Mt Arthur Coal Community Consultative Committee

Planned meeting date: 12 May 2021 Information provided: 1 January to 31 March

Environmental Management

FY21 Rehabilitation Update

Mt Arthur Coal has completed (with seed) 29.9ha to date for FY21. A further 12 ha adjacent to the new EME Pad has been bulk shaped and had topsoil spread ready for seeding. The EME pad area is currently undergoing weed treatment to minimise weeds present in the spread topsoil. The EME pad is scheduled for seeding in May. Further bulk shaping is scheduled in Drayton Void areas to hit our FY21 target of 73 ha.

Mt Arthur Coal has also commenced repair and re-work of drought impacted rehab in the VD4 and VD5 areas. This work includes:

- Scalping to remove weeds and minimise the weed seed bank (all 68.2 ha completed);
- Any regrowth of weeds sprayed (all 68.2 ha completed);
- Repair of erosion and re-working of rock drains (completed, however some re-work is required following torrential rains this reporting period);
- Application of additional gypsum (all 68.2 ha completed);
- Application of compost and chisel ploughing to incorporate (approximately 30ha completed at the end of March); and
- Re-application of a higher rate Box Gum Woodland seed mix (approximately 13ha completed at the end of March).

Additional temporary stabilisation is being investigated in the use of hay mulch to higher risk surfaces along VD5. All works are planned to be completed by the end of the financial year.

Environmental Performance

Air Quality Monitoring (Period: 1 January to 31 March)

- This paper (for the reporting period of 1 January 31 March 2021) covers the performance of all six statutory PM10 monitoring sites using TEOMs, and the two dust deposition gauges.
- One day within the reporting period experienced elevated absolute PM10 TEOM monitoring results.
 - 16 January 2021 DC04
- Table 1 below provides an equipment performance summary.
- A guide has been provided at the end of this section to assist in the interpretation of the results and figures.

Table 1. Equipment Performance Summary

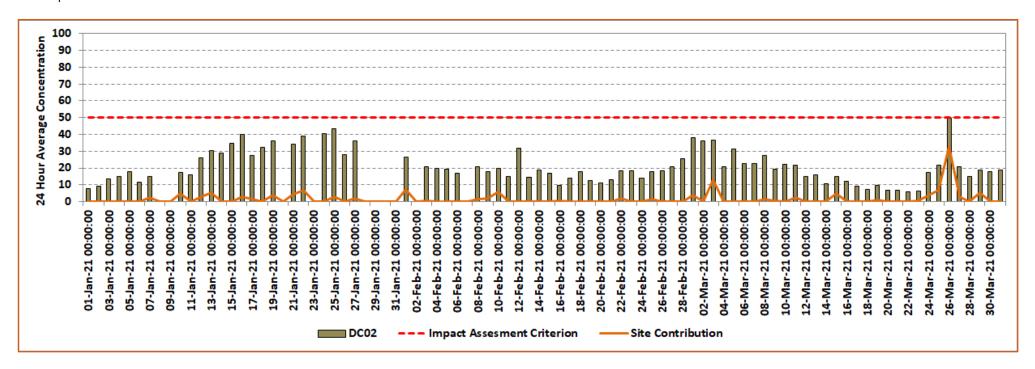
Site	Date/s	Reason	
DC02	08-09/01/2021** 20/01/2021** 28-31/01/2021** 02/02/2021 07/02/2021	<75% Data capture due to equipment issues ** <75% Data capture due to equipment issues ** <75% Data capture due to equipment issues ** <75% Data capture due to equipment issues <75% Data capture due to equipment issues	
DC04	20/03/2021	<75% Data capture due to equipment issues	
DC05	18-22/01/2021** 03-09/02/2021 30/03/2021	<75% Data capture due to equipment issues ** <75% Data capture due to communication issues <75% Data capture due to equipment issues	
DC06	07-24/01/2021**	<75% Data capture due to equipment issues (Environmental Monitoring Contractor completed several days of troubleshooting – replacing cooler and switching valve. Data review required after each replacement, which prolonged period). ** <75% Data capture due to equipment issues **	
	29/01/2021**		
DC07	31/03/2021	<75% Data capture due to equipment issues	

^{**} **Note** the instances of equipment issues identified during the month of January 2021 within Table 1; were also reported to the CCC at the February 2021 meeting and via the associated Pre-read Report. Equipment performance for February and March was significantly improved.

