

## Maules Creek Coal Mine Community Consultative Committee Meeting #49

# Environmental Monitoring Report For the Q1 period, January – March 2025

## **Attended Noise Monitoring**

Maules Creek Coal (MCC) engaged an independent acoustic consultant to conduct LAeq (15minutes) and LA1 (1 minute) attended noise monitoring at six monitoring locations on site.

#### A. NOISE GENERATED BY MCCM AGAINST OPERATIONAL DAY & NIGHT NOISE CRITERIA; January - March 2025 .

The results show that MCCM is within EPL 20221 compliance limits, that operations did not exceed the applicable; LAeq (15minute) 35dB Criteria, LA1 (1Minute) 45dB Criteria and the EPA's Noise Policy for Industry compliance guidelines.

#### Table 1 - January Noise Monitoring

Location	Start date and time	Wi	nd	Stability class	Very enhancing? 1	Limits, d	IB <sup>1</sup>	Site levels	, dB <sup>2</sup>	Exceedance	es, dB
		Speed m/s	Direction <sup>3</sup>			L <sub>Aeq,15minute</sub>	L <sub>Amax</sub>	L <sub>Aeq,15minute</sub>	L <sub>Amax</sub>	L <sub>Aeq,15minute</sub>	L <sub>Amax</sub>
NM1	22/01/2025 22:30	0.3	177	F	No	35	45	IA	IA	Nil	Nil
NM2	22/01/2025 23:30	0.8	199	F	No	39	45	IA	IA	Nil	Nil
NM3	22/01/2025 23:15	0.8	200	F	No	35	45	IA	IA	Nil	Nil
NM4	22/01/2025 23:00	0.5	185	F	No	35	45	IA	IA	Nil	Nil
NM5	22/01/2025 22:00	0.3	186	F	No	35	45	IA	IA	Nil	Nil
NM6	22/01/2025 23:58	3.3	149	D	Yes	40	50	IA	IA	Nil	Nil

#### Table 2 - February Noise Monitoring

Location Start date and time		Wind		Stability class Very				Site levels, dB <sup>2,3</sup>		Exceedances, dB	
		Speed m/s	Direction 4		enhancing? 1	L <sub>Aeq,15minute</sub>	L <sub>A1,1minute</sub>	L <sub>Aeq,15minute</sub>	L <sub>A1,1minute</sub>	L <sub>Aeq,15minute</sub>	L <sub>A1,1minute</sub>
NM1	6/02/2025 22:30	0.8	187	F	No	35	45	IA	IA	Nil	Nil
NM2	6/02/2025 23:30	3.2	103	D	Yes	44	49	IA	IA	Nil	Nil
NM3	6/02/2025 23:16	1.1	166	F	No	35	45	IA	IA	Nil	Nil
NM4	6/02/2025 23:00	0.5	303	F	No	35	45	IA	IA	Nil	Nil
NM5	6/02/2025 22:00	0.5	58	F	No	35	45	IA	IA	Nil	Nil
NM6	6/02/2025 23:58	3.3	72	D	Yes	40	50	IA	IA	Nil	Nil



#### Table 3 - March Noise Monitoring

Location	Start date and time	tart date and time Wind		Stability class Very		Limits, dB <sup>1</sup>		Site levels, dB <sup>2,3</sup>		Exceedances, dB	
		Speed m/s	Direction 4		enhancing? 1	L <sub>Aeq,15minute</sub>	L <sub>A1,1minute</sub>	L <sub>Aeq,15minute</sub>	L <sub>A1,1minute</sub>	L <sub>Aeq,15minute</sub>	L <sub>A1,1minute</sub>
NM1	12/03/2025 22:30	2.0	126	D	No	35	45	<20	<20	Nil	Nil
NM2	12/03/2025 23:30	2.9	82	D	No	39	45	<20	<20	Nil	Nil
NM3	12/03/2025 23:21	3.1	82	D	Yes	40	50	<20	<20	Nil	Nil
NM4	12/03/2025 23:00	1.4	103	F	No	35	45	<20	<20	Nil	Nil
NM5	12/03/2025 22:00	1.5	129	Е	No	35	45	<20	<20	Nil	Nil
NM6	12/03/2025 23:58	1.6	83	F	No	35	45	<20	<20	Nil	Nil

## **Wind Direction during Attended Monitoring**

Wind direction data is collected from the Maule's Creek Coal Mine (MCCM) Automated Weather Station (AWS). Wind data for the duration of the attended monitoring assessment, recorded at the MCCM AWS is presented in the table below.

