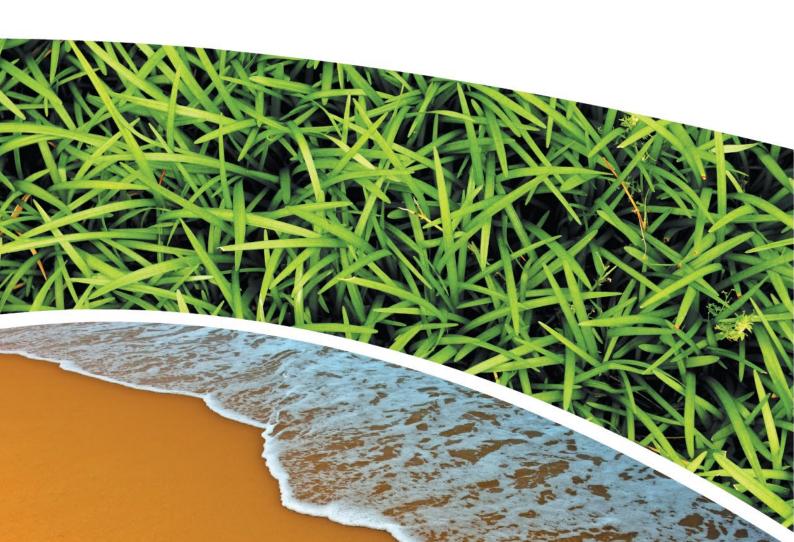


Concrush Pty Ltd 21 Racecourse Rd, Teralba

Prepared for CONCRUSH
Prepared by RCA Australia
RCA ref 13155-626/1
May 2025





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RCA ref 13155-626/1

RCA AUSTRALIA GEOTECHNICAL • ENVIRONMENTAL

28 May 2025

Concrush Pty Ltd 21 Racecourse Rd Teralba NSW 2284

Attention: Mr Kevin Thompson

Geotechnical Engineering

Engineering Geology

Environmental Engineering

Hydrogeology

Construction Materials Testing

Environmental Monitoring

Sound & Vibration

Occupational Hygiene

1ST QUARTER 2025 NOISE MONITORING CONCRUSH SITE, 21 RACECOURSE RD, TERALBA

1 INTRODUCTION

RCA Australia (RCA) was engaged by Concrush Pty Ltd (Concrush) to carry out a quarterly noise monitoring survey for the Concrush site facility located at 21 Racecourse Road, Teralba, NSW. The purpose of the noise survey was to monitor the noise levels at the closest sensitive receivers and assess site noise against relevant noise criteria.

The survey has been conducted in accordance with the requirements of AS 1055-2018 - Acoustics - Description and Measurement of Environmental Noise [1] and the Noise Policy for Industry [2] (NPfI), (EPA 2017).

Consent Condition B47 makes reference to observing noise limits stated in EPL13351. EPL13351 however does not contain any noise limits, and so environmental noise management levels has been based on the Operational Noise Management Plan [3] (ONMP) for the Project prepared by RCA.

2 SITE & SURROUNDS

2.1 LOCATION AND SENSITIVE RECEIVERS

Attended noise monitoring will be undertaken on a quarterly basis at the three monitoring locations indicatively shown below. Monitoring locations may change depending on safety and access considerations and to minimise disturbance to residential receivers.

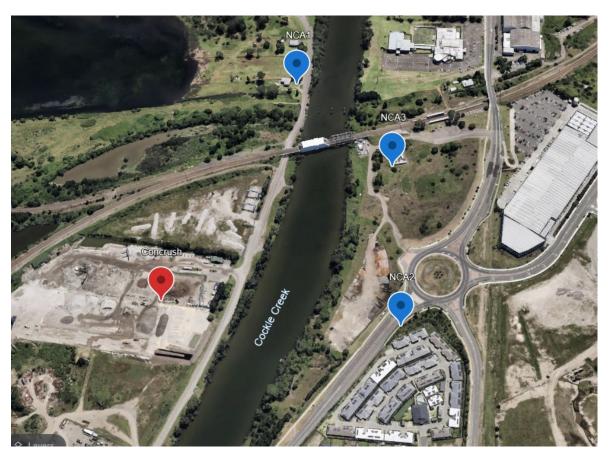


Figure 1 Site (red) and noise monitoring locations (blue)

3 CRITERIA

The site's environmental noise management levels at the nominated monitoring locations are shown in **Table 1**.