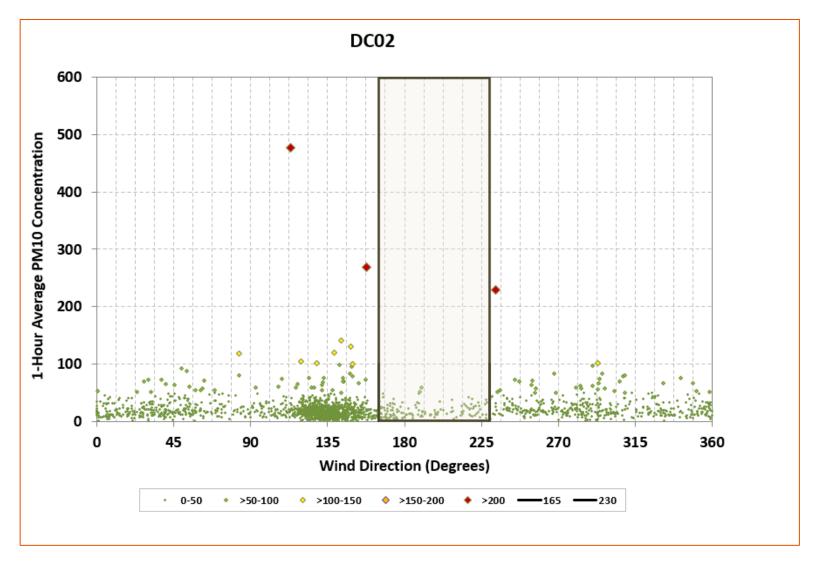
Air Quality Monitoring (Period 1 January to 31 March)

