Mt Arthur Coal Community Consultative Committee

Planned meeting date: 9 August 2023 Information provided: 1 April to 30 June 2023

Environmental Management

FY23 Rehabilitation Update

FY23 rehabilitation target (67ha) was met, seeding 68.2ha of pasture at Outer Pit Dump (OPD), Saddlers North and Drayton Void.



Bulk shaping in Saddlers North continues and was ongoing throughout the reporting period. Other rehabilitation will be conducted in the Saddlers North dump area and the Drayton void area.

Revegetation program in the Macdonald's void area has been completed to enhance the woodland developing. The scope included approximately 40ha of:

- Stem thinning of denser existing woodland
- Intense spot weed treatment targeting African olive, African boxthorn,
- Slashing and ripping of planting beds.
- Tube stock diversification (focussing on canopy species)
- Diversification by seeding (focusing on ground cover)

Land Management

Weed treatment outside of the rehabilitation continues to focus on the species within the table below. MAC has been in contact with local weed management officials to ensure there is alignment on focus species. Work in the following areas was completed during the reporting period:

- CD1 Cutting and painting Lycium Ferocissimum and Acacia saligna.
- VD1 Cutting and painting Lycium Ferocissimum and Acacia saligna. Exotic grasses including Megathyrsus maxima.
- OOPD Topsoil Stockpile Spraying broadleaf weeds.

Species	Common Name
Acacia Saligna	Golden Wreath Wattle
Lycium Ferocissimum	African Box Thorn
Cortaderia Sellona	Pampas Grass

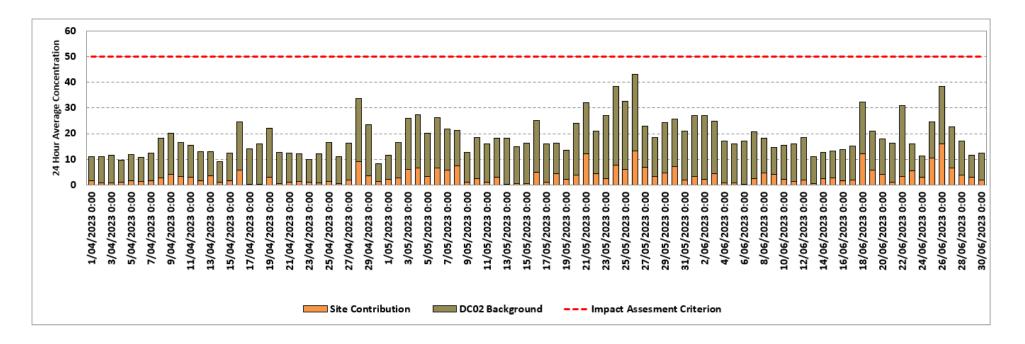
Species	Common Name
Chloris Gayana	Rhodes Grass
Megathyrsus Maximus	Guinea Grass
Phytolacca octandra	Ink Weed
Galenia	Carpet Weed
Opuntia SP	Prickly Pear Cactus

Environmental Performance

Air Quality Monitoring (Period 1 April 2023 to 30 June 2023)

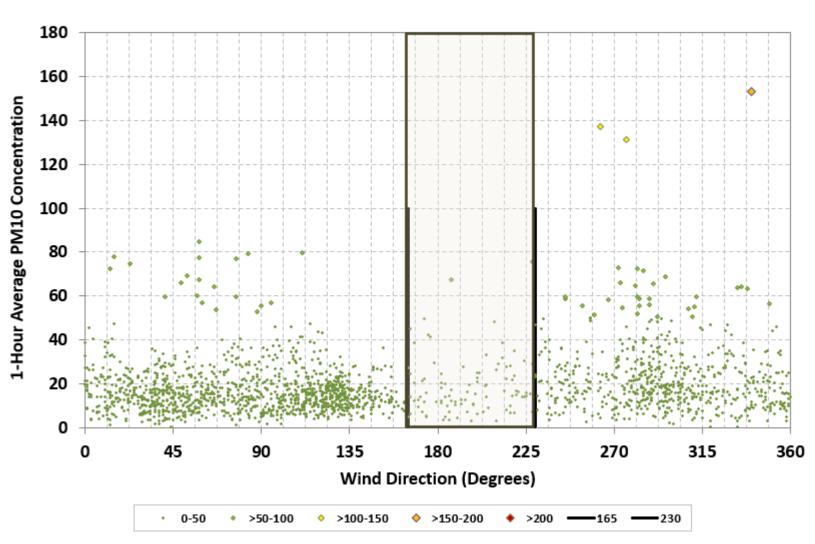
- This paper (for the reporting period of 1 April 2023 to 30 June 2023) covers the performance of all six statutory PM10 monitoring sites using TEOMs, and the two dust deposition gauges.
- Two days within the reporting period experienced elevated absolute PM10 TEOM monitoring results. However, MAC contribution PM10 levels were below the PM10 threshold levels.
 Exceedances recorded were notified to the Department of Planning and Environment as per Project Approval. Further information provided on the Section Environmental Incidents.
 - 23 May 2023 at Wellbrook DC09.
 - 22 June 2023 at Roxburgh Rd DC05.
- 100% of dust data captured from all six statutory PM10 monitoring sites during the reporting period. Uptime percentages have continued to improve on the back of several improvements including the purchase of new TEOMs, UPS battery units & communication loggers.
- A guide has been provided at the end of this section to assist in the interpretation of the results and figures. The figures within this section have been developed in line with consultation with members of the CCC.

