

Maules Creek Coal Mine Community Consultative Committee Meeting #48

Environmental Monitoring Report For the Q3 period, July - September 2024

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; July - September 2024 .

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 –July Noise Monitoring

Location	Start date and time	Wind		Stability class	Very enhancing? ¹	Limits, dB ¹		Site levels, dB ²		Exceedances, dB	
		Speed m/s	Direction ³			L _{Aeq,15minute}	L _{Amax}	L _{Aeq,15minute}	L _{Amax}	L _{Aeq,15minute}	L _{Amax}
NM1	24/07/2024 22:30	0.3	75	F	No	35	45	<20	25	Nil	Nil
NM2	24/07/2024 23:30	0.3	331	F	No	39	45	<20	<20	Nil	Nil
NM3	25/07/2024 00:21	0.5	136	F	No	35	45	IA	IA	Nil	Nil
NM4	24/07/2024 23:00	0.1	226	F	No	35	45	IA	IA	Nil	Nil
NM5	24/07/2024 22:01	0.5	68	F	No	35	45	25	30	Nil	Nil
NM6	24/07/2024 23:56	0.4	317	F	No	35	45	IA	IA	Nil	Nil

Table 2 – August Noise Monitoring

Location	Start date and time	Wind		Stability class	Very enhancing? ¹	Limits, dB ¹		Site levels, dB ²		Exceedances, dB	
		Speed m/s	Direction ³			L _{Aeq,15minute}	L _{Amax}	L _{Aeq,15minute}	L _{Amax}	L _{Aeq,15minute}	L _{Amax}
NM1	21/08/2024 22:30	0.3	316	F	No	35	45	<30	32	Nil	Nil
NM2	21/08/2024 23:00	0.6	242	F	No	39	45	<25	<25	Nil	Nil
NM3	21/08/2024 23:20	0.7	217	F	No	35	45	IA	IA	Nil	Nil
NM4	21/08/2024 23:47	0.6	33	F	No	35	45	IA	IA	Nil	Nil
NM5	21/08/2024 22:00	0.3	59	F	No	35	45	<25	27	Nil	Nil
NM6	21/08/2024 23:25	0.7	210	F	No	35	45	IA	IA	Nil	Nil

Table 3 – September Noise Monitoring

Location	Start date and time	Wind		Stability class	Very enhancing? ¹	Limits, dB ¹		Site levels, dB ²		Exceedances, dB	
		Speed m/s	Direction ³			L _{Aeq,15minute}	L _{Amax}	L _{Aeq,15minute}	L _{Amax}	L _{Aeq,15minute}	L _{Amax}
NM1	23/09/2024 22:30	0.3	4	F	No	35	45	<20	<20	Nil	Nil
NM2	23/09/2024 23:30	0.3	194	F	No	39	45	<20	<20	Nil	Nil
NM3	23/09/2024 23:45	0.3	85	F	No	35	45	IA	IA	Nil	Nil
NM4	23/09/2024 23:00	0.5	218	F	No	35	45	IA	IA	Nil	Nil
NM5	23/09/2024 22:00	0.2	36	F	No	35	45	<20	<20	Nil	Nil
NM6	23/09/2024 23:57	0.3	166	F	No	35	45	IA	IA	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
July	SSW
August	SE
September	SE

Blast Monitoring

There was 25 blasts at MCCM during Q3 2024. 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	25	95.186	113.3	120	No
Vibration	mm/s		25	0.1441	1.86	10	No

Air Quality

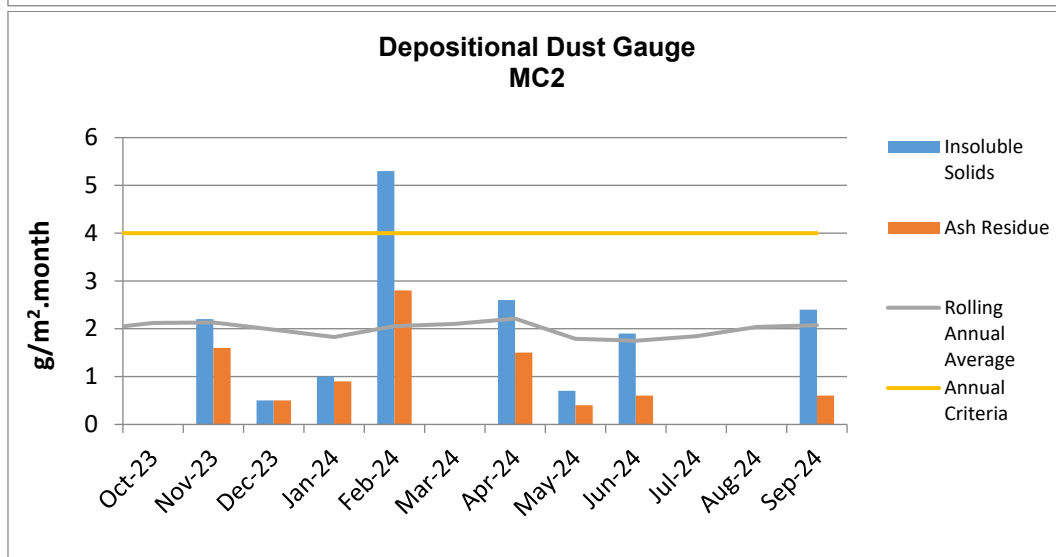
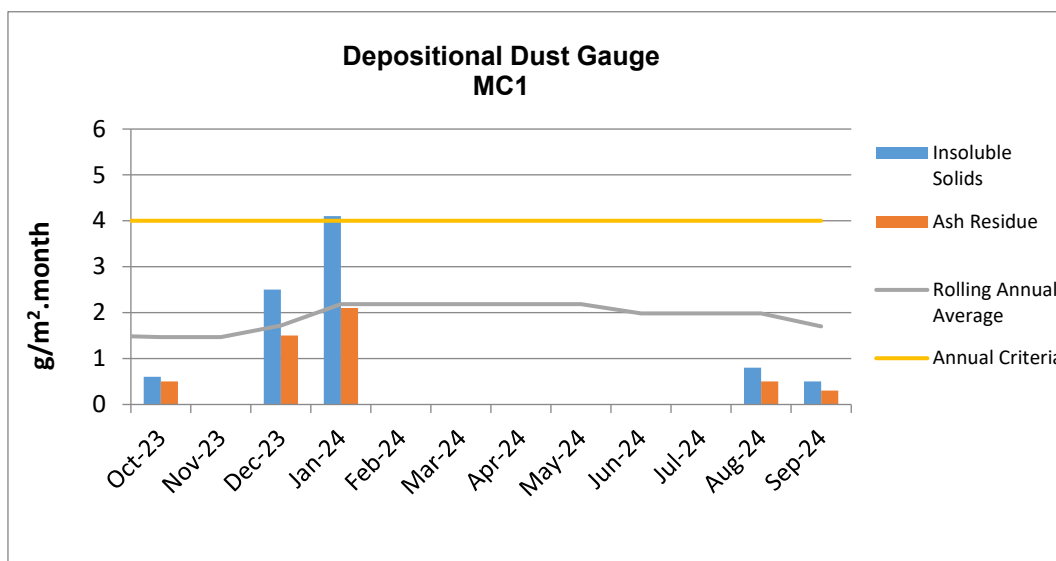
A. Total Depositional Dust