Sheppard Avenue - DC02

Data capture - 89%

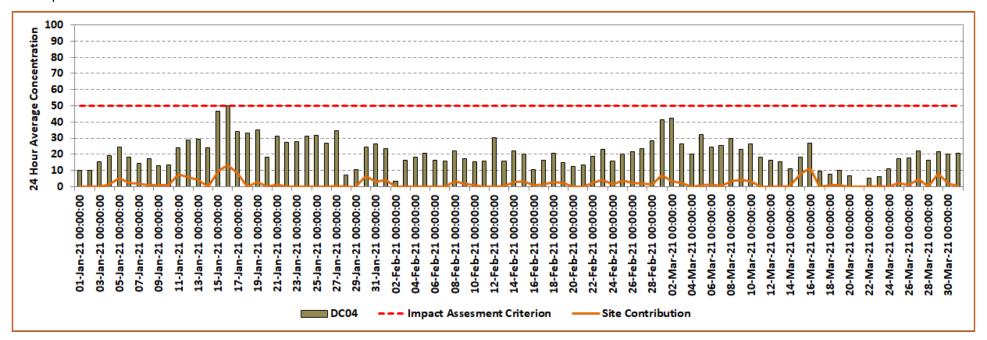


Sheppard Avenue – DC02

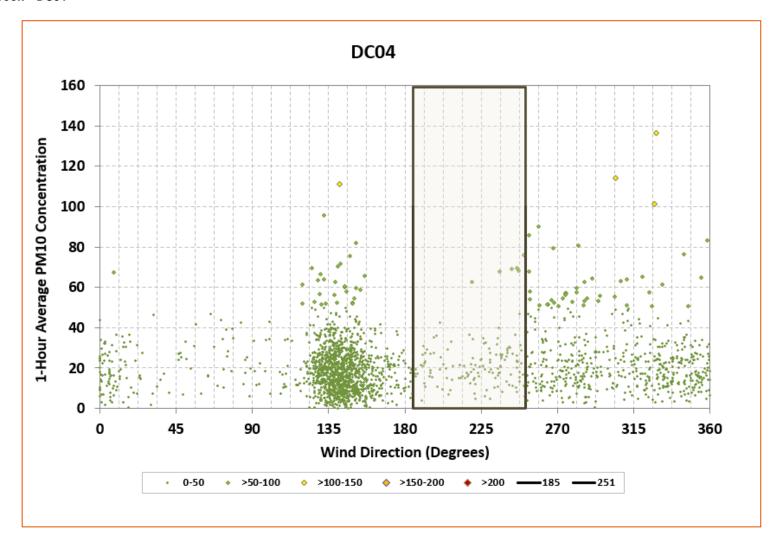


South Muswellbrook - DC04

Data capture – 99%

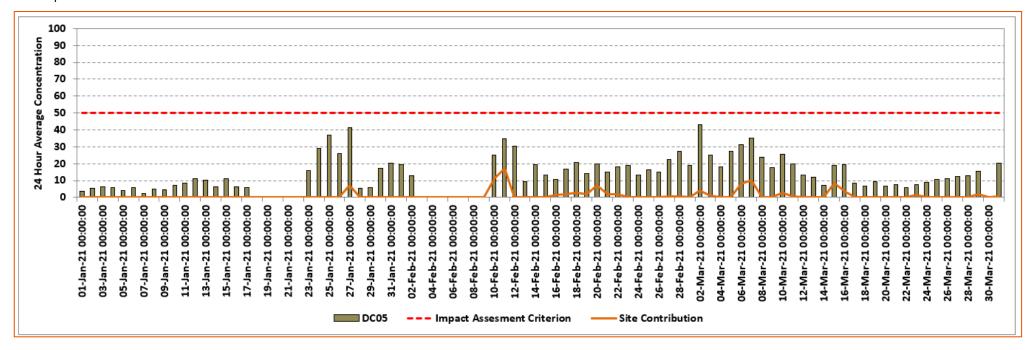


South Muswellbrook - DC04

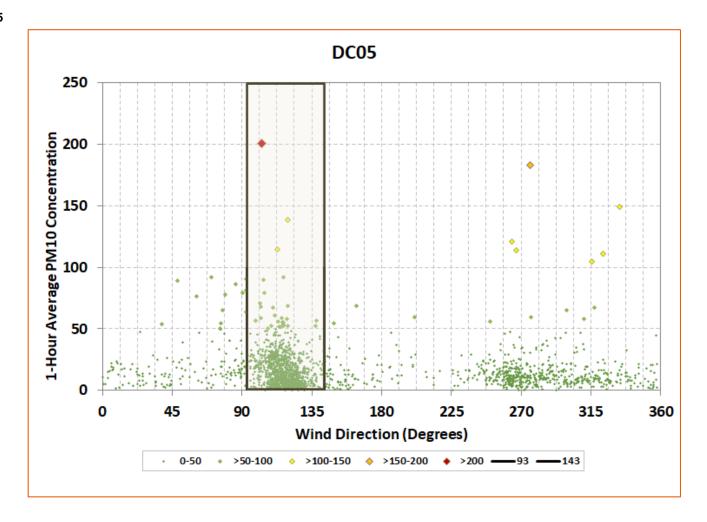


Roxburgh Road - DC05

Data capture – 86%