**Table 4 - Prevailing Wind Direction** 

Monitoring Date	Prevailing Wind Direction
January	SE
February	SE
March	SE



## **Blast Monitoring**

There was 39 blasts at MCCM during Q1 2025. All blast monitoring results recorded within the reporting period have complied with applicable overpressure and ground vibration limits specified in the respective approvals.

## Table 5 – Blast Results Summary

Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Noise	dB	All	39	94.65	114.10	120	No
Vibration	mm/s		39	0.09	1.56	10	No



## **Air Quality**

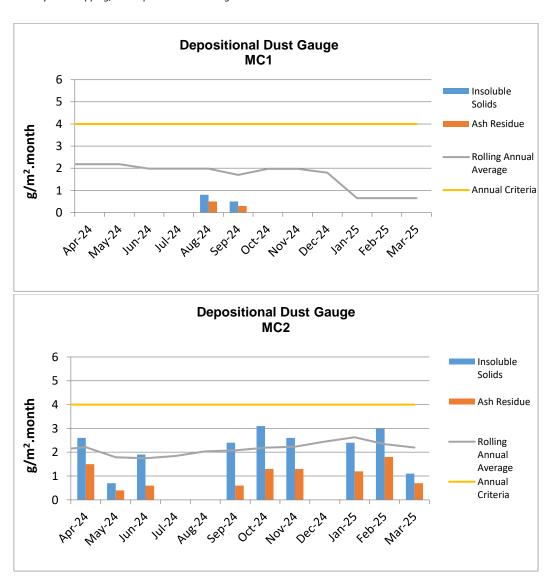
#### A. Total Depositional Dust

The 12 monthly rolling annual average remains below the relevant Project Approval (PA 10\_0138) criteria of 4g/m²/month for the respective monitoring points.

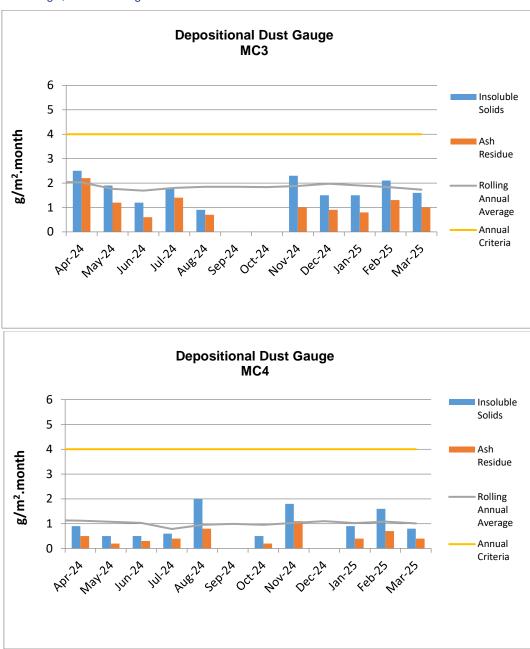
Table 6 – Deposited Dust Gauge Results [g/m²/month]

MONTH	MC1	MC2	MC3	MC4
January	27.3c	2.4	1.5	1.9
February	6.0c	3.0	2.1	1.6
March	11.6c	1.1	1.6	0.8
12 MONTH ROLLING AVERAGE	0.7	2.2	1.7	1.0

<sup>&</sup>lt;sup>c</sup> samples contaminated by bird dropping, decomposed insects or vegetable matter.







