MAXWELL INFRASTUCTURE and MT ARTHUR COAL

Joint Community Consultative Committee

Minutes for the Meeting held on 8 December 2021 at Maxwell Infrastructure Meeting Room and via Zoom video-conferencing

Attendance:

Chairperson

Wej Paradice* (WP) MAC Chairperson

Maxwell Infrastructure

Donna McLaughlin (DM) Health, Safety, Environment and Community Manager

Alex Newton (AN) Environment and Approvals Coordinator
Teresa Coleman (TC) Environment and Community Coordinator

Peter Horder (PH) Community Representative

Michael White (MW) Goldophin/Coolmore representative

Mt Arthur Coal (MAC)

James Nixon* (JN) Environmental Superintendent Katie Weaver* (KW) Principal - Corporate Affairs

Kim Carlson* (KC) Corporate Affairs

Hannah Farr* (HF) Health, Safety, Environment and Community Manager

Council Representative

Theresa Folpp* (TF) Muswellbrook Shire Council delegate

Other

Lisa Andrews (LA) Maxwell CCC Independent Chairperson

Kerri Garvie* (KG) Independent Minute Taker

1. Housekeeping and Safety

Meeting opened at 11.10am. WP asked if there was any objection to recording the meeting for minute taking purposes only. LA expressed that she doesn't usually like to record meetings as it can stifle participation and it is discouraged by DPIE, however, given the meeting was being held both via video-conferencing and in person, to assist the minute taker the committee raised no objection. WP stated that the recording would be deleted following completion of the minutes. **Agreed.**

2. Apologies

WP advised that Mt Arthur have had a change of membership with two new members recently approved by DPIE in November 2021; John Hobden and Lavinia Hutchison. Unfortunately, due to the short notice they were unable to attend this CCC.

Dianna Gee, Jennifer Lecky, Tim Wolfgang, Aaron Moon, Fiona Webber, Mark Bowditch, Robert Halloran & Sharon Pope (MSC) replaced by Teresa Folpp.

^{*}Attended remotely via video-conferencing.

3. Declaration of Pecuniary Interest

LA advised that she is an Independent Chairperson appointed by DPIE & engaged by Malabar Resources to chair the Maxwell CCC. MW advised that he was Goldophin and Coolmore Stud's representative. LA explained that the Goldophin & Coolmore representation on the Maxwell CCC was part of the recent approval (Condition A20 of the SSD 9526 - Maxwell Underground Coal Mine Project) and advised that she would forward this condition of consent to WP for his information. WP is also an Independent Chairperson appointed by DPIE to Chair Mt Arthur Coal CCC and is paid for this activity. **Noted.**

4. Acceptances of Previous Meeting Minutes:

Minutes were accepted as a true and accurate record by the Chair.

5. Actions from Previous Meeting

Action	ISSUE	RESPONSBILITY
	December 2020 Meeting Actions	
1	MAC to provide information on train loading process for the MAC rail loop, areas of dual tracks and train movements. Slide 13 of presentation.	JN
2	MAC to organise a noise informational session on how noise is recorded, and the meaning of results.	JN
	June 2021 Meeting Actions	
1	MAC and Maxwell to update the Environmental Monitoring figure to show the dust arc of influence for both MAC and Maxwell Infrastructure. Complete 25/06/2021 – emailed with finalised minutes.	JN/AN
2	MAC to provide scatterplot directional PM_{10} figure with the draft minutes. Completeemailed with finalised minutes.	JN
3	MAC to provide the figure showing deposited dust results with the draft minutes. This Action is confirmed not to be relevant as no longer required in consent. To be discussed on 8 December 2021	JN

6. Rail Movements

Rail Movements May 2021 to October 2021

	Total coal tonnes	Maximum train movements per day
Maxwell Annual Limits	7 Mtpa	12
Mt Arthur Coal Annua Qimits	27 Mtpa	30
Maxwell Actual	0.0 Mt	1
Mt Arthur Coal Actual	5.9 Mt	Max: 9 Average: 4.3

All within limits.