Sheppard Avenue - DC02

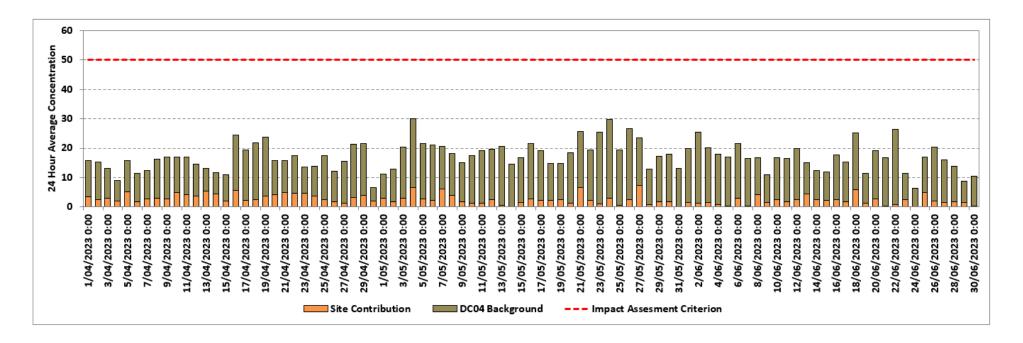


Sheppard Avenue – DC02



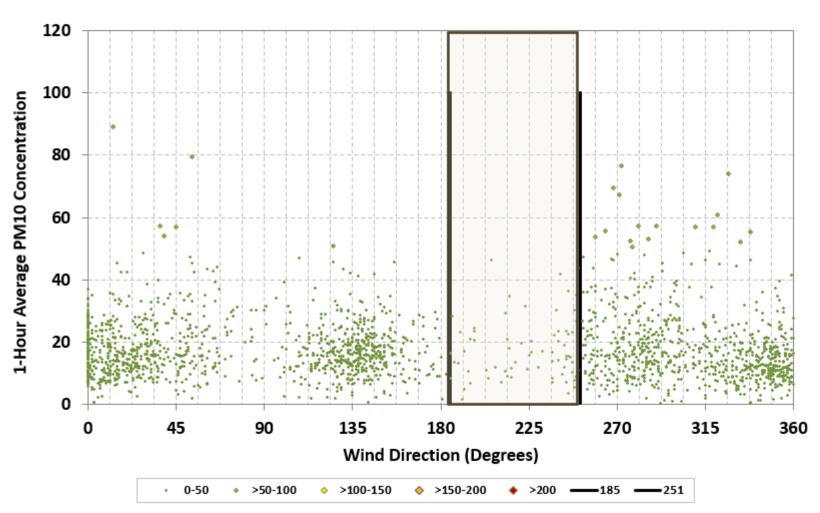


South Muswellbrook - DC04

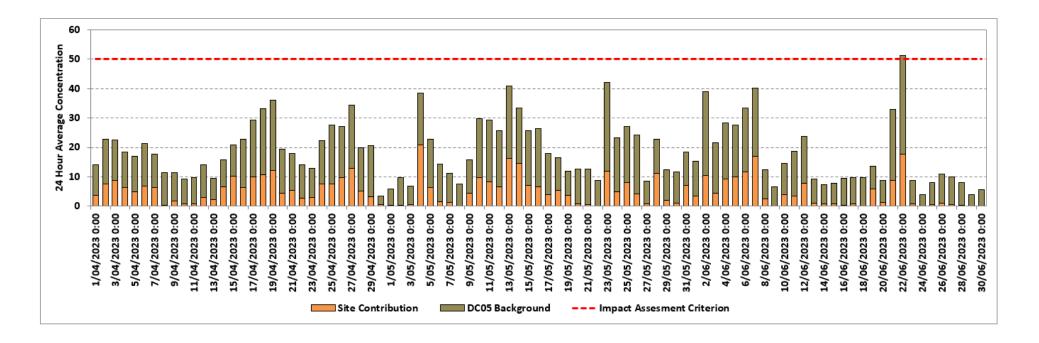


South Muswellbrook - DC04