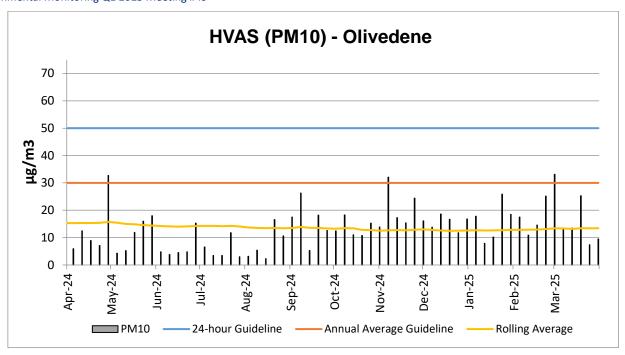
<sup>\*</sup> Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).

## B. High Volume Air Sampling (HVAS)

The HVAS monitor is located on the property 'Olivedene,' a mine owned property on Therribri Road. During past 12 months, there have been no exceedances of the 24-hour average of 50  $\mu$ g/m<sup>3</sup>.

HVAS PM<sub>10</sub> Rolling Annual Average as of March was **13.4 μg/m³**, which is below the Annual Average Guideline of 30 μg/m³.





#### C. TEOM - PM10 Results

The annual rolling average for PM10 at the Maules Creek Coal for TEOM1 was  $9.3 \mu g/m^3$  and at TEOM3 was  $12.2 \mu g/m^3$  these are both below the Project Approval annual average criteria of  $30\mu g/m^3$  as shown in the following figure. There have been no exceedances of the 24-hour average for Q1.

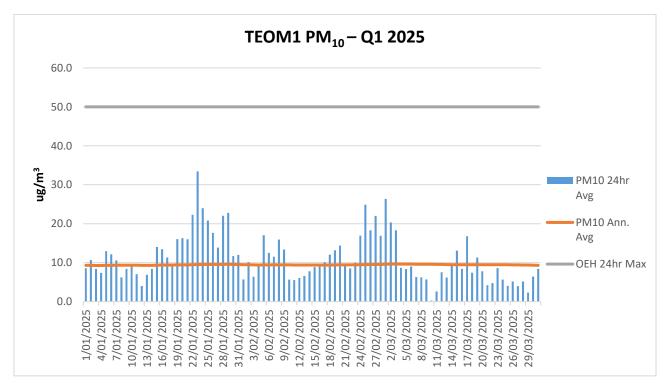


Figure 1 - TEOM Result – Particulate Matter  $PM_{10\mu g/m}^3$ 

st Blank columns indicate sample periods where there was either power outage, maintenance or other related causes.



