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18 November 2024

MAC201092-02-2024LR10

Attention: Dargues Gold Mine (DGM) Sustainability Team
Aurelia Metals Ltd
920 Majors Creek Road
Majors Creek NSW 2622

Dear DGM Sustainability Team,

Unattended Noise Monitoring Summary

Dargues Gold Mine, George Street, Majors Creek, NSW

Month Ending October 2024

1 Introduction

Muller Acoustic Consulting Pty Ltd (MAC) has completed a review of data from an unattended noise monitor located at Dargues Gold Mine (DGM), George Street, Majors Creek, NSW on behalf of Aurelia Metals Ltd.

The review of unattended data from the SVANTEK 977A Noise Monitoring Station (the monitor) was completed on behalf of DGM. The monitor was installed by MAC to assist in managing noise emissions from DGM and to supplement quarterly attended noise monitoring.

2 Analysis Methodology

The analysis reviewed evening and night noise levels (ie not daytime). Results obtained during non-prevailing meteorological conditions (ie wind speeds above 3m/s at 10m above ground and temperature inversion conditions of up to 3°C /100m and wind speeds of up to 2m/s at 10m above ground level) are considered not applicable against the EPL (#20095) criteria and have been excluded.

Directional analysis was not available while the supplementary monitor was installed through the month of October 2024.

3 Unattended Monitoring Results and Discussion

A review of results and discussion for the unattended monitoring period for the month ending October 2024 has been completed. A total of 78 noise events have been identified and compared against the threshold of 33dBA as noted in Section 8.3.2 of the NMP. A review identified that zero (0) events were attributed to DGM activities. DGM contribution remained below the estimated LAeq threshold, and therefore further analysis is not required. **Table 1** provides a summary of these events for the October 2024 period.

The analysed noise events for the monitoring period were dominated by extraneous noise such as local road traffic, insects, wildlife and wind.

Figure 1 presents the average monthly noise metrics for the monitoring terminal over several previous months. **Figure 2** presents the compliance performance with respect to DGM noise contributions LA90 and relevant criteria for the historic data.

We trust this information is satisfactory for your requirements at this time, if you have any questions, please contact the undersigned.

Yours sincerely



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Table 1 - Summary of Results - Unattended Noise Monitoring Events, Month Ending 31 October 2024

Date/Time	L _{Amax} dBA	L _{Aeq} dBA	L _{A90} dBA	Threshold L _{Aeq} , dBA (dB)	EPL Criteria L _{Aeq} (15min) dBA	Estimated Mine Noise Contribution L _{Aeq} (15min)	Satisfies EPL Criteria	Stability Class	Wind Speed (m/s)	Source Direction	Comments
01/10/2024 01:00	49	42	36	33	35	<30	Yes	D	0.9	N/A	Insects
01/10/2024 01:15	48	41	36	33	35	<30	Yes	D	1.0	N/A	Insects
01/10/2024 01:30	48	41	36	33	35	<30	Yes	D	1.1	N/A	Insects
01/10/2024 01:45	47	41	36	33	35	<30	Yes	D	1.2	N/A	Insects
01/10/2024 02:00	47	39	31	33	35	<30	Yes	D	1.2	N/A	Insects
01/10/2024 02:15	48	41	33	33	35	<30	Yes	D	1.2	N/A	Insects and birds
01/10/2024 02:30	48	41	32	33	35	<30	Yes	D	1.0	N/A	Insects
01/10/2024 03:00	48	40	31	33	35	<30	Yes	D	0.9	N/A	Insects, birds and traffic
01/10/2024 19:30	49	39	34	33	35	<30	Yes	D	0.9	N/A	Insects
01/10/2024 19:45	47	38	29	33	35	<30	Yes	D	0.9	N/A	Insects, birds and traffic
01/10/2024 21:45	47	38	30	33	35	<30	Yes	D	0.3	N/A	Insects
01/10/2024 22:15	45	38	27	33	35	<30	Yes	D	0.4	N/A	Insects and birds
01/10/2024 23:00	47	40	35	33	35	<30	Yes	D	0.7	N/A	Insects and birds
01/10/2024 23:15	49	38	29	33	35	<30	Yes	D	0.8	N/A	Insects and birds
02/10/2024 00:00	48	39	30	33	35	<30	Yes	D	0.5	N/A	Insects and birds
02/10/2024 00:15	48	40	35	33	35	<30	Yes	D	0.5	N/A	Insects
02/10/2024 00:30	47	38	25	33	35	<30	Yes	D	0.5	N/A	Insects and birds
02/10/2024 01:00	48	40	31	33	35	<30	Yes	D	0.4	N/A	Insects
02/10/2024 01:15	48	39	33	33	35	<30	Yes	D	0.3	N/A	Insects
02/10/2024 03:45	47	41	36	33	35	<30	Yes	D	0.8	N/A	Insects and birds
02/10/2024 04:15	47	39	27	33	35	<30	Yes	D	0.5	N/A	Insects and birds
02/10/2024 04:30	48	40	28	33	35	<30	Yes	D	0.5	N/A	Insects and birds