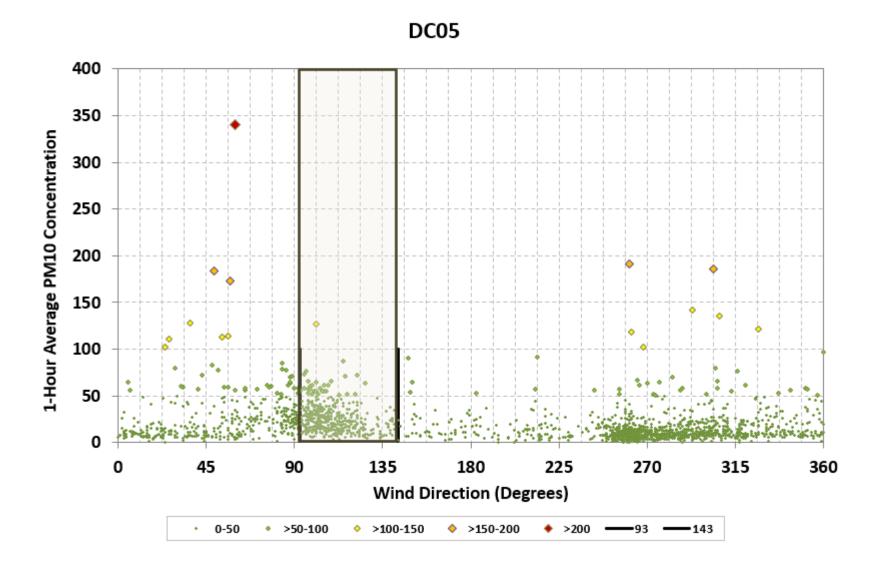




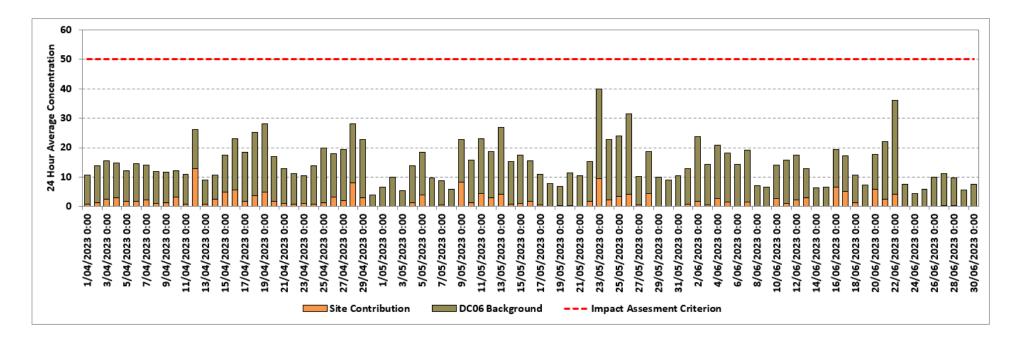
Roxburgh Road - DC05



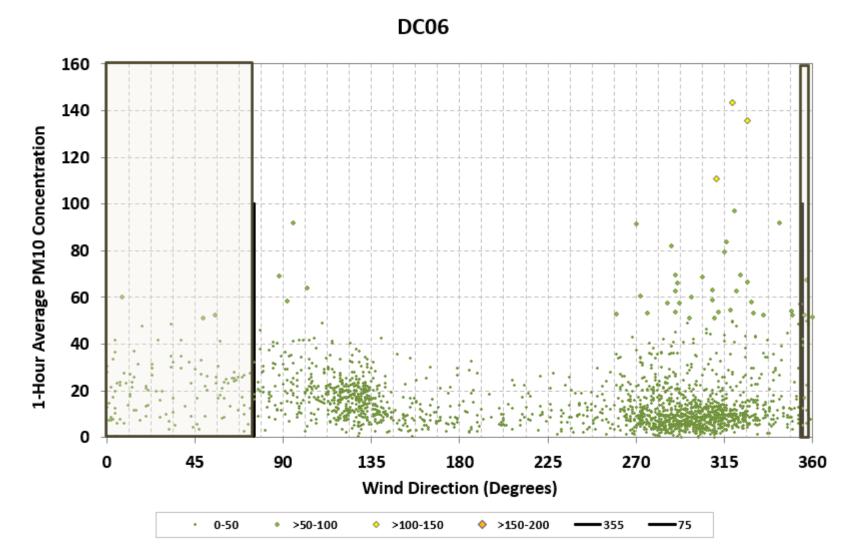
Roxburgh Road - DC05



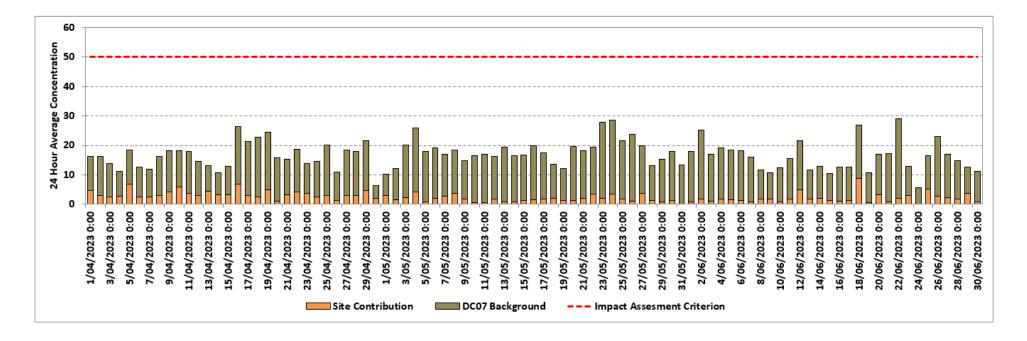
Edderton Homestead - DC06



Edderton Homestead - DC06