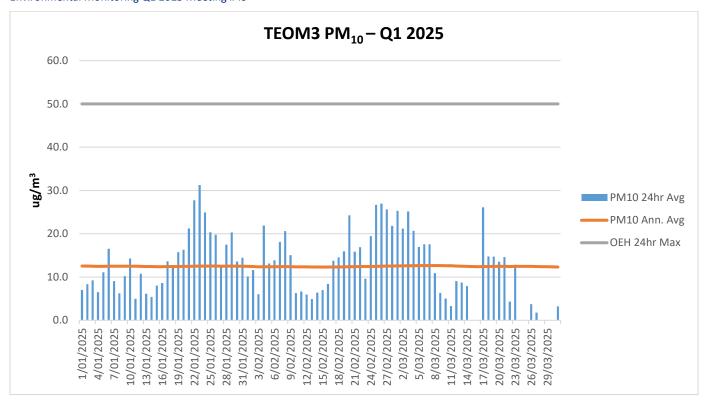


Figure 2 - TEOM Result - Particulate Matter PM<sub>10µg/m</sub><sup>3</sup>

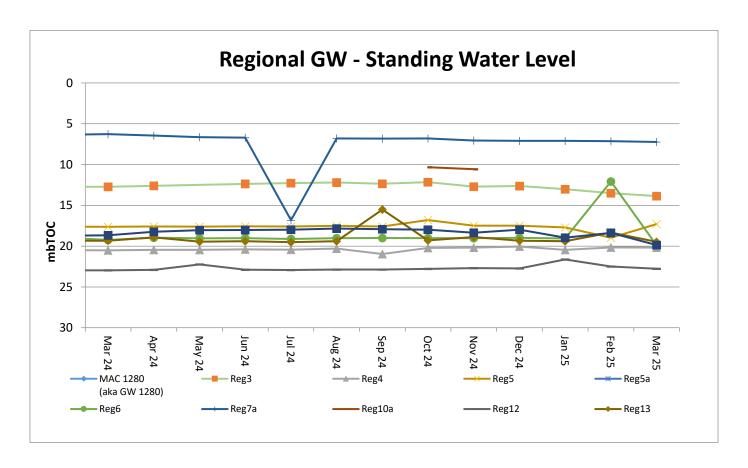
<sup>\*</sup> Blank columns indicate sample periods where there was either power outage, maintenance or other related causes.



## **Water Monitoring**

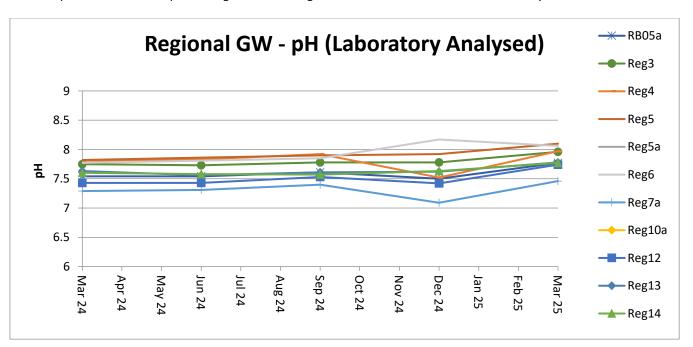
#### A. Groundwater

Groundwater monitoring results in open standpipe piezometers show levels to be relatively stable. The Regional bores were installed between Q4, 2013 and Q1, 2014. BCM01, BCM03, Reg10 are shallow bores which have remained dry since construction in 2013.



#### Acidity / Alkalinity (pH)

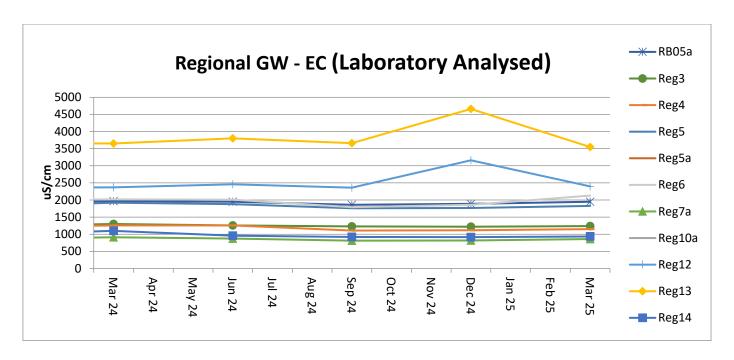
Over the past twelve months pH readings across the regional bores have remained static with very little fluctuation.





#### **Electrical Conductivity**

Laboratory Electrical Conductivity (EC) levels are all within historic groundwater EC range of  $500_{\mu s/cm}$  to  $2,500_{\mu s/cm}$ , with the exception of monitoring bore Reg13 which has a historic groundwater EC range of  $2,500_{\mu s/cm}$  to  $4,100_{\mu s/cm}$ . Within the last twelve months EC has remained static.

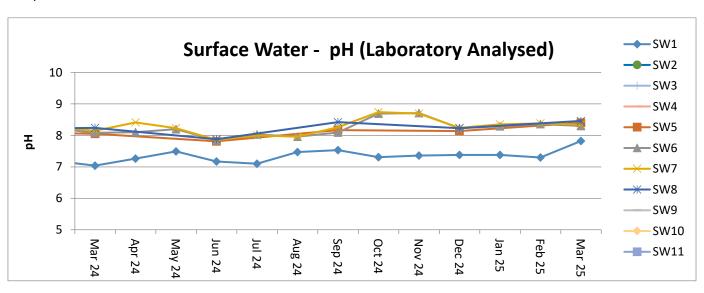


## B. Surface Water - Creeks and Rivers

Routine surface water monitoring is conducted in surrounding creeks and rivers on a monthly basis. Results for parameters including pH, EC and Total Suspended Solids (TSS) are shown in the figures below.