Table 1 - Summary of Results - Unattended Noise Monitoring Events, Month Ending 31 October 2024

Date/Time	L _{Amax} dBA	L _{Aeq} dBA	L _{A90} dBA	Threshold L _{Aeq} , dBA (dB)	EPL Criteria L _{Aeq} (15min) dBA	Estimated Mine Noise Contribution L _{Aeq} (15min)	Satisfies EPL Criteria	Stability Class	Wind Speed (m/s)	Source Direction	Comments
02/10/2024 04:45	48	41	36	33	35	<30	Yes	D	0.5	N/A	Insects and birds
02/10/2024 21:00	47	37	27	33	35	<30	Yes	D	0.9	N/A	Insects
02/10/2024 21:15	45	37	27	33	35	<30	Yes	D	0.8	N/A	Insects
02/10/2024 21:30	44	36	27	33	35	<30	Yes	D	0.5	N/A	Insects
02/10/2024 21:45	45	35	26	33	35	<30	Yes	D	0.1	N/A	Insects
02/10/2024 22:00	49	37	27	33	35	<30	Yes	D	0.6	N/A	Insects
02/10/2024 22:30	46	38	28	33	35	<30	Yes	D	0.8	N/A	Insects
02/10/2024 22:45	47	39	33	33	35	<30	Yes	D	0.8	N/A	Insects
02/10/2024 23:00	48	39	29	33	35	<30	Yes	D	0.8	N/A	Insects
02/10/2024 23:15	46	39	27	33	35	<30	Yes	D	0.5	N/A	Insects
02/10/2024 23:45	47	40	30	33	35	<30	Yes	D	0.0	N/A	Insects and birds
03/10/2024 00:30	46	37	28	33	35	<30	Yes	D	0.0	N/A	Insects and birds
03/10/2024 22:00	48	37	27	33	35	<30	Yes	D	1.0	N/A	Insects and birds
03/10/2024 22:30	47	38	28	33	35	<30	Yes	D	0.8	N/A	Insects and traffic
03/10/2024 22:45	46	37	25	33	35	<30	Yes	D	0.9	N/A	Insects
03/10/2024 23:00	44	35	25	33	35	<30	Yes	D	1.0	N/A	Insects
03/10/2024 23:30	47	37	26	33	35	<30	Yes	D	0.9	N/A	Insects
04/10/2024 00:00	48	36	25	33	35	<30	Yes	D	0.7	N/A	Insects
04/10/2024 00:15	49	37	25	33	35	<30	Yes	D	0.8	N/A	Insects
04/10/2024 00:30	46	36	24	33	35	<30	Yes	D	1.0	N/A	Insects
04/10/2024 00:45	48	37	25	33	35	<30	Yes	D	1.0	N/A	Insects
04/10/2024 01:00	48	39	26	33	35	<30	Yes	D	0.9	N/A	Insects

Table 1 - Summary of Results - Unattended Noise Monitoring Events, Month Ending 31 October 2024