 Table 1
 Quarterly noise monitoring locations and noise management levels

| NCA | Day noise management level L _{Aeq,15 min} dBA | Eve noise management level L _{Aeq,15 min} dBA | | |
|-------|---|---|--|--|
| NCA 1 | 51 | 43 | | |
| NCA 2 | 56 | 47 | | |
| NCA 3 | 53 | 53 | | |

3.1 ANNOYING CHARACTERISTICS

Under the *NPfl* corrections to measured site levels may apply if annoying characteristics apply to the noise. Possible characteristics are identified in **Table 2**.



 Table 2
 Modifying factors as defined in NPfl

| Factor | Description | Correction |
|------------------------|--|------------------------------------|
| Tonal noise | Level of one-third octave band L_{Zeq} exceeds the level of the adjacent bands on both sides by: | 5 dB |
| | 5 dB or more if the centre frequency of the band containing the tone is in the range 500-10,000 Hz | |
| | 8 dB or more if the centre frequency of the band containing the tone is in the range 160-400 Hz | |
| | 15 dB or more if the centre frequency of the band containing the tone is in the range 25-125 Hz. | |
| Low frequency noise | Difference between L_{Ceq} and L_{Aeq} is 15 dB or more and low frequency one-third octave band L_{Zeq} levels exceed the thresholds in Table C2 of the NPfI. | 2 - 5 dB |
| Intermittent noise | Observed level of the source varies by more than 5 dB during the night. | 5 dB |
| Duration | One noise event in a 24-hr period, which lasts less than 2.5 hours. | 0-20 dB increase in criteria |

3.2 WEATHER CONDITIONS

The *NPfI* states that environmental noise measurements should not be conducted under the following conditions:

Average wind speeds (over 15-minute periods or shorter) at microphone height are greater than 5 metres per second, or when rainfall occurs.

4 SURVEY METHODOLOGY

4.1 MODIFICATIONS OF PROCEDURES

The quarterly noise monitoring methodology defined in the ONMP requires two fifteen minute attended noise measurements to be taken at each monitoring location during both the day and evening. Concrush only operate during the evening in response to customer demands, which are usually local roadworks projects. As such, evening work is sporadic and often requested at short notice. Because of this, RCA have not been able to capture noise measurements of evening works this reporting quarter.

4.2 EQUIPMENT

The equipment used for attended monitoring is shown below in **Table 3**. The sound level meters are class 1 measurement instruments.

The onsite sound level monitor was gone for repair. No data for this quarter is reported.



 Table 3
 Equipment used for attended noise monitoring

| Туре | Make/Model | Serial Number | Last Calibrated |
|-------------------|------------|---------------|-----------------|
| Sound Level Meter | SVAN 977 | 99558 | July 2024 |
| Sound Level Meter | SVAN 979 | 92044 | Feb 2023 |
| Calibrator | SV 33B | 86489 | March 2024 |

4.3 WEATHER

Conditions were clear and suitable for monitoring in accordance with AS1055 and the NPfl.

Weather conditions at the time of the survey are shown in **Table 4**. Wind speed was sourced from the Concrush onsite weather station, while the cloud cover was observed.

 Table 4
 Survey weather conditions

| Survey Date | Time | Wind Speed (m/s) | Wind Direction (°) | Cloud cover (observed) | Valid weather conditions? |
|-------------|---------|---------------------|--------------------|------------------------|---------------------------|
| 06/01/2025 | 2:45 pm | 2.1 | 64 | 1/8 | Yes |
| 06/01/2025 | 3:15 pm | 2.7 | 69 | 1/8 | Yes |
| 06/01/2025 | 3:45 pm | 2.6 | 74 | 1/8 | Yes |
| 06/01/2025 | 4:15 pm | 2.7 | 75 | 1/8 | Yes |

5 SURVEY RESULTS

Table 5 provide the results of the daytime attended noise surveys. Marked time traces of the attended noise surveys are shown in **Appendix A** at the end of this report.