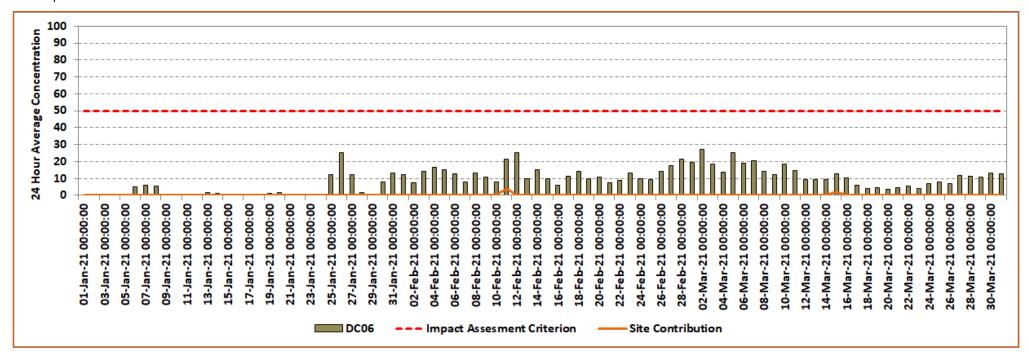


Roxburgh Road - DC05

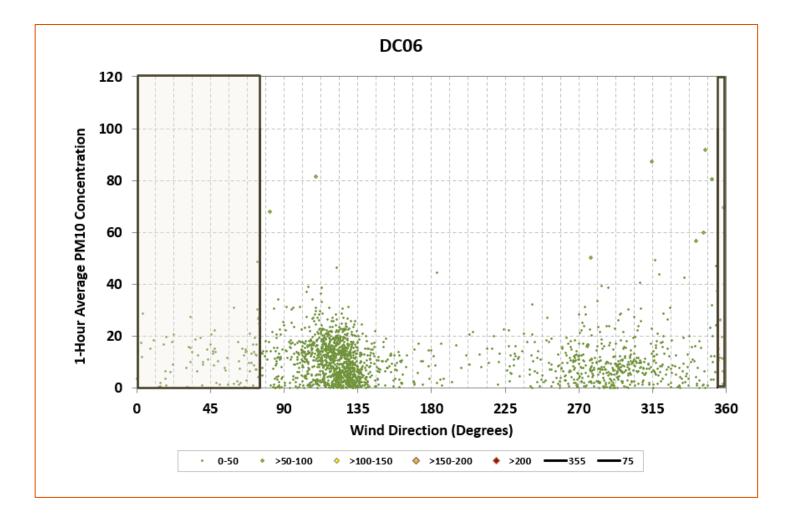


Edderton Homestead - DC06

Data capture – 79%

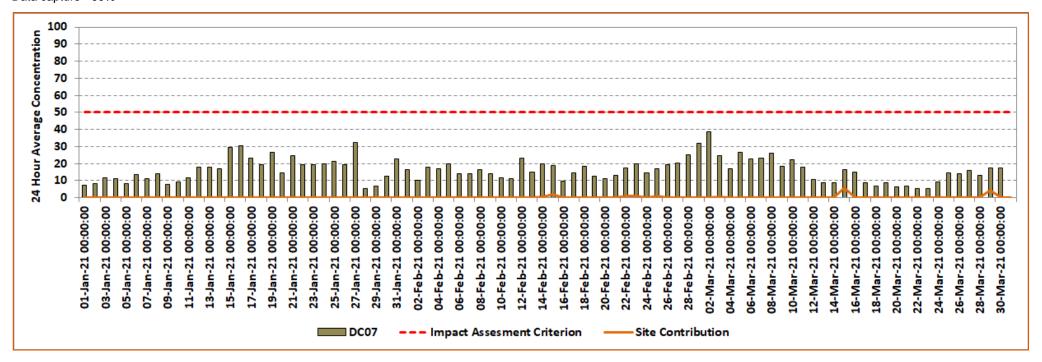


Edderton Homestead - DC06

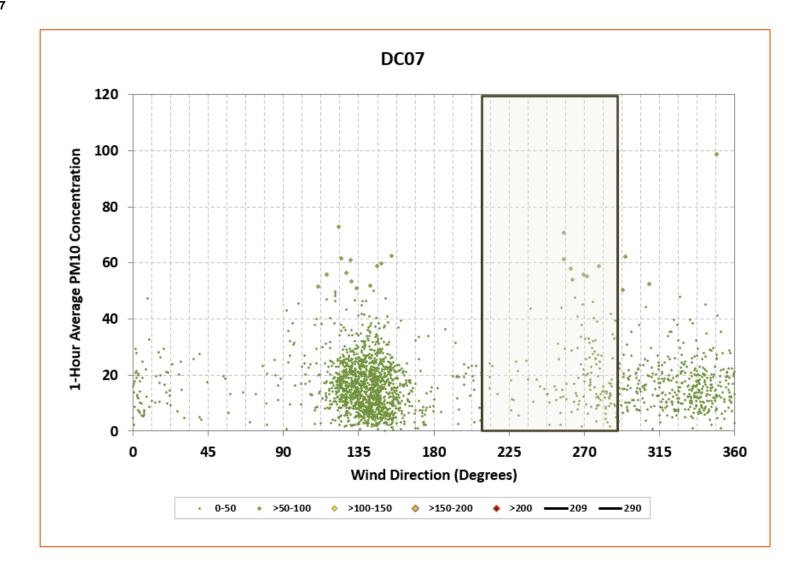


Antiene - DC07

Data capture - 99%

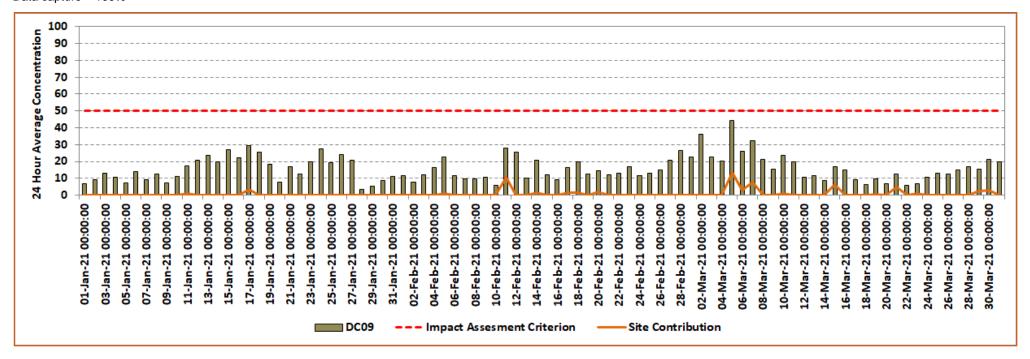


Antiene - DC07

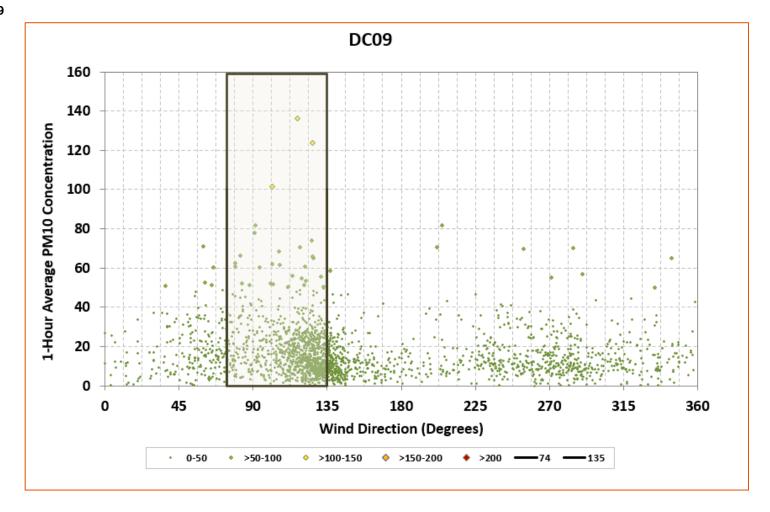