Date/Time	L _{Amax} dBA	L _{Aeq} dBA	L _{A90} dBA	Threshold L _{Aeq} , dBA (dB)	EPL Criteria L _{Aeq} (15min) dBA	Estimated Mine Noise Contribution L _{Aeq} (15min)	Satisfies EPL Criteria	Stability Class	Wind Speed (m/s)	Source Direction	Comments
04/10/2024 01:30	49	39	22	33	35	<30	Yes	D	1.0	N/A	Insects
04/10/2024 01:45	49	40	24	33	35	<30	Yes	D	1.0	N/A	Insects
04/10/2024 02:00	49	42	31	33	35	<30	Yes	D	0.9	N/A	Insects
04/10/2024 02:15	49	39	29	33	35	<30	Yes	D	1.0	N/A	Insects
04/10/2024 02:45	49	40	24	33	35	<30	Yes	D	1.0	N/A	Insects
04/10/2024 03:00	48	39	25	33	35	<30	Yes	D	1.0	N/A	Insects
04/10/2024 03:45	47	38	24	33	35	<30	Yes	D	1.1	N/A	Insects
04/10/2024 04:00	48	41	29	33	35	<30	Yes	D	1.0	N/A	Insects
04/10/2024 04:30	47	39	24	33	35	<30	Yes	D	1.0	N/A	Insects and birds
12/10/2024 20:30	46	34	28	33	35	<30	Yes	D	1.0	N/A	Insects
12/10/2024 22:45	45	35	26	33	35	<30	Yes	D	0.5	N/A	Insects
12/10/2024 23:00	49	35	26	33	35	<30	Yes	D	0.5	N/A	Insects
14/10/2024 03:15	48	34	24	33	35	<30	Yes	D	1.2	N/A	Insects and wind
15/10/2024 22:15	48	38	26	33	35	<30	Yes	D	0.8	N/A	Insects
15/10/2024 23:45	49	38	26	33	35	<30	Yes	D	0.3	N/A	Insects
16/10/2024 00:00	49	40	26	33	35	<30	Yes	D	0.9	N/A	Insects
16/10/2024 01:00	48	39	24	33	35	<30	Yes	D	0.7	N/A	Insects and birds
16/10/2024 01:15	48	39	25	33	35	<30	Yes	D	0.5	N/A	Insects and birds
16/10/2024 01:30	48	38	25	33	35	<30	Yes	D	0.7	N/A	Insects and birds
16/10/2024 01:45	48	34	24	33	35	<30	Yes	D	1.0	N/A	Insects
16/10/2024 02:15	49	39	24	33	35	<30	Yes	D	0.7	N/A	Insects
16/10/2024 02:30	49	39	23	33	35	<30	Yes	D	1.0	N/A	Insects

Table 1 - Summary of Results - Unattended Noise Monitoring Events, Month Ending 31 October 2024

Date/Time	L _{Amax} dBA	L _{Aeq} dBA	L _{A90} dBA	Threshold L _{Aeq} , dBA (dB)	EPL Criteria L _{Aeq} (15min) dBA	Estimated Mine Noise Contribution L _{Aeq} (15min)	Satisfies EPL Criteria	Stability Class	Wind Speed (m/s)	Source Direction	Comments
16/10/2024 02:45	48	36	23	33	35	<30	Yes	D	0.7	N/A	Insects
16/10/2024 22:15	49	39	26	33	35	<30	Yes	D	0.1	N/A	Insects and traffic
16/10/2024 22:30	48	36	24	33	35	<30	Yes	D	0.8	N/A	Insects and wildlife
17/10/2024 00:30	48	36	22	33	35	<30	Yes	D	0.9	N/A	Insects
17/10/2024 00:45	48	34	22	33	35	<30	Yes	D	0.9	N/A	Insects
18/10/2024 21:30	49	35	33	33	35	<30	Yes	D	2.4	N/A	Insects and traffic
18/10/2024 22:45	48	35	32	33	35	<30	Yes	D	1.7	N/A	Insects
18/10/2024 23:00	45	34	32	33	35	<30	Yes	D	1.7	N/A	Insects
19/10/2024 00:30	49	34	30	33	35	<30	Yes	D	1.2	N/A	Insects
19/10/2024 21:30	48	35	32	33	35	<30	Yes	D	0.6	N/A	Insects
19/10/2024 22:00	43	37	34	33	35	<30	Yes	D	0.4	N/A	Insects
19/10/2024 22:45	46	34	31	33	35	<30	Yes	D	0.7	N/A	Insects

Note: It is reiterated that inapplicable meteorological conditions such as rain, winds >3m/s, and temperature inversions of up to 3°C / 100m and wind speeds of up to 2m/s at 10m above ground level and have been excluded.