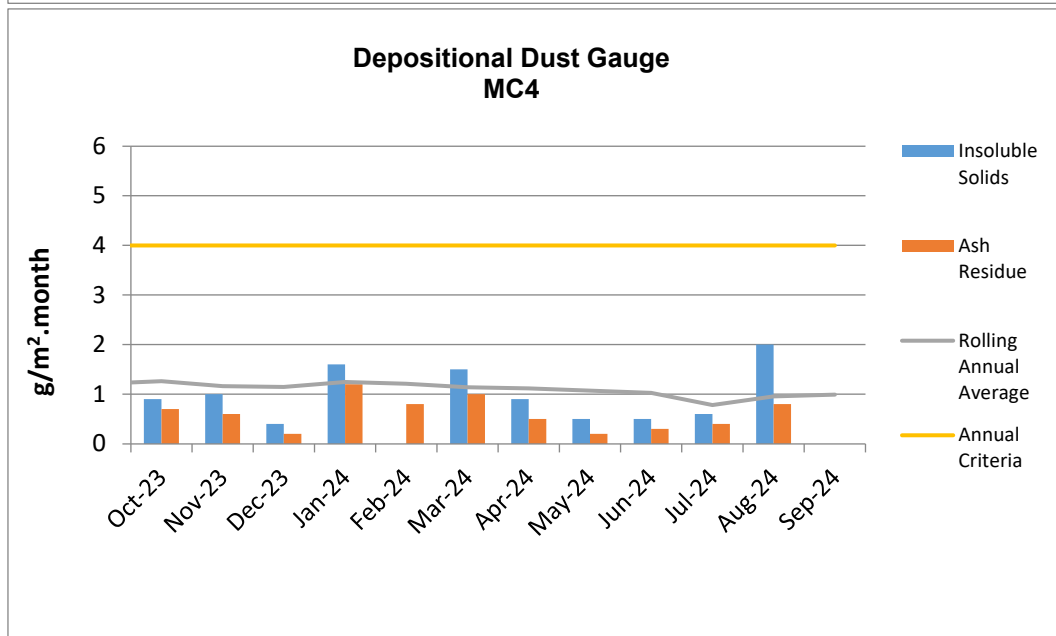
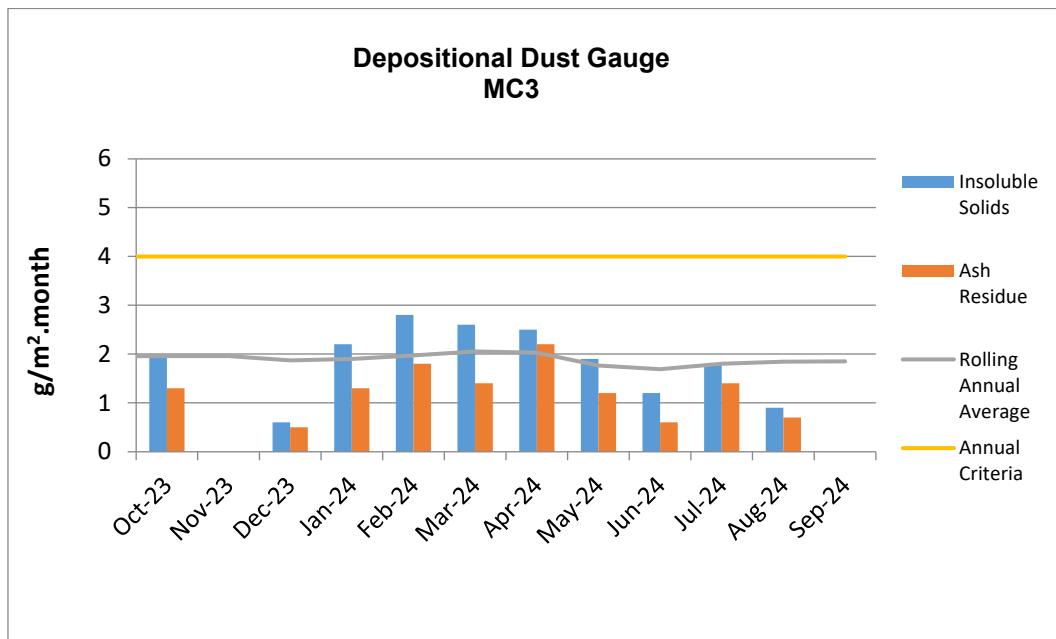
The 12 monthly rolling annual average remains below the relevant Project Approval (PA 10_0138) criteria of 4g/m²/month for the respective monitoring points.

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

MONTH	MC1	MC2	MC3	MC4
July	38.0c	6.8c	1.8	0.6
August	0.8	8.1c	0.9	2.0
September	0.5	2.4	4.5c	4.1c
12 MONTH ROLLING AVERAGE	1.7	2.1	1.9	1.0

^c samples contaminated by bird dropping, decomposed insects or vegetable matter.