Wellbrook - DC09

Data capture - 100%

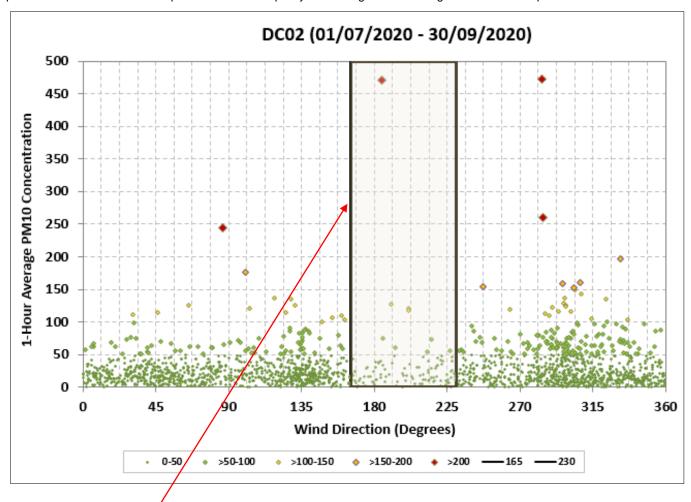


Wellbrook - DC09



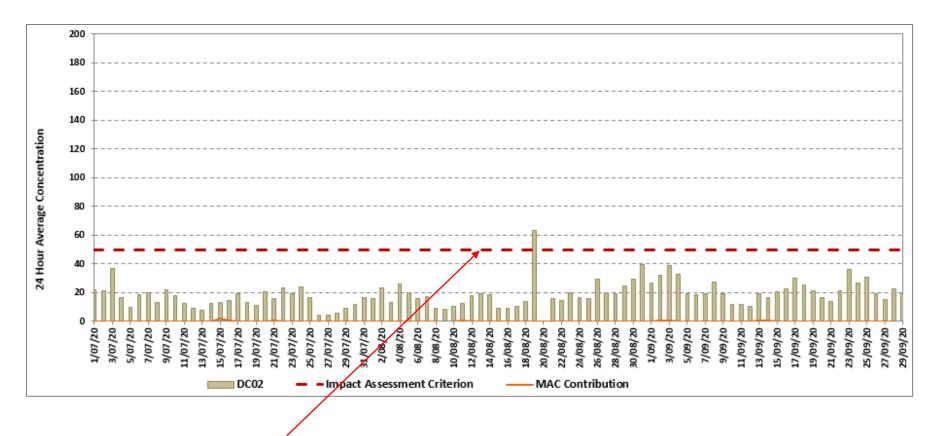
<u>Air Quality Monitoring Interpretation Guidance</u>

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.

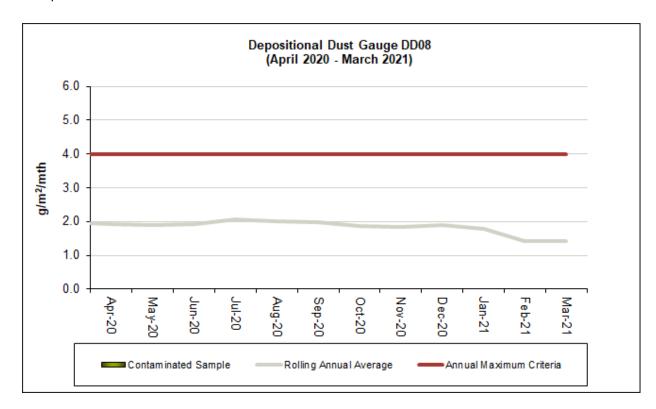
Air Quality Monitoring Interpretation Guidance continued