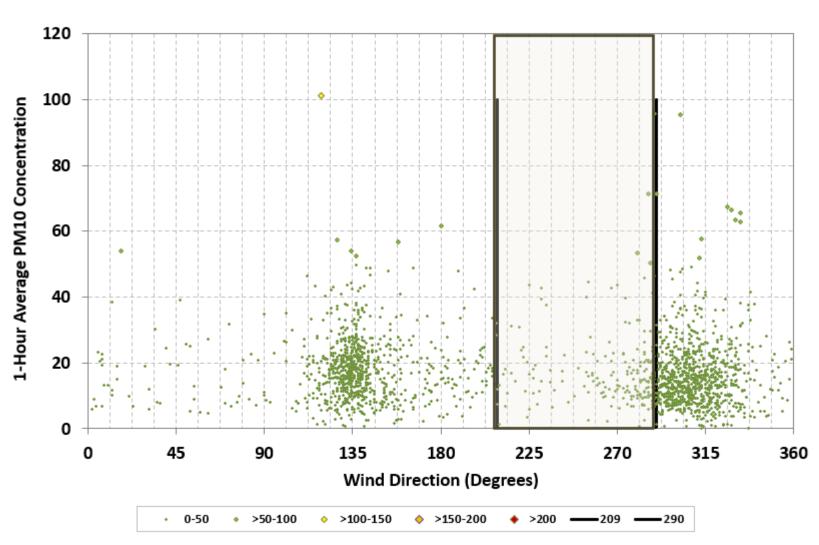


Antiene - DC07
Data capture - 100%

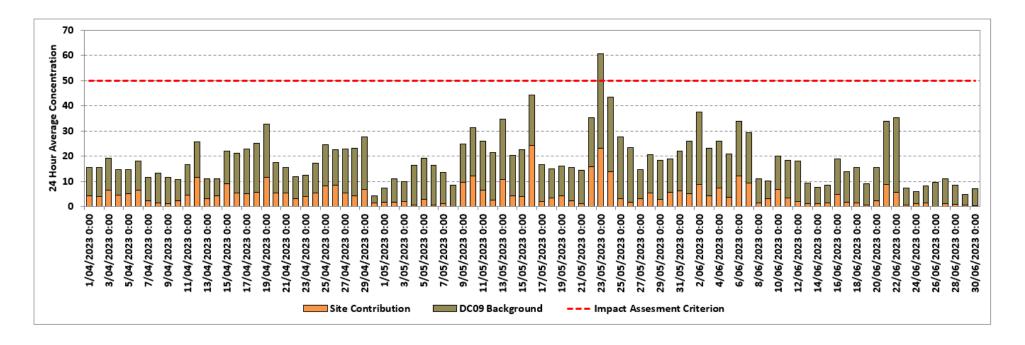


Antiene - DC07



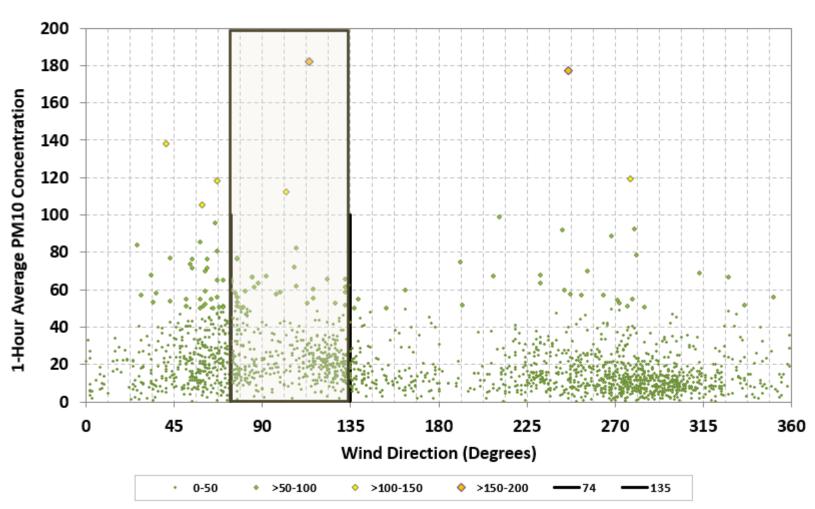


Wellbrook - DC09



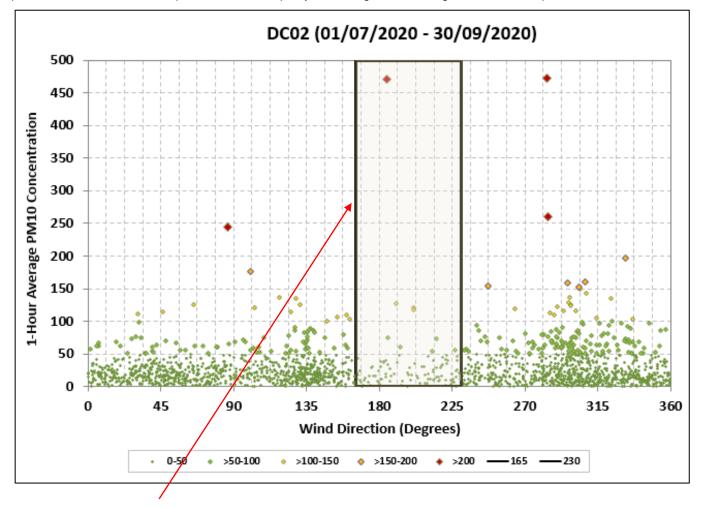