#### Acidity / Alkalinity (pH)

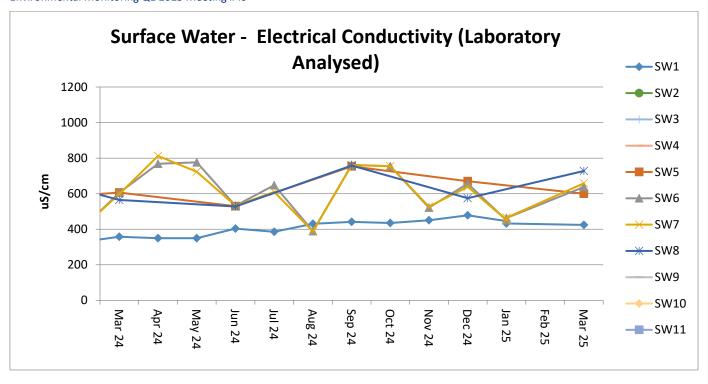
Monitoring results for pH in creeks and rivers surrounding MCCM are all trending within the ANZECC range for Irrigation, Ecosystem Health and Recreation.



## **Electrical Conductivity**

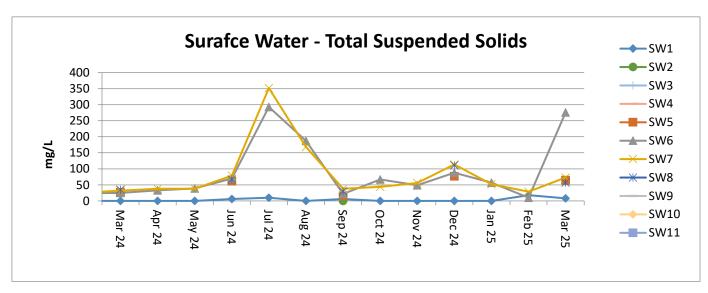
Surface water EC trends have remained consistent with SW5, SW6, SW7 and SW8 all historically variable. SW5, SW6, SW7 and SW8 are points along the Namoi River which are subject to regulated and variable flow regimes.





#### **Total Suspended Solids (TSS)**

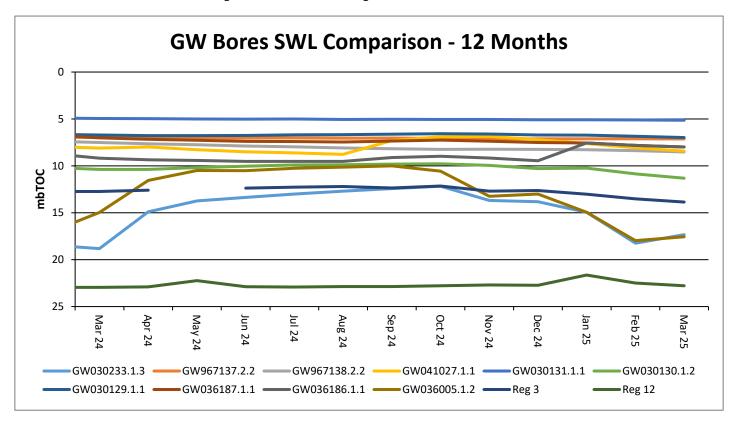
Surface water TSS trends have remained generally consistent with historical results. SW5, SW6, SW7 and SW8 are historically variable as they are located along the Namoi River which is subject to regulated and variable flow regimes.