Source: Malabar JCCC December 2021 presentation- Slide Reference #3

7. Complaints

Complaints Maxwell Infrastructure and Mt Arthur Coal

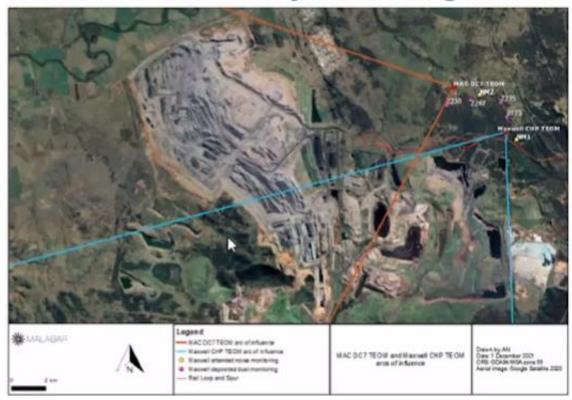
- No rail-related complaints were received by Maxwell Infrastructure for the period.
- No rail-related complaints were received by Mt Arthur Coal for the period.

Source: Malabar JCCC December 2021 presentation- Slide Reference #4

Advised that no complaints were registered for either Maxwell Infrastructure or MAC for this reporting period (April-December 2021)

8. Environmental Performance

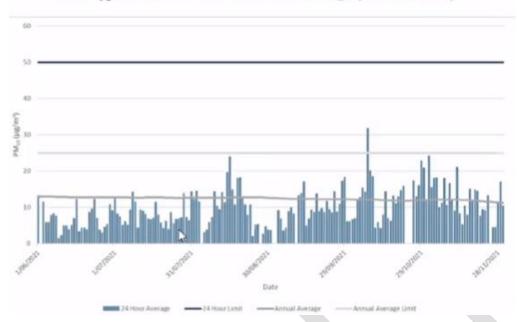
Location of Air Quality Monitoring Sites



Source: Malabar JCCC December 2021 presentation- Slide Reference #5

These figures were updated as per June 2021 meeting to include the arcs of influence for both TEOMS. Also updated to include revised attended noise monitoring locations.

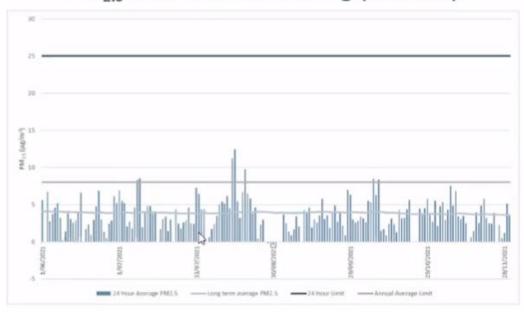
PM₁₀ Real Time Monitoring (Maxwell)



Source: Malabar JCCC December 2021 presentation- Slide Reference #6

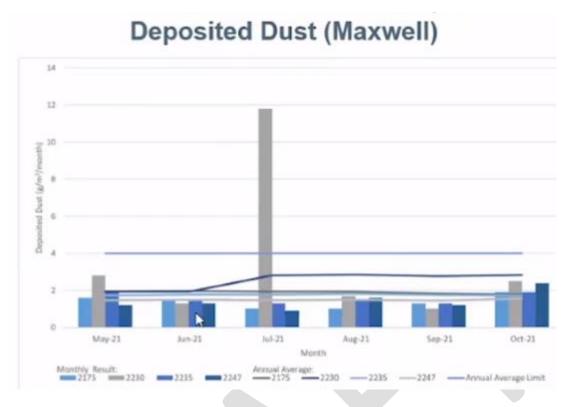
The gaps in the data are due to maintenance and scheduled calibration by monitoring contractor and power cuts. To minimise future potential data loss due to power cuts and tripping, alerts are generated when more than 4 hours of data loss occurs.