The Concrush site was not audible during all measurements.



Table 5Noise survey observations Daytime 06/01/2025, dBA

| | Survey Date Start Time | | Ove | rall | | Site | Site | Site | Penalty for | Site L _{Aeq 15min} | Complies | Noise Sources and Level |
|--------------------|------------------------------|----------------------------|------------------|------------------|------------------|-----------------|------------------------------------|--|------------------------|--------------------------------|-------------------|---|
| Survey Location | | L _{Amax} 15min | L _{Aeq} | L _{A10} | L _{A90} | LAmax 15 min | L _{Aeq} 15min Limit | L _{Aeq 15min} Contribution | LAeq 15min alliloyilig | Contribution including penalty | condition Y/N? | Range |
| NCA1 | 06/01/2025 2:45 pm | 87 | 66 | 71 | 50 | Nil | 51 | Nil | Nil | Nil | Y | Site Inaudible. Road noise: ~70-87 dBA Train: ~58-68 dBA |
| NCA1 | 06/01/2025 3:46 pm | 84 | 68 | 72 | 51 | Nil | 51 | Nil | Nil | Nil | Y | Site Inaudible. Road noise: ~60-84 dBA Train: ~60-72 dBA |
| NCA2 | 06/01/2025 3:15 pm | 95 | 68 | 67 | 59 | Nil | 56 | Nil | Nil | Nil | Y | Site Inaudible. Road Noise: ~60-95 dBA |
| NCA2 | 06/01/2025 4:15 pm | 79 | 65 | 66 | 59 | Nil | 56 | Nil | Nil | Nil | Y | Site Inaudible. Road Noise: ~60-79 dBA |
| NCA3 | 06/01/2025 3:15 pm | 72 | 58 | 57 | 50 | Nil | 53 | Nil | Nil | Nil | Y | Site Inaudible. Distant road ~55-63 dBA Trains: ~55-68 dBA |
| NCA3 | 06/01/2025 4:15 pm | 67 | 54 | 55 | 51 | Nil | 53 | Nil | Nil | Nil | Y | Site Inaudible. Distant road ~55-67 dBA Train: ~55-60 dBA |

IA indicates "inaudible", NM indicates "not measurable".



5.1 ASSESSMENT OF ANNOYING CHARACTERISTICS

5.1.1 LOW FREQUENCY NOISE

Site was not audible, meaning that it was not the dominant noise source. As a result, a low frequency assessment could not be undertaken.

5.1.2 TONALITY

Site was not audible, meaning that it was not the dominant noise source. As a result, a tonality assessment could not be undertaken.

5.1.3 INTERMITTENT NOISE

The penalty for intermittency is only applicable to the night-time assessment period. This noise survey was undertaken during day and evening time, and so this potential penalty does not apply to results in this report.

5.1.4 DURATION

Site is operational for more than 2.5 hours each day, and so no 'duration' modifications apply.

5.2 SUMMARY OF OBSERVATIONS

The site was inaudible during all measurements. All measurements complied with noise targets set in the Operational Noise Management Plan.

6 CONCLUSION

No site noise could be heard during all off-site noise measurements. Noise levels from the Concrush site complied with noise targets adopted in the ONMP at all monitoring locations.