Wellbrook - DC09





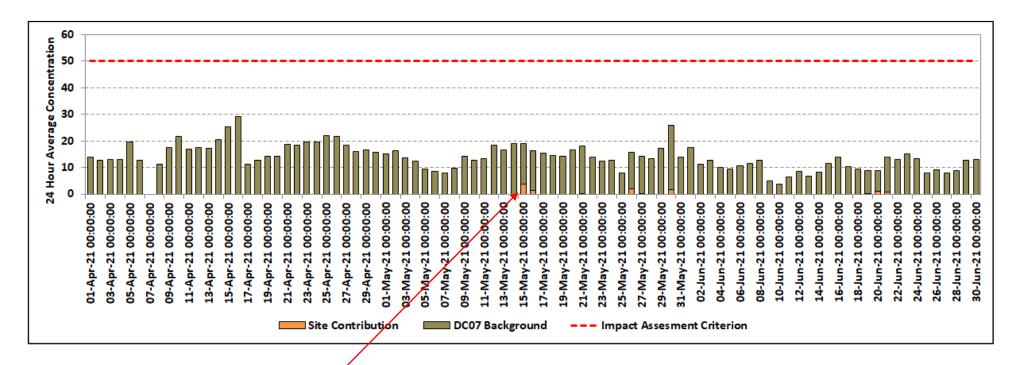
Air Quality Monitoring Interpretation Guidance

This information has been provided to assist with the interpretation of the air quality monitoring results and figures within this report.