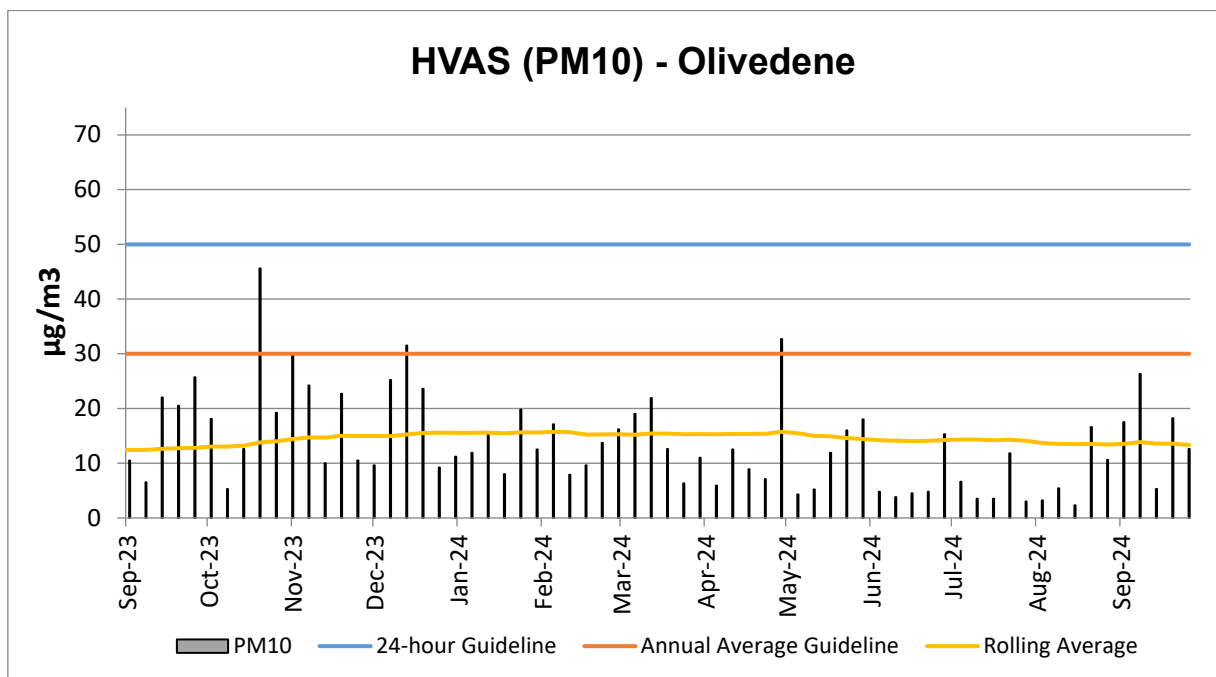


* Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).

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 µg/m³.

HVAS PM₁₀ Rolling Annual Average as of September was **13.3 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 **10.0 µg/m³** and at TEOM3 was **12.5 µg/m³** these are both below the Project Approval annual average criteria of 30µg/m³ as shown in the following figure. There have been no exceedances of the 24-hour average for Q3.