Yours faithfully

RCA AUSTRALIA

Zavyal

Zaryab Ali

Graduate Acoustic Engineer



REFERENCES

- [1] Standards Australia, AS1055 (2018): Acoustics Description and measurement of environmental noise.
- [2] The Noise Policy for Industry (NSW EPA, 2017)
- [3] Operational Noise Management Plan for Concrush Pty Ltd Teralba Facility

GLOSSARY

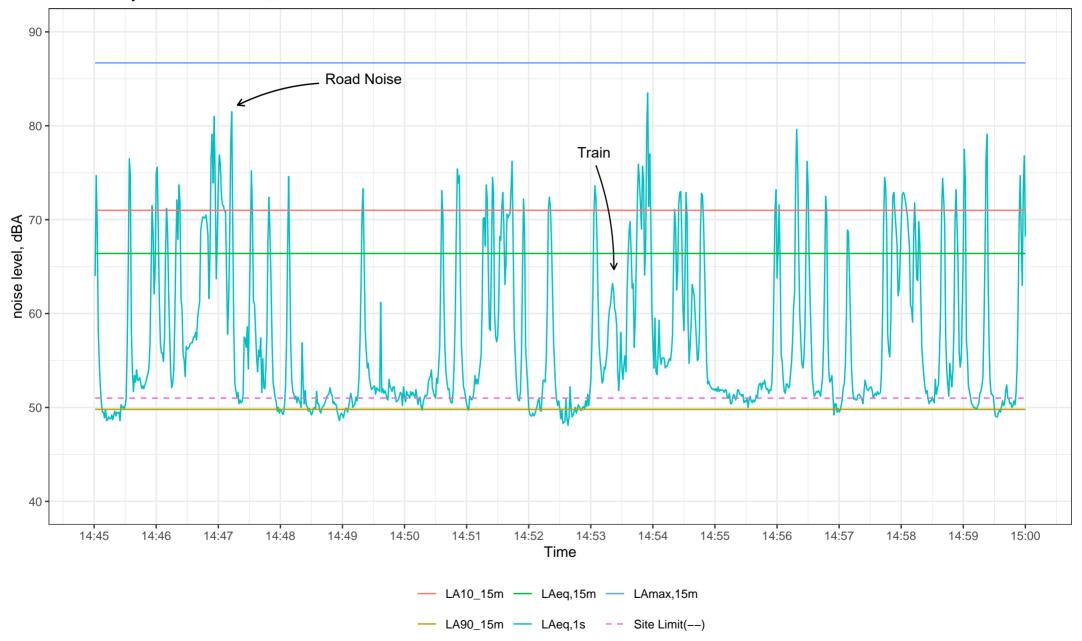
| dB (A) | Unit of sound pressure level, modified by the A-weighting network to represent the sensitivity of the human ear. |
|-----------------|---|
| SPL (Lp) | The incremental variation of sound pressure from the reference pressure level expressed in decibels. |
| L _{eq} | Equivalent continuous noise level averaged over time on an equivalent energy basis. |
| L ₁ | Average Peak Noise Level in a measurement period. |
| L ₁₀ | Average Maximum Noise Level in a measurement period. |
| L ₉₀ | Average Minimum Noise Level in a measurement period. |
| 1/3 Octave | Division of frequencies into bands of width one-third of an octave. Sound data can be calculated for each division. |