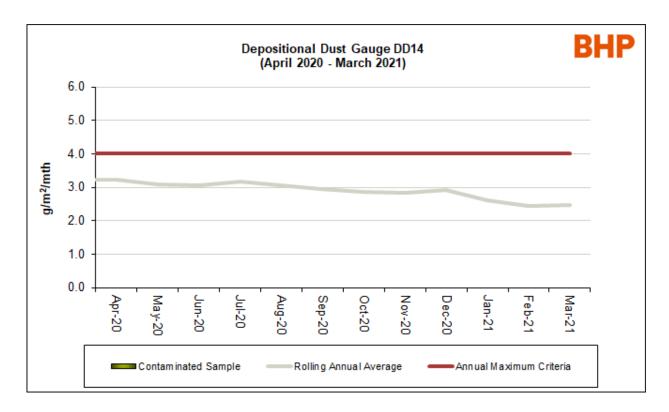
This graphic shows the cumulative Daily 24hr PM10 concentrations along with the incremental Mt Arthur Coal concentrations. This example shows that the cumulative 24hr concentration exceeded the impact assessment criteria; the Mt Arthur incremental concentrations remained below the criteria.

Deposited Dust DD08

Data capture - 100%



DD14 Data capture – 100%



Water Monitoring (Period 1 January to 31 March)

Quarterly groundwater monitoring was scheduled to occur in March however due to excessive rainfall during the month groundwater monitoring could not be completed. Groundwater monitoring has been rescheduled and was being completed in April – May. Results will be reported at the next CCC meeting in August 2021.

Blast Monitoring (Period 1 January to 31 March)

There have been no exceedances of the blast criteria during the reporting period. There has been one blast in excess of the 5mm/s vibration limit and one blast in excess of the 115dBL over pressure limit. There is an allowed exceedance of 5% of blasts for these limits over a 12 month period. The 5% criteria has not been exceeded.

Operational Noise Monitoring (Period 1 January to 31 March)

There have been no exceedances of operational noise criteria during the reporting period. 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.

Environmental Incidents

No incidents occurred during the reporting period.

Update: Unauthorised Discharge Event (January 23rd 2020) near Denman Road:

In addition to the Formal Warning issued to Mt Arthur (September 2020), the EPA has chosen to modify the MAC Environmental Protection Licence (EPL) to include a new Condition (see below) requiring Mt Arthur to complete a 'Review of mine water transfer pipelines' by the 24th September 2021. The outcome of this review will include detailing further actions or works that can be feasibly implemented by MAC to reduce further risk. Mt Arthur is currently in the process of engaging suitably qualified party to complete the study and the CCC will be provided further updates once the review has been completed and the EPA has provided feedback to Mt Arthur.

8 Pollution Studies and Reduction Programs

U1 Review of mine water transfer pipelines

U1.1 The Licensee must undertake a review of mine water transfer pipelines at the premises to assess the risk of pollution of waters and identify any actions or works that can be reasonably and feasibly implemented to reduce the risk. A report detailing the findings and recommending upgrades must be provided to the EPA by 24 September 2021 via email to: EPA.DeliveryHub@epa.nsw.gov.au

The review and report must:

- a. be undertaken by an appropriately qualified and experienced person;
- b. assess existing mine water transfer pipelines against relevant guideline design criteria;
- c. provide a risk assessment and ranking of findings to justify recommendations;
 d. include recommendations for upgrades and improvements:
- e. include a timeline for implementation of any recommended upgrades and improvements, based on highest risk and approximate costing.

Note: It is the EPA's intention to formalise the recommendations of the Pollution Study into a Pollution Reduction Program.