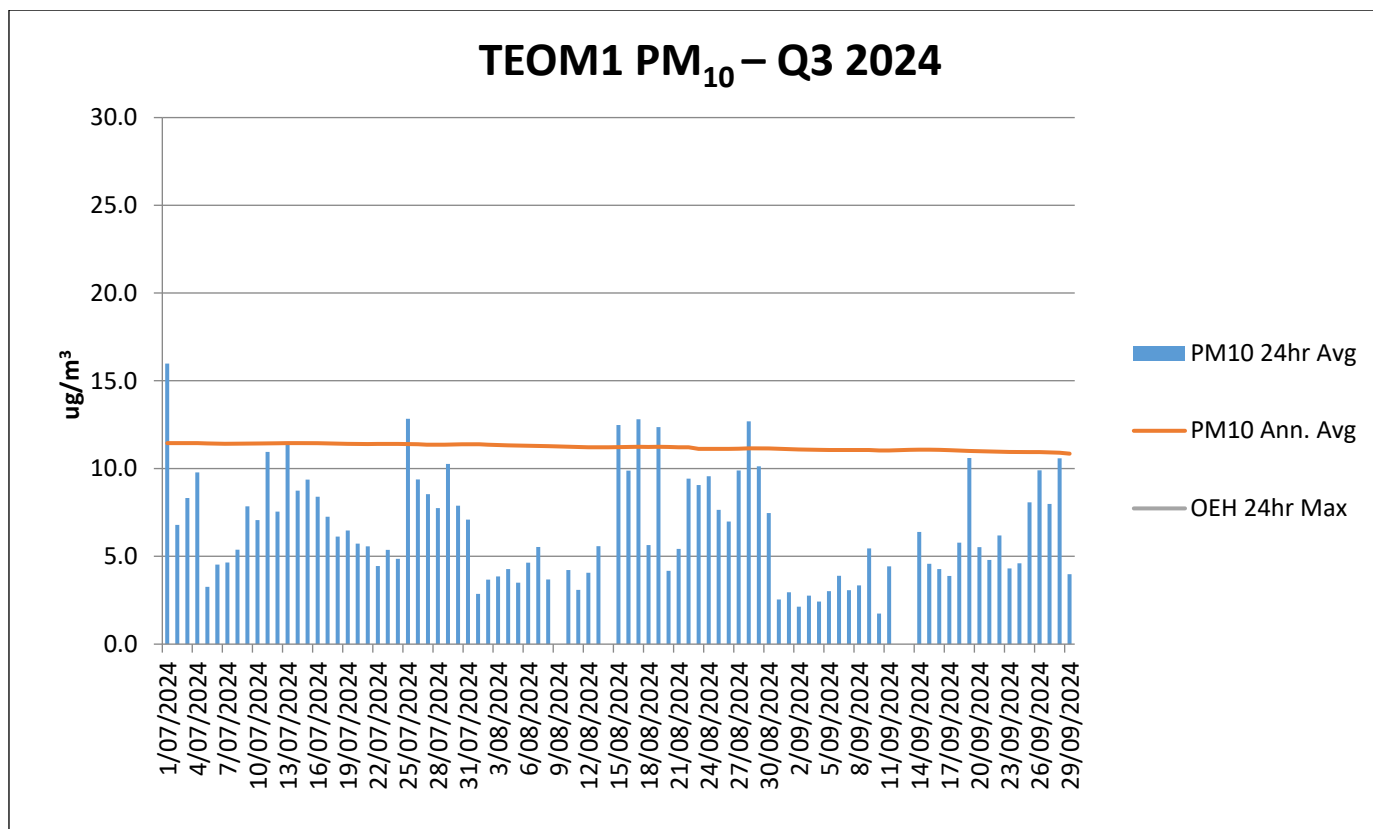


Figure 1 - TEOM Result – Particulate Matter PM₁₀µg/m³

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

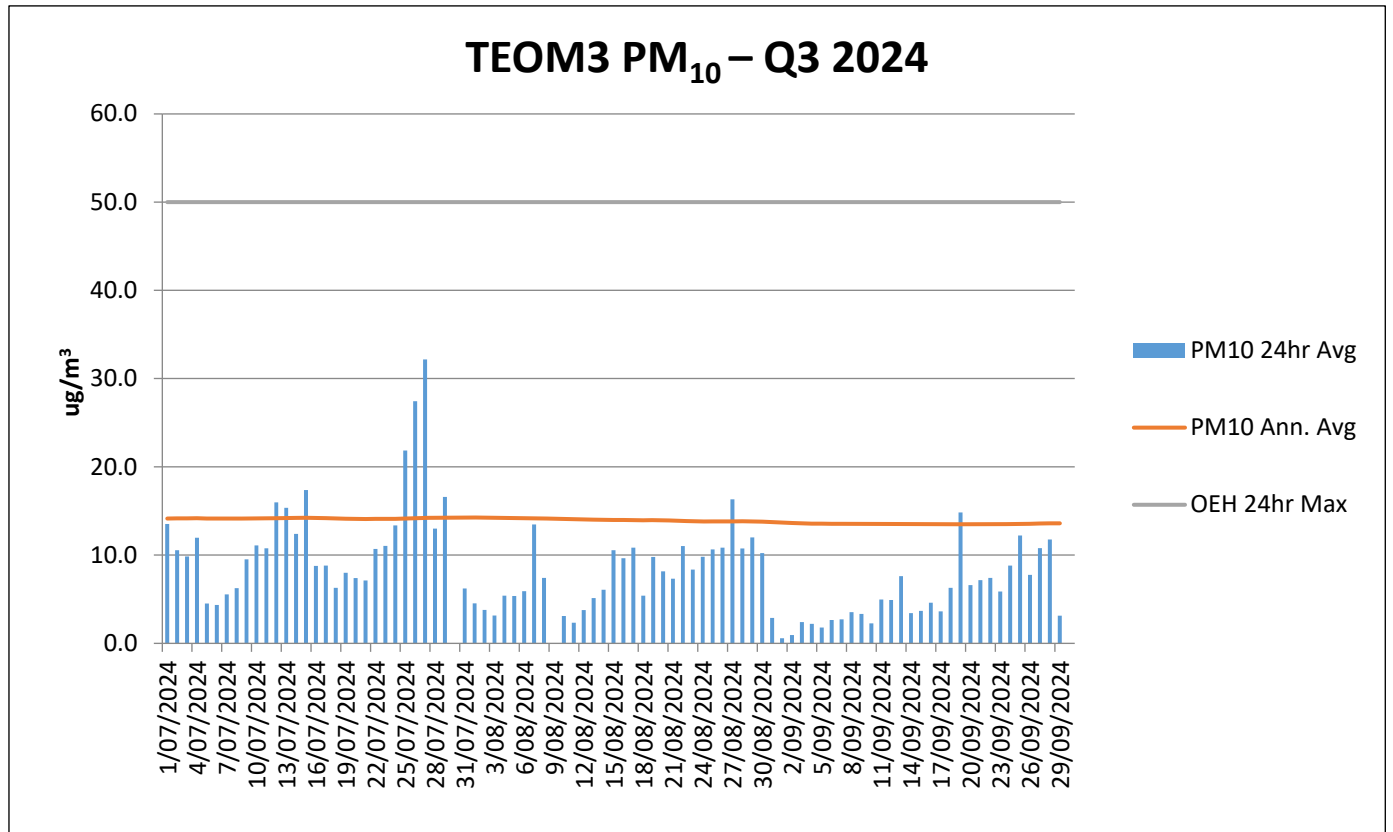


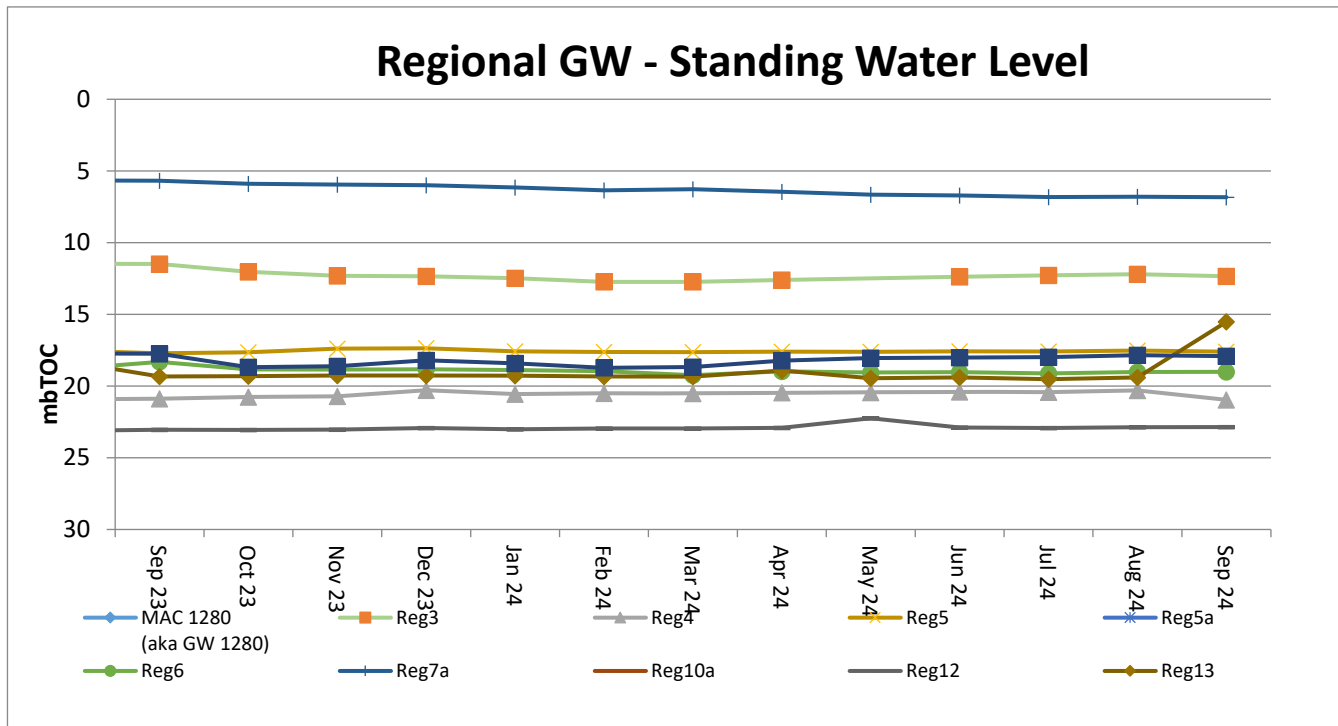
Figure 2 - TEOM Result – Particulate Matter PM₁₀ug/m³