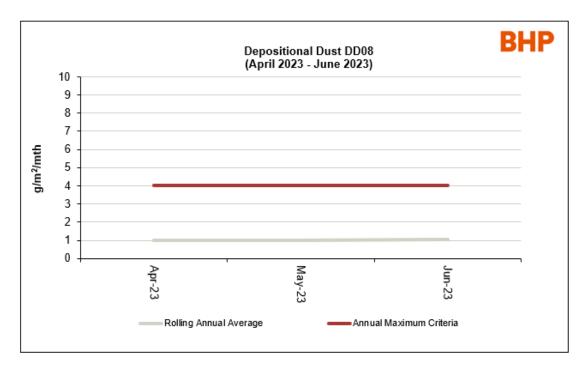
This graphic shows the window where the Mt Arthur Coal contribution is at risk of influencing the DC02 dust monitor based on the wind direction. This window can be referred to as the Arc of Influence. All 1- Hour Average Concentrations have been plotted for the reporting period to give an indication of Mt Arthur's influence on DC02.

Air Quality Monitoring Interpretation Guidance continued

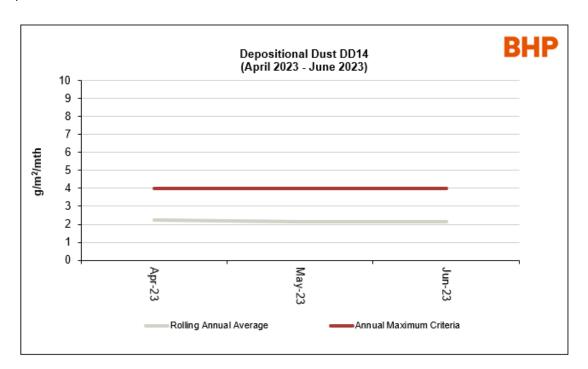


This graphic shows the cumulative Daily 24hr PM10 concentrations along with the incremental Mt Arthur Coal concentrations. This example shows that the cumulative 24hr concentration ('Background') of approximately 20ug/m3; the Mt Arthur incremental concentration ('Site Contribution') is represented by the orange coloured portion.

Deposited Dust *DD08*



DD14Data capture – 100%



Water Monitoring (1 April 2023 to 30 June 2023)

Groundwater

Groundwater monitoring was undertaken in June 2023 with results currently being analysed and collated for the Mt Arthur Coal FY23 Annual Review. Results from the June 2023 monitoring round will be communicated at the next CCC.

The groundwater exceedances discussed at the last CCC that occurred in the December 2022 and March 2023 monitoring rounds that had been reported to DPE have been subsequently closed out by DPE with no further comments, finding there have been no adverse impacts from Mt Arthur Coal.

Surface water

Surface water monitoring was conducted monthly during the three-month period. No exceedances of the criteria in accordance with the Groundwater and Surface Water Response Plan were reported to DPE.

Blast Monitoring (1 April 2023 to 30 June2023)

There were no exceedances of the upper or lower vibration limits during the reporting period. There were no exceedances of the upper overpressure limit.

There was one exceedance of the lower overpressure limit of 115dBL. This was reported at BP10 (North Yammanie) on Monday 26 June 23 (116.4dBL), no complaints were received. This was within the 5% of allowable exceedances for FY23 and not considered an environmental incident.

Operational Noise Monitoring (1 April 2023 to 30 June 2023)

Monthly night-time compliance monitoring (attended) was completed to schedule by MAC's external expert consultant. MAC is not informed of when this monitoring is scheduled for completion to ensure there is a true representation of operational activities on any given night.

There were no exceedances of the threshold levels reported for any noise monitoring locations during the reporting period.

Environmental Incidents (1 April 2023 to 30 June 2023)

Dust Level Exceedances

HVEC recorded exceedances of the impact assessment criteria on two separate days throughout the period. Detailed investigation reports were provided to DPE after each exceedance which outlined the project's contribution and the actions taken by the operation in line with the MAC Air Quality Management Plan. The table below provides a summary of each exceedance.

Date	Site	Absolute PM10 level (24-hr average µg/m3)	MAC Contribution (24-hr average µg/m3)	Other details
23 May 2023	DC09	60.7	23.1	No complaints. Appropriate actions taken by OCEs.
22 June 2023	DC05	51.2	17.8	No complaints. Appropriate actions taken by OCEs.