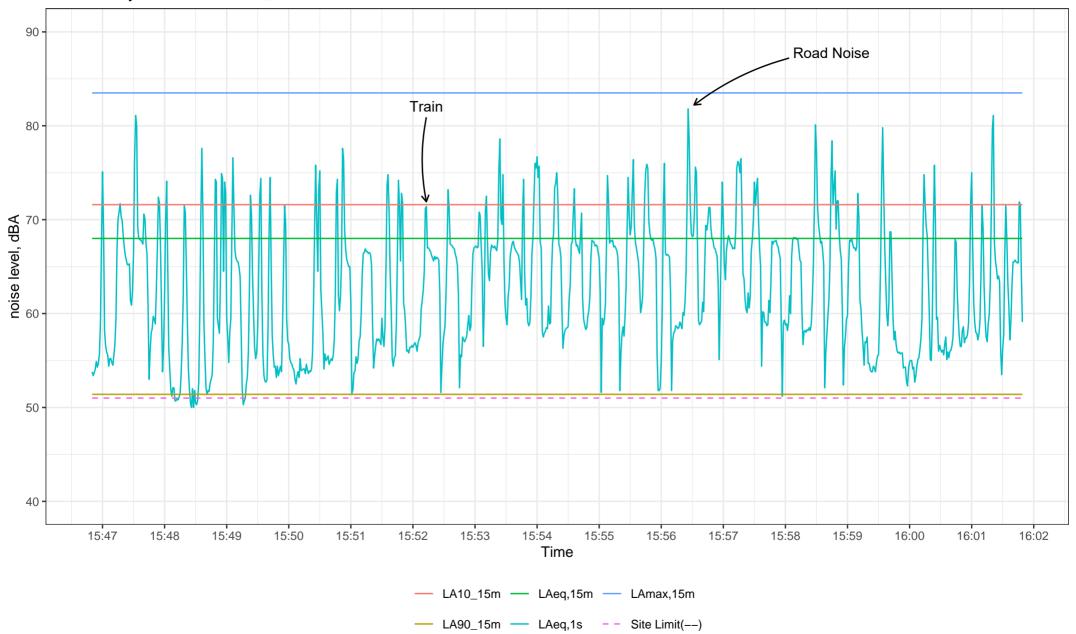
Appendix A

Daytime survey Time Traces

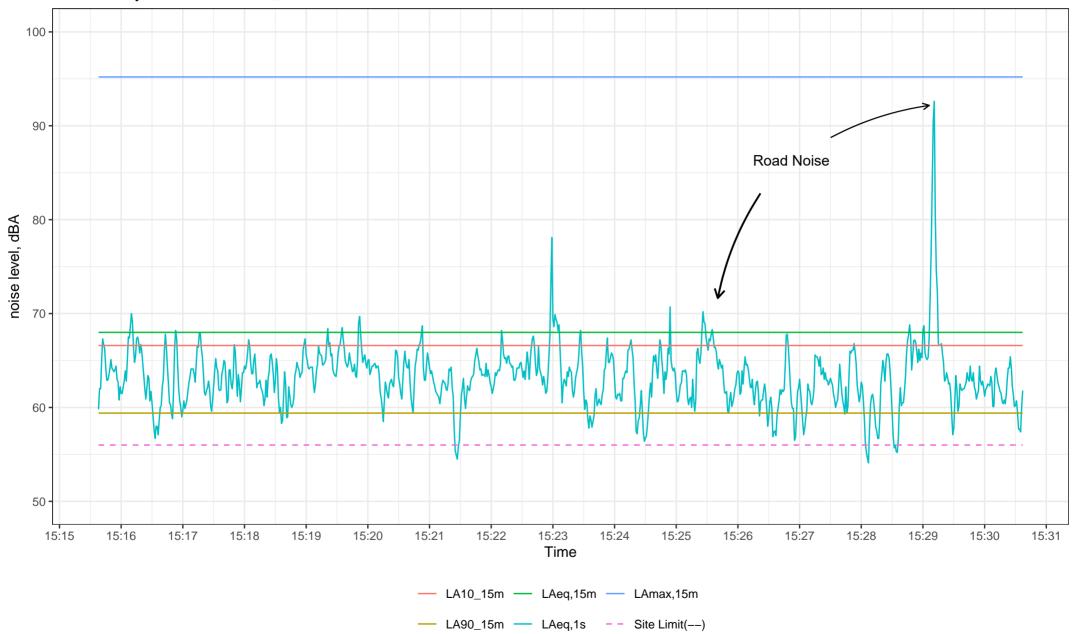
06-January-2025 Concrush_NCA1 #1



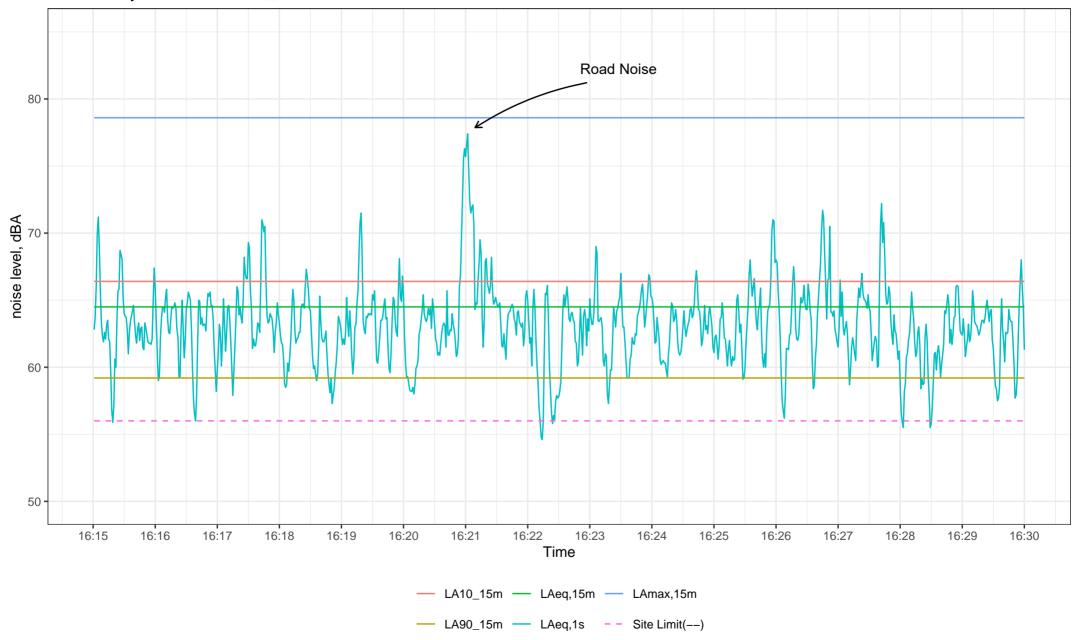