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

Water Monitoring

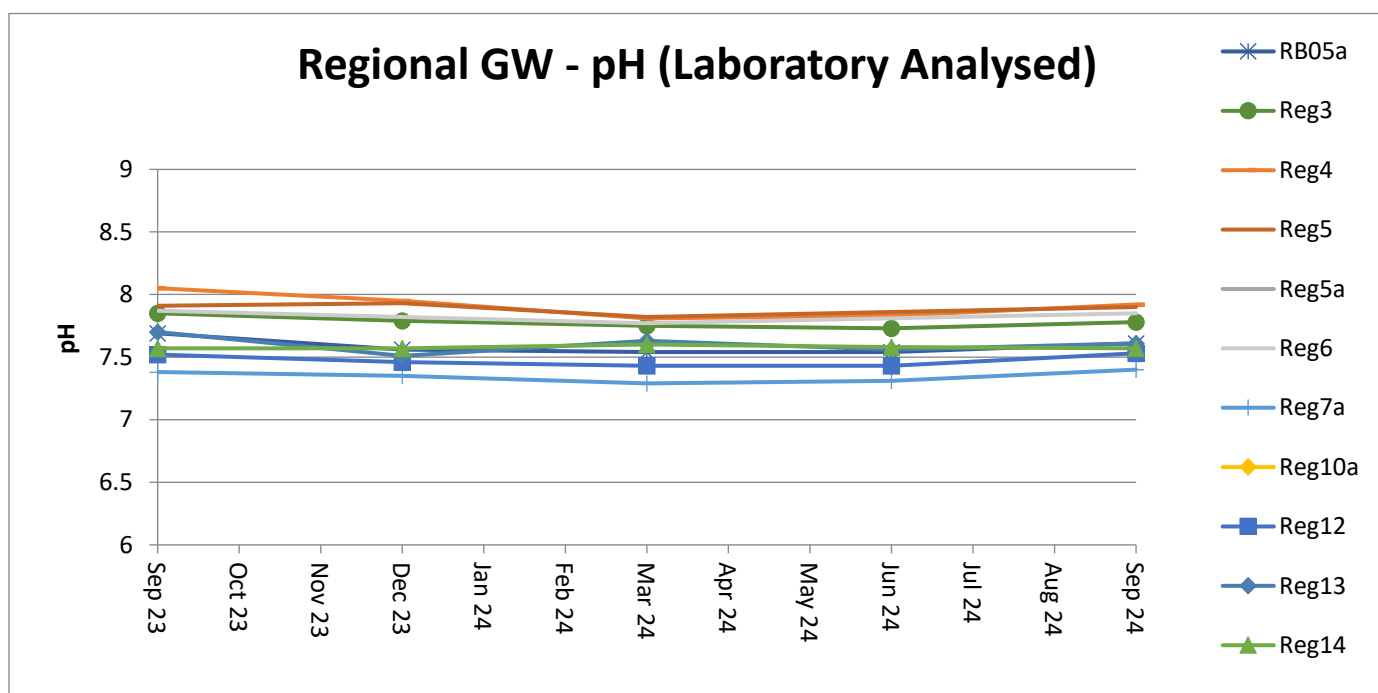
A. Groundwater

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.



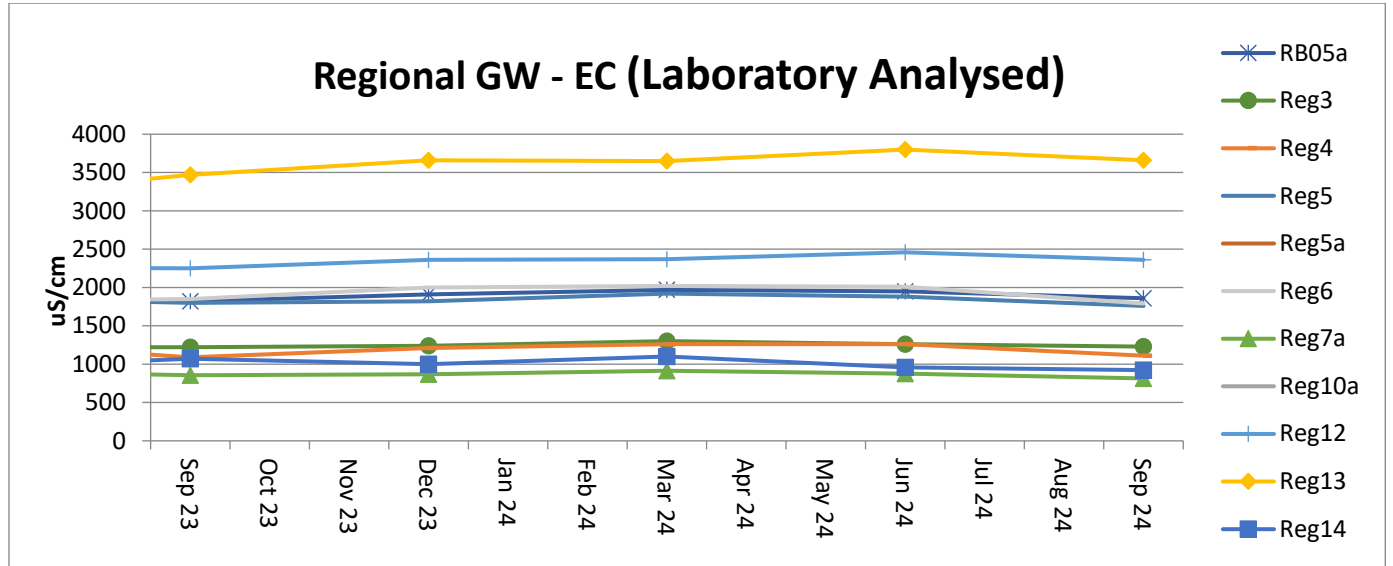
Acidity / Alkalinity (pH)

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_{µS/cm} to 2,500_{µS/cm}, with the exception of monitoring bore Reg13 which has a historic groundwater EC range of 2,500_{µS/cm} to 4,100_{µS/cm}. Within the last twelve months EC has remained static.

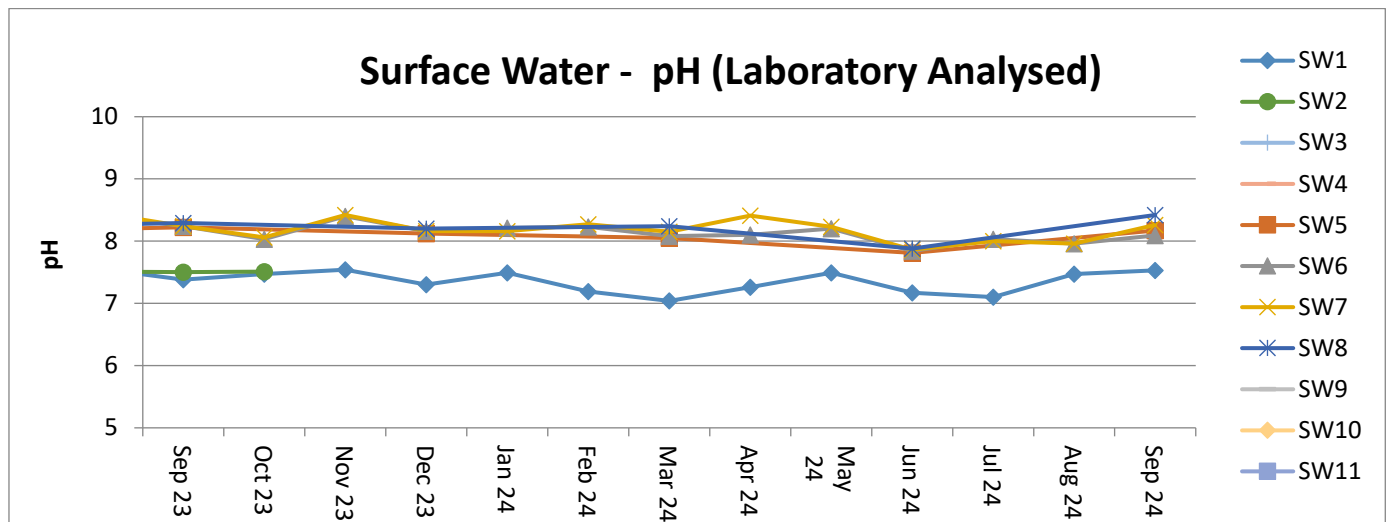


B. Surface Water – Creeks and Rivers

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.