Environmental Reporting (1 April 2023 to 30 June 2023)

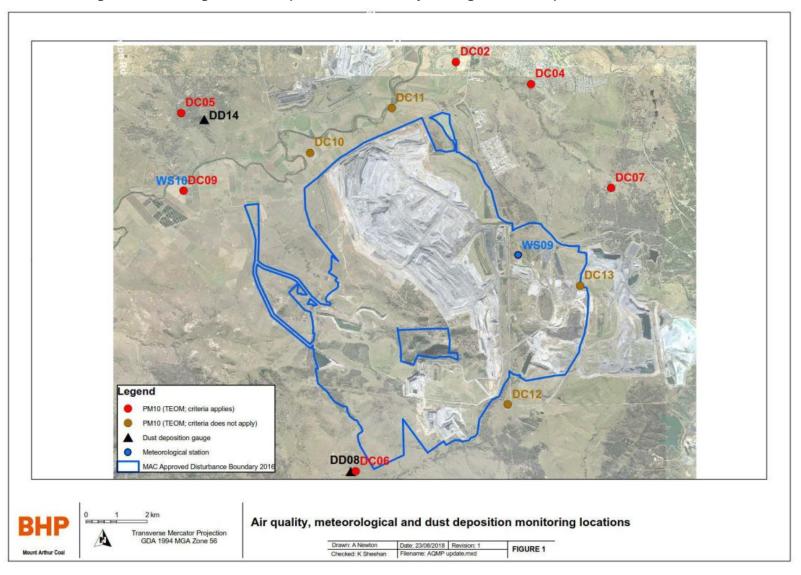
Monthly Reporting

Historical information and reporting is available to view on the BHP website using the following link:

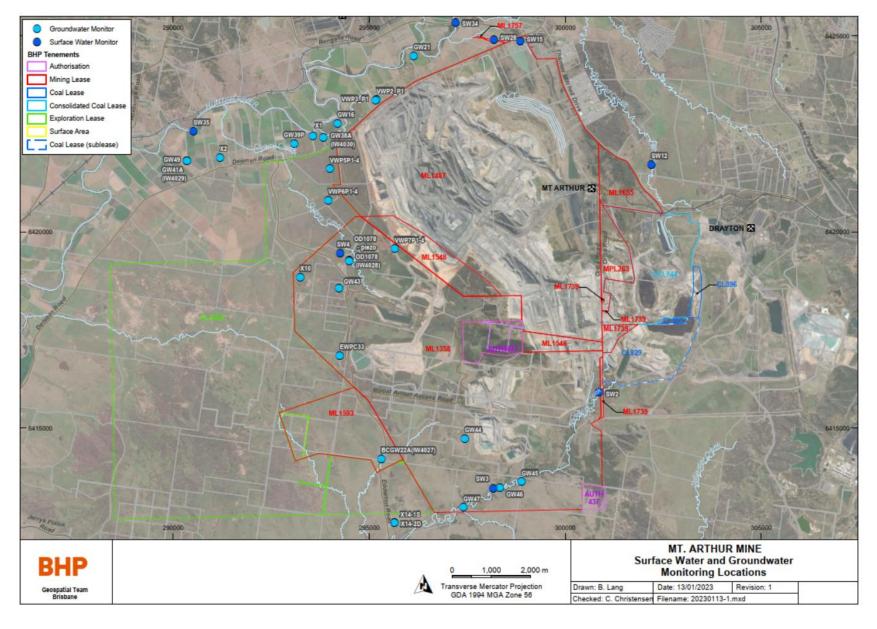
https://www.bhp.com/environment/regulatory-information#

Environmental Monitoring Plans (for reference)

Air Quality and Meteorological Monitoring Locations (Source: Air Quality Management Plan)