PM_{2.5} Real Time Monitoring (Maxwell)



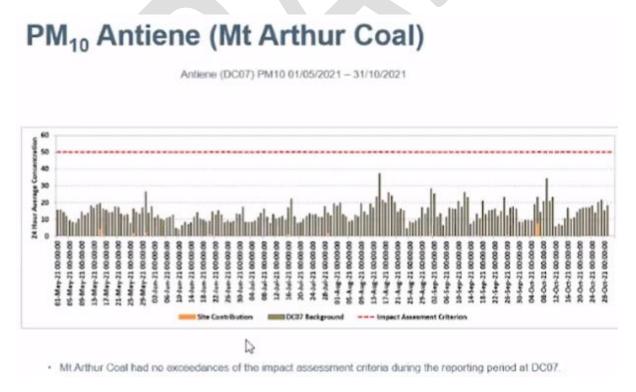
Source: Malabar JCCC December 2021 presentation- Slide Reference #7

The gaps in data are the same as per PM10.



Source: Malabar JCCC December 2021 presentation- Slide Reference #8

Sampling notes from July 2021 indicate that this was a contaminated sample (contamination can include soil deposited by birds)



Source: Malabar JCCC December 2021 presentation- Slide Reference #9

PM₁₀ Antiene (Mt Arthur Coal)

Antiene (DC07) PM10

DC07

80

70

60

40

40

0

40

0

45

90

135, 180

225

270

315

360

Source: Malabar JCCC December 2021 presentation- Slide Reference #10

0-50

Attended Noise Monitoring (Maxwell)

>200

Location	Date	L _{Aeq} (15 min)					LAt (f min)		
		Day Criteria	Noise Level	Evening Criteria	Noise Level	Night Criteria	Noise Level	Night Criteria	Noise Level
NM1	25/08/2021	45	<20	41	<20	41	<20	52	<20
NM2	25/08/2021	44	<20	40	<20	40	<20	52	<20
NM1	26/08/2021	45	<20	41	<20	41	<20	52	<20
NM2	26/08/2021	44	<20	40	<20	40	<20	52.	<20
NM1	27/08/2021	45	<20	41	<20	41	<20	52	<20
NM2	27/08/2021	44	<20	40	<20	40	<20	52	<20

Source: Malabar JCCC December 2021 presentation- Slide Reference #11

Monthly monitoring under the revised Environment Protection Licence and NBMP for the Maxwell UG project commenced in August 2021. Monitoring is required day, evening and night for 3 consecutive days each month.

Attended Noise Monitoring NP4 (Mt Arthur Coal)

Periodic noise monitoring results L_{Asq (15min)}

Dariodia naisa	maniforina	reculte.	
Periodic noise	HIGHROTHIS	resums	—Δ1 (1min).

Langerance	NP04	L _{A1 (tea)}	NPO
Representative residential assessment zone	A		-
Noise impact assessment criteria (intrusive criteria) ($L_{\rm Aeq}$ ($t_{\rm low}$)	38	Representative residential assessment zone	A
Land acquisition criteria (L _{deg (Their)})	43	Noise impact assessment criteria (L _{A1 (Initial})	45
Predicted noise level for 2016/17 for each monitoring location	38	10/05/2021 22:55	33
10/05/2021 22:55	30		
07/06/2021 23:19	33	07/06/2021 23 19	38
13/07/2021 00:19	26*	13/07/2021 00:19	NM*
26/08/2021 23 23	30	26/08/2021 23:23	35
21/09/2021 22:55	37	21/05/2021 22:55	40
19/10/2021 00:07	38"	19/10/2021 00:07	47*
IA = inaudible. NM = audible but not measureable.		IA = Inaudible. NM = audible but not measureable.	

*remeasure value, first measurement exceeded and operations modified to comply with criteria for next measurement 75 min later. *criteria did net apply due to noise enhancing conditions, currently an engoing investigation with DPIE.