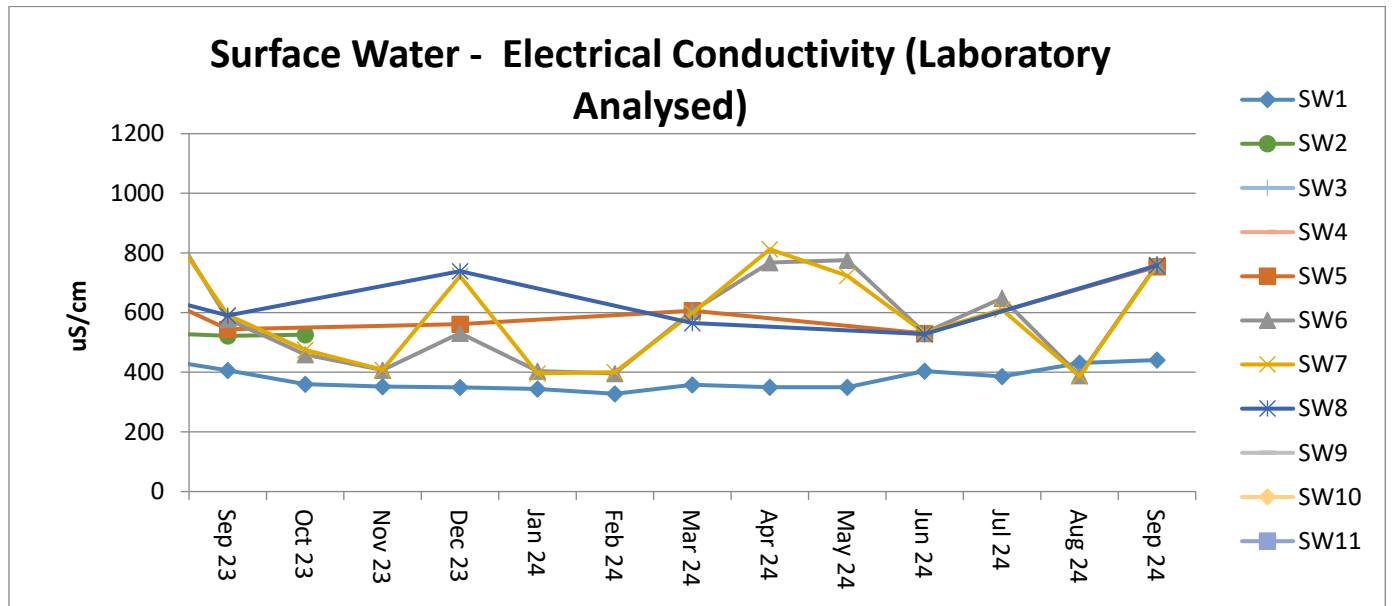
Acidity / Alkalinity (pH)

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



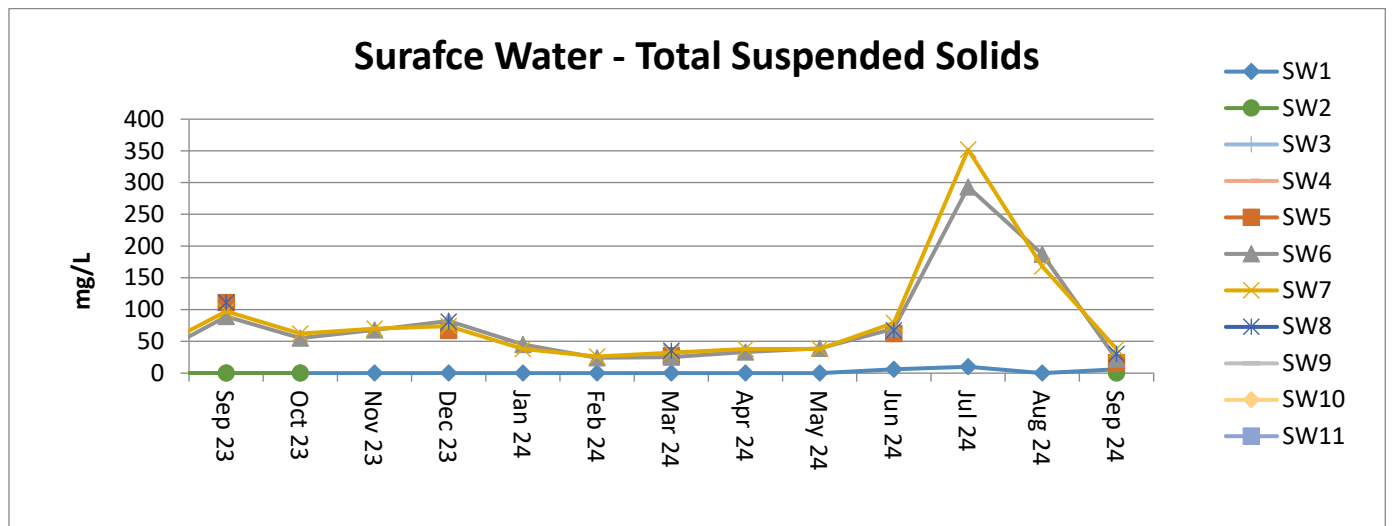
Electrical Conductivity

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.