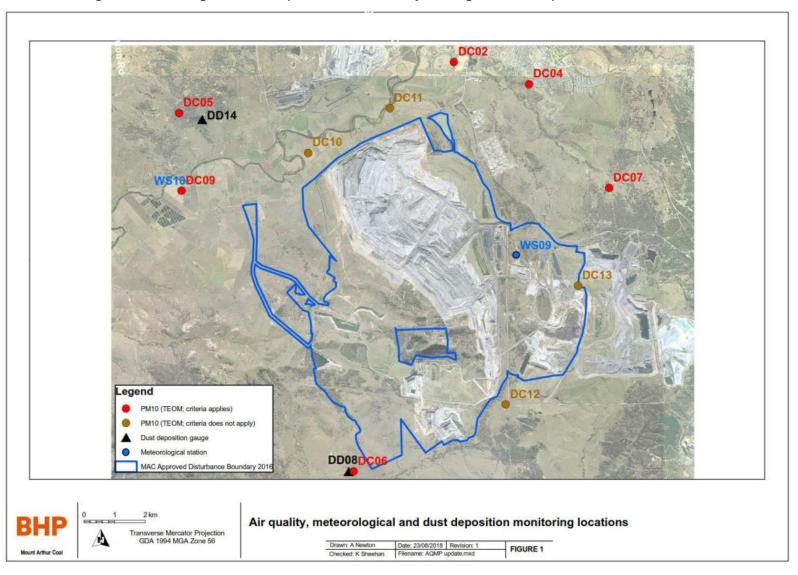
Environmental Reporting

MAC has completed, and therefore complied with, all annual reporting requirements under licence conditions. During the reporting period, the 2020 Independent Environment Audit Reports (IEA) were submitted to the relevant Regulators. These reports are available to view on the BHP website using the following link:

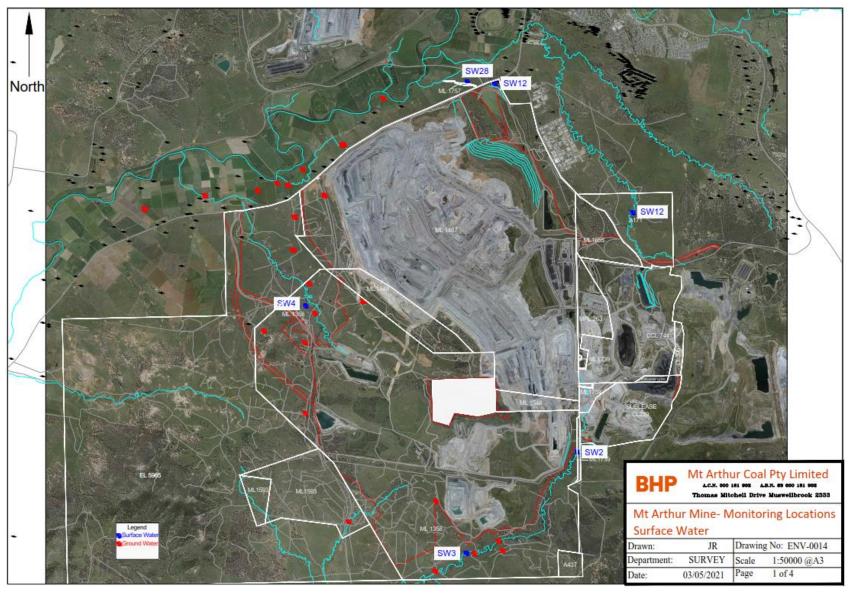
https://www.bhp.com/environment/regulatory-information#

Environmental Monitoring Plans (for reference)

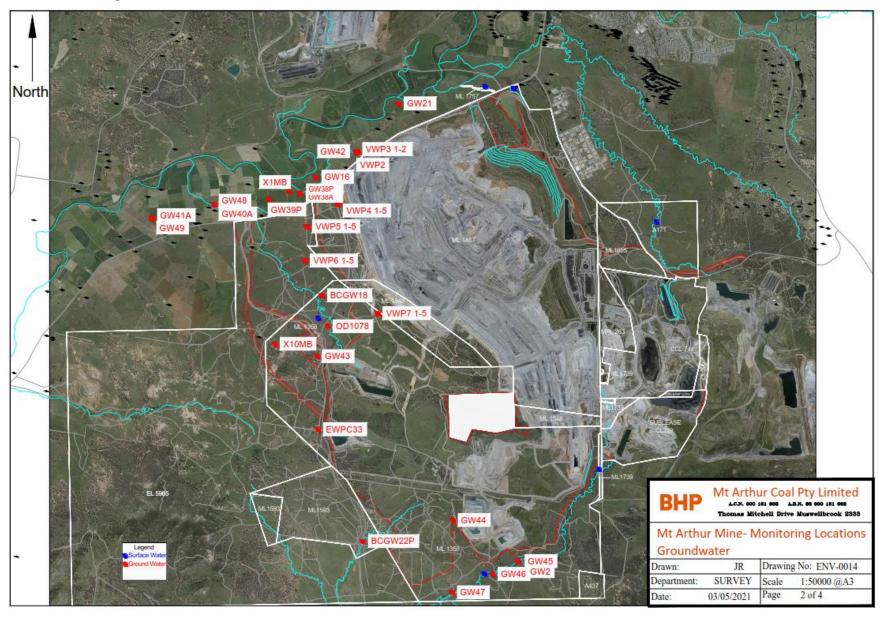
Air Quality and Meteorological Monitoring Locations (Source: Air Quality Management Plan)