06-January-2025 Concrush_NCA1 #2



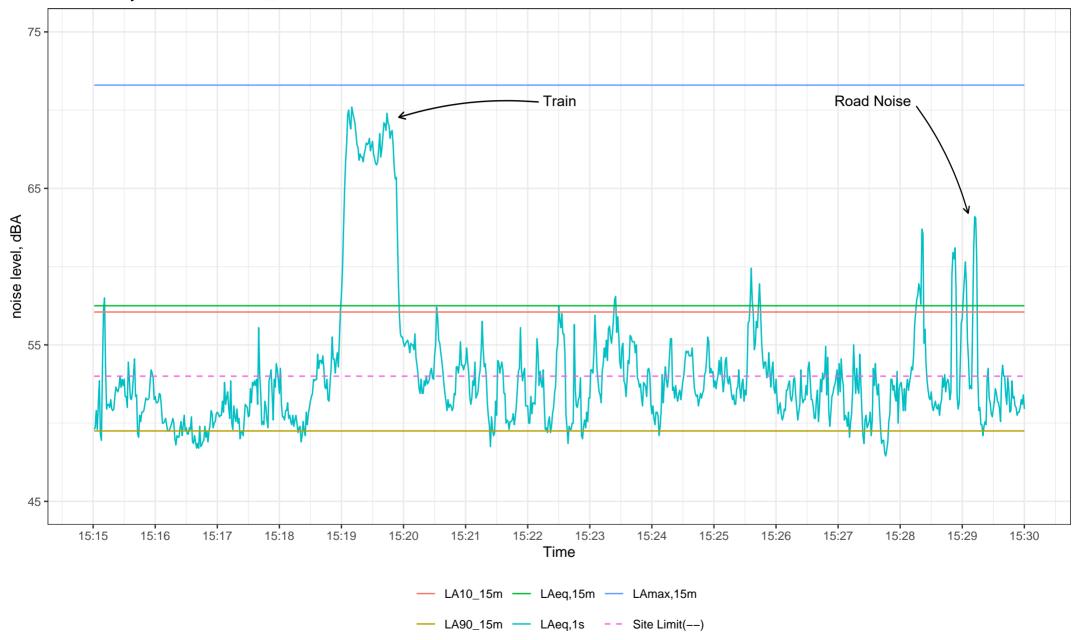




06-January-2025 Concrush_NCA2 #2



06-January-2025 Concrush_NCA3 #1



06-January-2025 Concrush_NCA3 #2