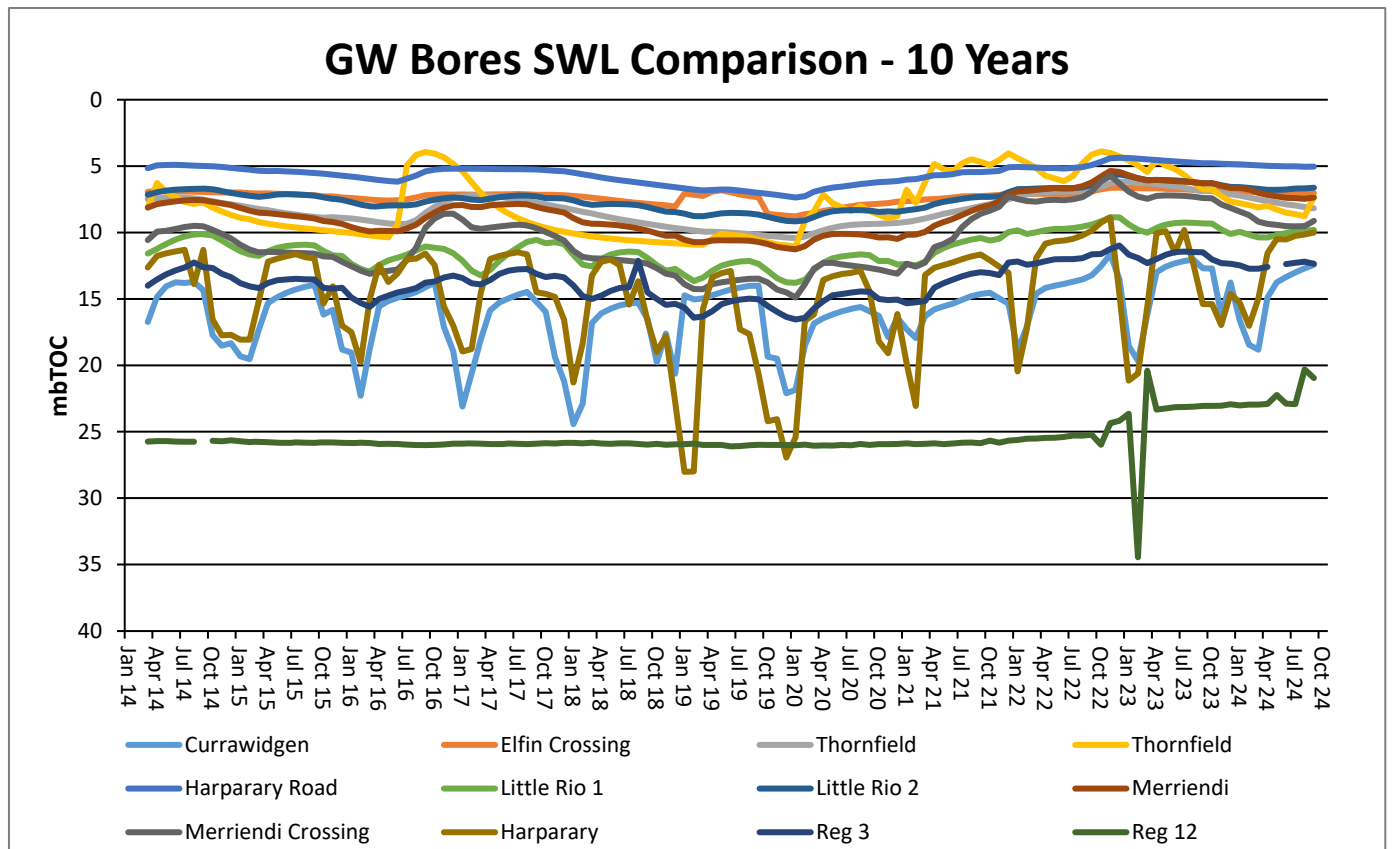
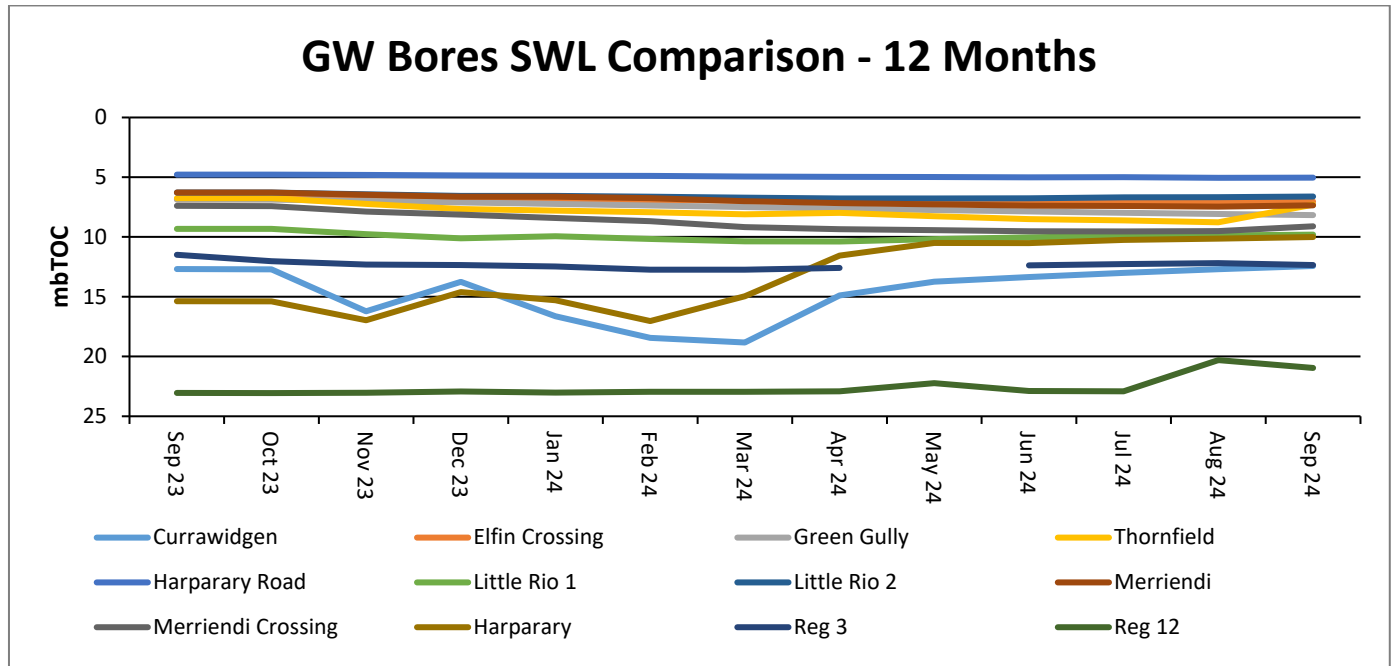
Total Suspended Solids (TSS)

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 CY24 rehabilitation in accordance with the Forward Plan.

Feral Animal Management

Most recent routine Whitehaven Biodiversity Feral Animal Control program (July to September 2024) results were:

- 1,911 out of total 4,081 feral pigs removed were from the Maules Biodiversity properties;
- 647 out of the total 957 feral goats removed were from the Maules Biodiversity properties;
- 85 out of total 213 Canid Pest Ejectors (1080) triggered were from the Maules Biodiversity properties;
- 11 Deer were removed from the Maules Biodiversity properties.

