

29 November 2024

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Cleary Bros (Bombo) Pty Ltd  
39 Five Islands Road  
Port Kembla NSW 2505

SLR Project No.: 610.031293.00002

**RE: Albion Park Quarry  
November 2024 Noise Compliance Measurements**

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## 1.0 Introduction

SLR Consulting Australia Pty Ltd (SLR) has been engaged by Cleary Bros (Bombo) Pty Ltd to conduct noise compliance monitoring of its Albion Park Quarry (APQ) operations.

The APQ Environment Management Strategy (Cleary Bros 2024) summarises the project approval (Development Consent SSD10369) noise conditions and sets out the Noise Monitoring Program for operation of the quarry. This letter details the biannual independent noise compliance measurements undertaken by SLR on 6 November 2024 which are required as part of the Noise Monitoring Program, reproduced below:

*Operator-attended noise compliance monitoring will be conducted twice each financial year, once during the winter months, and once at another time of the year and to include the “short-term activities” if they are undertaken during the year.*

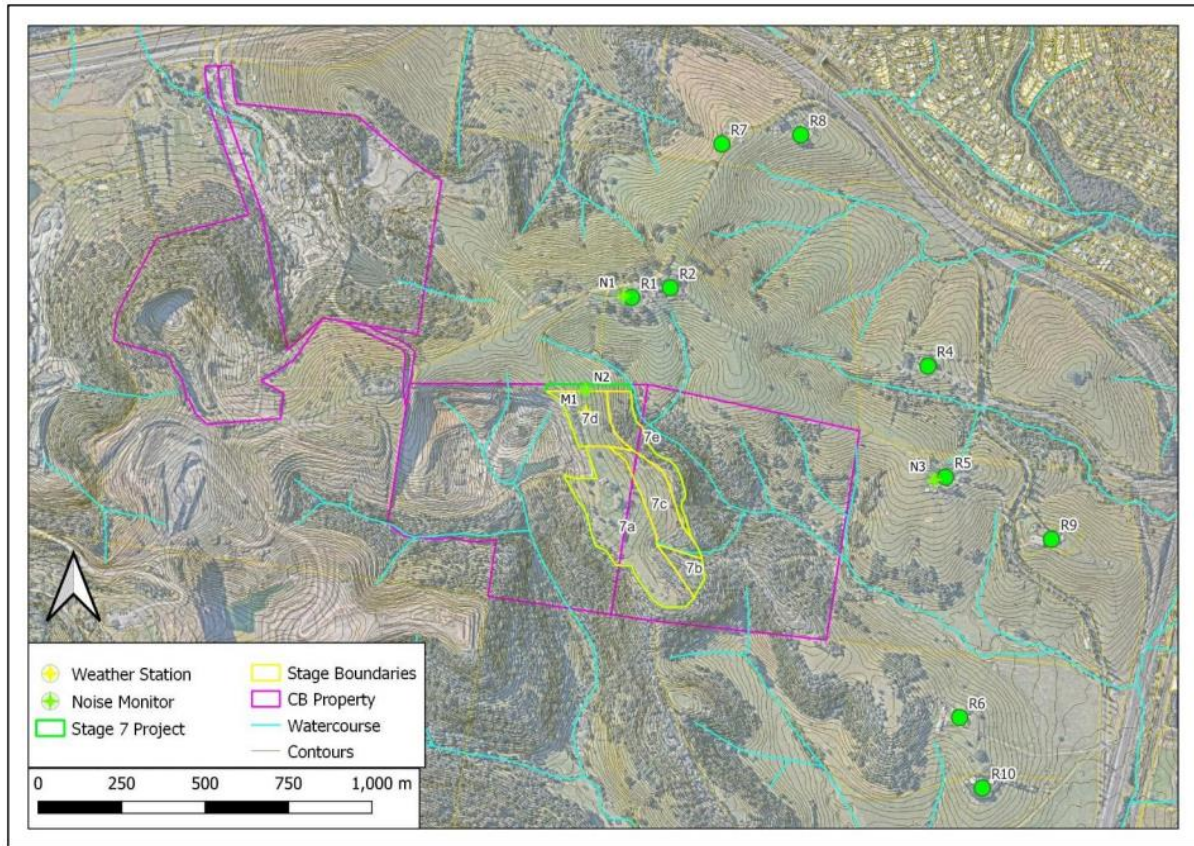
Independent operator-attended noise monitoring locations and criteria are reproduced from the Noise Monitoring Program and shown in **Table 1**.