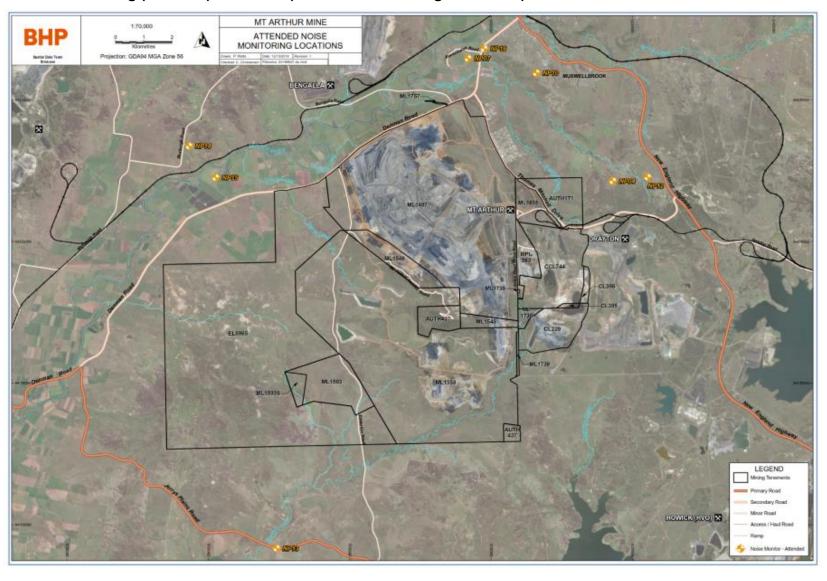
Site Water Monitoring Locations (Sourced and modified from: Site Water Management Plan) Surface Water and Ground Water Monitoring Locations:



Blast Monitoring Locations (Source: Blast Management Plan)

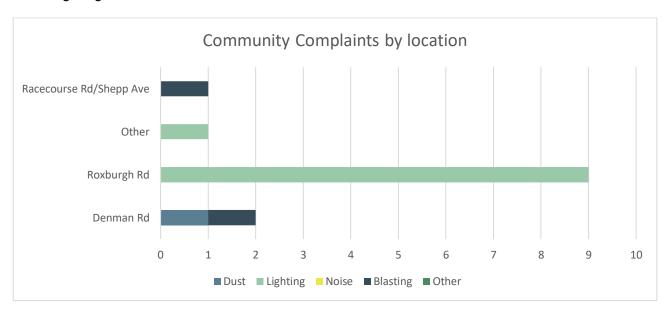


Operational Noise Monitoring (attended) Locations (Source: Noise Management Plan)

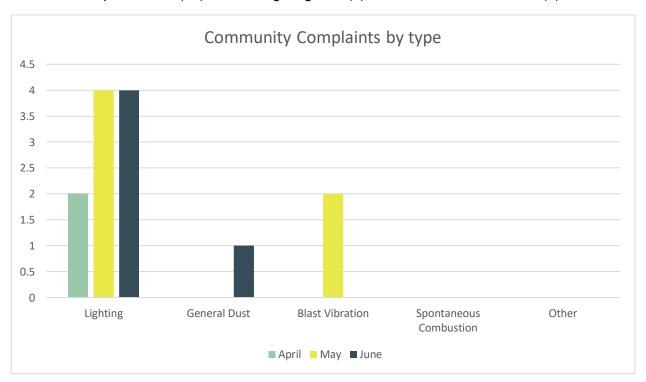


Community Complaints

The Community Complaints included in this report are for the period 1 April to 30 June 2023. Mt Arthur Coal received thirteen (13) complaints during this period. Nine (9) were in Roxburgh Rd, two (2) for Denman Rd, one (1) for Racecourse Rd and one (1) for other. It was a complaint about MAC South lighting.



Of the 13 complaints, ten (10) were for lighting, two (2) for blast vibration and one (1) for dust.





Community Complaints Summary: 1 April to 30 June 2023

Date	Time	From	Issue	Lodgement type	Investigation and response to caller
10/04/2023	8.41pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
20/04/2023	9.38pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
2/05/2023	9.02pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
3/05/2023	6.49pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
4/05/2023	1.40pm	Racecourse Rd, Muswellbrook	Blast Vibration	Community Response Line	Investigation revealed blast was from a neighbouring mine.
6/05/2023	8.06pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
12/05/2023	11.56am	Roxburgh Rd, Muswellbrook	Blast Vibration	Community Response Line	Investigation revealed weather conditions were suitable for blasting at the time. Results indicated overpressure noise and ground vibration levels were within regulatory criteria. Caller was advised of investigation and monitoring results.
28/05/2023	6.52pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
5/06/2023	2.03pm	Denman Rd, Muswellbrook	Blast dust	Community Response Line	Investigation revealed weather conditions were suitable for blasting at the time. Results at the nearest monitor indicated dust levels were not elevated at the time, and the 24-hour average remained within regulatory criteria. Caller was advised of investigation and monitoring results.

7/06/2023	5.46pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
8/06/2023	5.48pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
28/06/2023	6.08pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
30/06/2023	6.30pm	Other	Lighting	Community Response Line	Investigation revealed Thiess operations at MAC South were the cause of the issue. MAC OCE worked with Thiess to have lighting adjusted in respose to the call.

ACTIONS from last meeting

NIL