- · There were two exceedances of the noise criteria in the reporting period.
- The two exceedances had a remeasure undertaken as required under the Noise Management Plan.
- · After the remeasure in July MAC subsequently compiled with the criteria.
- · After the remeasure in October MAC did not comply with the LA1 (1min) criteria however the criteria did not apply due to noise enhancing conditions. There is currently an investigation ongoing with DPIE, no outcome to report at this stage.

Source: Malabar JCCC December 2021 presentation- Slide Reference #12

NA in exceedance column means atmospheric conditions outside those specified in the project approval and so criterion is not applicable.





ACTION 1: JN to provide information on train loading process for the MAC rail loop, areas of dual tracks and train movements.

- During general operations one train will be loaded and with one other train on the loop at any point.
- FY21 trends:
 - · 1.1M month per month
 - · 5-6 trains per day
- During major track outages (ARTC closes the entire network approximately 6 times per year) up to 3 trains can be stowed on the MAC loop during the outage (no loading).
- No queuing or stowing of MAC trains on the Antiene Spur.
- One 'loop' of track departure and arrival which starts approximately at the underpass see next slide.

Source: Malabar JCCC December 2021 presentation-Slide Reference #13

Actions





Source: Malabar JCCC December 2021 presentation-Slide Reference #14

Actions Mt Arthur Coal



ACTION 3: JN to organise a noise informational session on how noise is recorded, and the meaning of results.

Mt Arthur Attended Noise Monitoring

- Why? To quantify and describe the acoustic environment and compare noise levels from sources of interest (e.g. mines) with their specified limits.
- When? Usually during the night period once per month. Monitoring typically occurs between 10pm and 2am. One 15-minute measurement at each monitoring location is taken.
- Weather? Nights are chosen such that noise criteria are most likely to be applicable, based on forecasts of no rain and wind speeds less than 3 m/s. However, temperature inversions can still make noise criteria not applicable, often during the winter.
- Where? At a monitoring location representative of the nearest privately-owned residences.
 Monitoring is typically not conducted at the residence to avoid annoyance (e.g. setting off dogs in the middle of night), interference (e.g. AC units), and shielding/reflections by buildings.
- Did you know? Compliance monitoring undertaken by Global Acoustics is "double blind." The
 mine doesn't know when monitoring will occur until after it is completed. On the other hand, we
 do not know how or where the mine will be operating, so we cannot target nor avoid noisy
 operations.

Source: Malabar JCCC December 2021 presentation- Slide Reference #15

3





ACTION 3: JN to organise a noise informational session on how noise is recorded, and the meaning of results.

Mt Arthur Attended Noise Monitoring cont..

The goal of noise monitoring is ultimately to quantify the source of interest (mine). The final result must be known at the conclusion of each measurement in the field.

How does the independent consultant do it?

- Pausing: The measurement can be stopped during interfering noise events (passing aircraft, cars, trains, etc.) to isolate the source of interest.
- Frequency analysis: If mine noise is less than 1 kHz and insects are above 1 kHz, we can easily determine the mining-only level.
- Direction: If there are multiple mines audible at the same time, we use compass headings and aerial maps to differentiate contributions from each source.
- Calculation: By documenting the duration and loudness of individual noise events, we can calculate a total contribution from the mine.
- Modifying factors: We determine whether low-frequency or tonal modifying factors are applicable in the field using an app that plugs into the instrument.

Source: Malabar JCCC December 2021 presentation- Slide Reference #16

General Business:

Nil items.

Meeting Schedule for 2022:

- Wednesday 13 June 2022; and
- Wednesday 7 December 2022.

At the Maxwell Administration Office, 952 Thomas Mitchell Drive, Muswellbrook, commencing at 2pm.

Meeting Close:

Meeting closed 11:44am.

ITEM	ISSUE	RESPONSIBILITY
1	Send condition of consent to WP for Godolphin/Coolmore representative on the CCC	LA
2	Update Map on Slide 5 (Location of Air Quality Monitoring Sites)	