**Table 1: Noise Monitoring Locations and Criteria**

Location ID	Monitoring Location	Stage 7a criteria (LAeq (15minute)) dB
N1	R1 – “The Cottage” nearest residence to the north of stage 7 extraction area	48
N2	Real time noise monitoring location, at the northern boundary of stage 7 extraction area	To be determined <sup>1</sup>
N3	R5 – “Deer Farm”, 42 James Road Croom, nearest residence to the east of the stage 7 extraction area	40
Note: 1 Noise criteria at N2 are based on the relative difference between N2 and N1 at the time of monitoring		

The noise measurement locations in **Figure 1** are reproduced from the Noise Monitoring Program.

**Figure 1 Extraction area and monitoring locations**



Note: Locations of monitoring equipment are approximate only.

## 2.0 Measurement Methodology

Noise measurements were undertaken with a Brüel & Kjær 2270 Precision Sound Level Meter (serial # 3029485) with the instrument calibration checked with a G.R.A.S 42 AG acoustic calibration instrument. The instrumentation used during the monitoring programme was designed to comply with the requirements of AS IEC 61672.1-2004 “Electroacoustics - Sound Level Meters” and carried current NATA or manufacturer calibration certificates.

Attended noise measurements were undertaken in the free field with consideration to AS1055:2018 Acoustics – Description and measurement of environmental noise. The sound level meter was programmed to record statistical noise level indices in 15-minute intervals, including the L<sub>Amax</sub>, L<sub>A1</sub>, L<sub>A10</sub>, L<sub>A90</sub> and L<sub>Aeq</sub> descriptors. During attended measurements observations were made of contributing noise sources from APQ and any extraneous noise sources influencing the measurements.

## 3.0 Results

Results of noise monitoring are presented in **Table 2**.



**Table 2: Measured Noise Levels, 15 minute dBA**

Loc	Time	Weather	Leq	L10	L90	Criteria	APQ contribution	Observations
N1	11:45	Light breeze <sup>1</sup> 1-2m/s 22.9 °C	50	52	44	48	<35	APQ 7a works faintly audible Heavy vehicle 40-43 Hand tooling 40-42  Cows 55-60 Birds 52-54 Vehicle pass by 52-55 Distant traffic 39-42
N2	12:15	Moderate-NNE breeze <sup>1</sup> . AWS <sup>2</sup> 2-3m/s, gusts to 7.7m/s 21.8 °C	47	50	43	-	43	Intermittent drilling contribution (continuous, tonal) from APQ 7a 43-49  Aircraft 49-60 Wind 45-60 Insects 42-46 Distant traffic 40-42
N3	13:00	Moderate S breeze <sup>1</sup> 3-4m/s, gusts to 7m/s. 22.2 °C	54	57	51	40	<41 <sup>3</sup>	APQ 7a inaudible at this location  Wind gusts 59-66 Distant traffic 41-43 Aircraft 51-65.

Notes:

1. Observed wind at microphone level.
2. Measured at automatic weather station (AWS) 10m above ground level.
3. Site inaudible at these locations, contribution estimated to be at least 10dB less than the measured background LA90 noise level

## 4.0 Assessment of Measured Noise Levels

### Location N1

At Location N1 quarry operations were typically inaudible. Heavy vehicle movements and hand-tooling were faintly audible for between 1 – 2 minutes. APQ site contribution was estimated at less than 35dB LAeq 15minute, which is below the 48 dB LAeq 15minute noise criterion at this location.

### Location N2

Based on the noise levels measured at Location N2 time-synchronised with the Site Hive real time noise monitor, it is recommended that the Site Hive monitor is adjusted by +4 dB.



The attended measurement location for N2 and the Site Hive monitor are within close proximity to one another and the automatic weather station. As such, the observed NNE wind speeds of 2-3 m/s and recorded gusts of up to 7.7 m/s are applicable to this measurement.

### **Location N3**

At Location N3 quarry operations were inaudible, with southerly wind and distant traffic noise from the Princes Highway dominant throughout the measurement. During periods of lower wind activity, APQ site noise remained inaudible, with contribution estimated to be below the 40 dB LAeq 15minute noise criterion at this location.