Weed Control

During July to September 2024 the following weed control was undertaken via spot spraying/jetting on the Maules Biodiversity Properties:

- 33ha of Broadleaf weeds such as General Broadleaf, Marshmallow, Saffron Thistle, Patterson's Curse, Turnip and Variegated Thistle were sprayed.
- 35ha of Woody Weeds such as Boxthorn, Prickly Pear, Red Berry Bush were sprayed.
- 163ha of tracks sprayed as part of the track maintenance.

2024 Annual Fauna Monitoring Bird Surveys

The 2024 Spring Bird Survey program so far undertaken monitoring of 155 sites with 608 surveys completed for interim species richness total of 139 and 13 threatened species detected. Interim results indicate that species richness in 2024 is on track to be higher than 2022 and 2023.

Upcoming Biodiversity Projects and Works

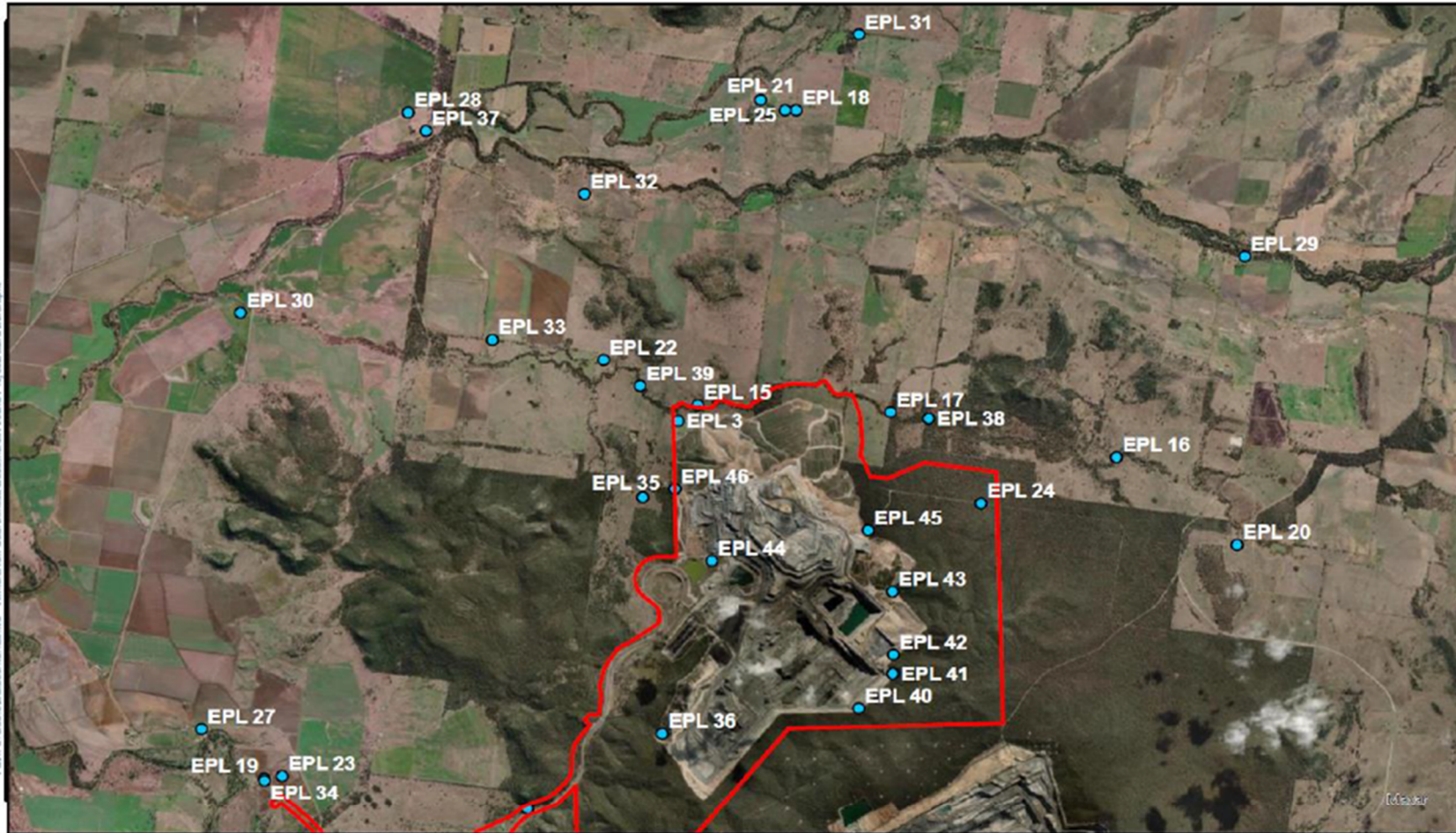
- Continue Pest Animal Management Program October to December 2024.
- Complete 2024 Revegetation Program and continue Tree Watering Program.
- Continue Seasonal Weed Control Programs.
- Continue Fire Break Track Maintenance Program.
- Continue and completed 2024 Spring Flora Monitoring.
- Continue other Annual Fauna Monitoring Programs.
- Commence 2024 / 2025 Bushfire preparation and Fuel Load Assessments

Community Complaints



There was one community complaint 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/>

Date received	Category	Nature of Complaint	MCCM Response
8/07/2024	Groundwater	Concerns from a local landholder regarding groundwater levels in their stock and domestic bore	MCC have been in contact with the landholder and have commissioned an independent review into the water levels. A letter has been provided reiterating MCC's compliance with relevant criteria.

12/07/2024	Groundwater	Complainant provided an email stating that they act as executor for the late owner of a nearby property. The complainant noted that they seek compensation because an alleged lack of water impacted the recent sale price of the property.	MCC have provide advice to the complainant.
24/07/2024	Weeds and Groundwater	Complaint received regarding weeds growing in a Whitehaven owned property and complainant also asking for a guarantee that exploration drilling in the area will not adversely impact the groundwater.	MCC have informed complainant of the extensive weed management conducted on the property. MCC has also provided advice that exploration boreholes are managed in line with the regulators code of practice.
3/08/2024	Traffic	Worker's bus was parking in complainant's front driveway of a morning resulting in members of the household being woken up.	MCC has altered the bus route, removing the need to park in this location.
30/08/2024	CCC	The DPHI received a complaint regarding inadequate consultation on the MCC BMP through the CCC process. The complaint also enquired about the lack of Aboriginal representation on the committee	MCC compiled the appropriate information and replied to the DPHI.



EPL 20221 Monitoring Locations - 16/05/2024

-  EPL Monitoring Locations
-  MCCM Project Boundary MOD 9

Scale: 1:33,944,857,333
Author: EGibson
Date Printed: 26/03/2021
Spatial Reference
Name: WGS 1984 Web Mercator Auxiliary
Sphere

Maules Creek Coal



Disclaimer: Map for reference only and subject to survey. MCC makes no guarantee of the accuracy of this map and data within. MCC shall have no liability for any decisions made or actions taken based upon this map.