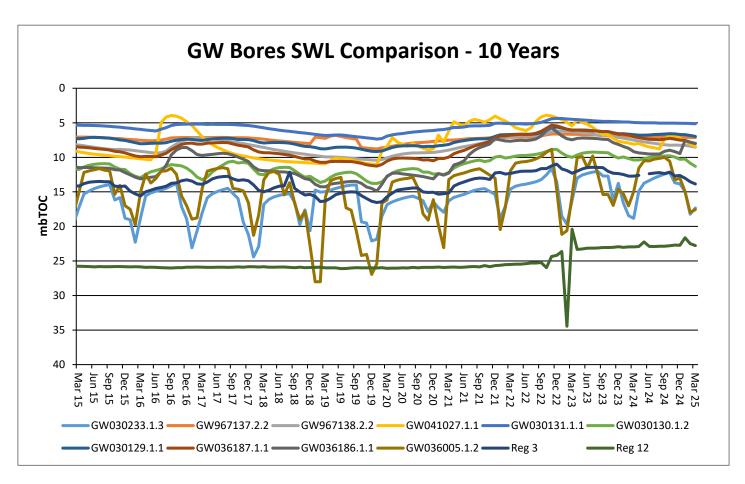




## Regional Groundwater monitoring

Maules Creek Coal Mine monitors regional bores across the region.







#### Rehabilitation

Progressive rehabilitation works are ongoing. MCC is on track to complete CY25 rehabilitation in accordance with the Forward Plan.

## Feral Animal Management

Most recent routine Whitehaven Biodiversity Feral Animal Control program (January to March 2025) results were:

- 1,378 out of total 2,165 feral pigs removed were from the Maules Biodiversity properties;
- 146 out of the total 154 feral goats removed were from the Maules Biodiversity properties;
- 97 out of total 238 Canid Pest Ejectors (1080) triggered were from the Maules Biodiversity properties.

#### **Weed Control**

During January to March 2025 the following weed control was undertaken via spot spraying/jetting on the Maules Biodiversity Properties:

- 140ha of Woody Weeds such as Sweet Briar, Box Thorn, Blackberry and Velvet Pear, Tiger Pear and Prickly Pear were sprayed.
- 10ha of Grasses such as African Lovegrass, Rhodes grass and Coolatai grass were sprayed.
- 14ha of tracks sprayed as part of the track maintenance.

#### **Upcoming Biodiversity Projects and Works**

- Continue Pest Animal Management Program April to June 2025.
- Continue 2025 Revegetation Program.
- Continue Seasonal Weed Control Programs.
- Continue Track Maintenance Program.
- Planning for Annual Nest Box Monitoring and Installation.
- Planning for Noisy Miner Management.
- Commence FY25 Ecological Burn program.
- Commence 2025 Winter Bird Survey.
- Planning towards Drone Surveys.

## **Community Complaints**

There was four community complaints registered during the quarter, all community complaints are available on the company website at https://whitehavencoal.com.au/our-business/our-assets/maules-creek-mine /.

MAULES CREEK COAL MINE  2024 Community Complaints Register								
Date Received	Method	Category	Nature of Complaint	MCCM Response				
25/02/2025	Email	Biodiversity	Questions were raised by a member of the community relating to the status of the Stage 3 BTM Biodiversity Strategy	MCC reviewed the data and provided a response to the DPHI				
7/03/2025	Email	Blasting	Local landholder complained about two blasts fired on 7th March. The blast was audible at their residence.	MCC blast on one occasion on the 7th March. A review of the data confirmed that the blast complied with the approved overpressure levels and operating conditions. The complainant was contacted and informed that the blast was in compliance.				



7/03/2025		Blasting	Local resident complained about a blast	This blast was not detonated by MCC.
	Email		on the 7th March at approximately 11am.	The complainant was contacted and
	EIIIdii		The complainant described it as being	informed that MCC did not blast at
			very loud followed by a sulphur smell.	this time.
		Blasting	A complaint was received by the EPA	MCC only blasted on one occasion on
			regarding the assumption that two blasts	the 7th March. MCC provided the
10/03/2025	Email		were detonated by MCC on the 7th	requested information to the EPA,
			March. The complaint related to dust and	showing compliance with the
			noise.	operating conditions.





EPL 20221 Monitoring Locations - 06/12/2023

EPL Monitoring Locations

MCCM Project Boundary MOD 9

Scale: 1:33,944,857,333

Author: EGibson

Date created: 18/03/2025

Spatial Reference Name: WGS 1984 Web Mercator Auxiliary Sphere Maules Creek Coal