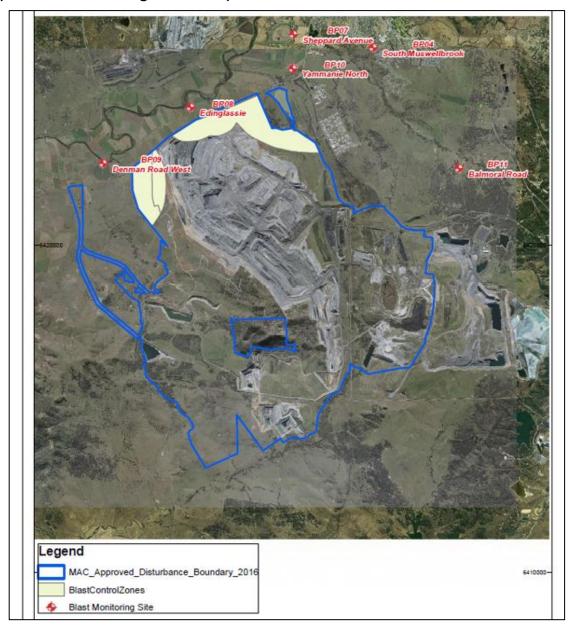
Site Water Monitoring Locations (Sourced and modified from: Site Water Management Plan) Surface Water Monitoring Locations:



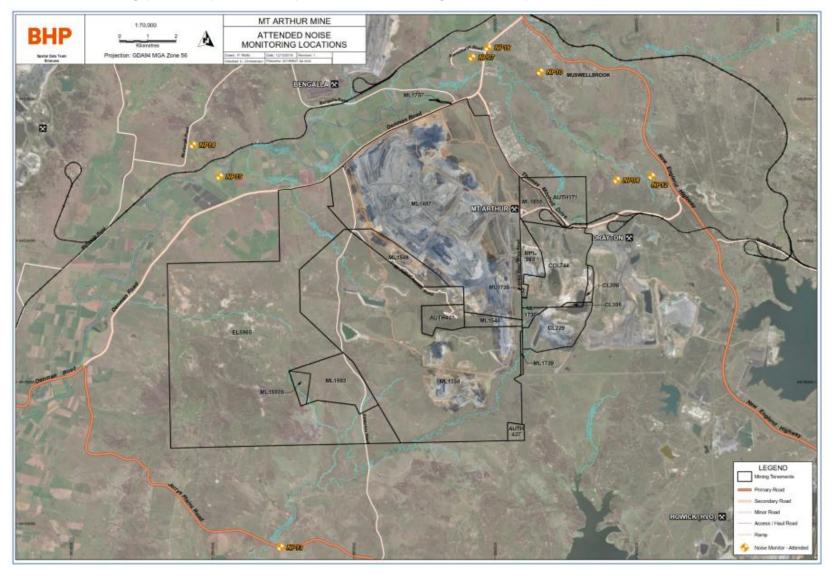
Ground Water Monitoring Locations:



Blast Monitoring Locations (Source: Blast Management Plan)

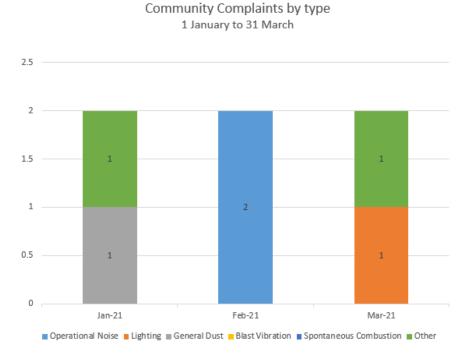


Operational Noise Monitoring (attended) Locations (Source: Noise Management Plan)



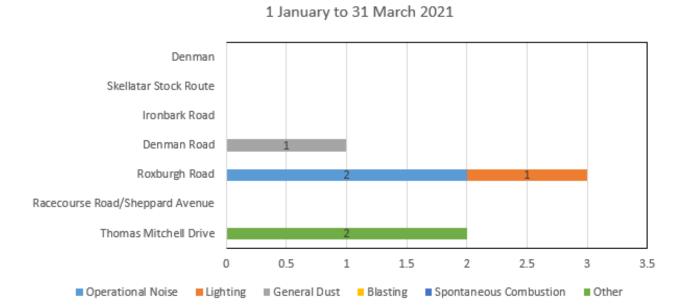
Community Complaints

The Community Complaints included in this report are for the period 1 January to 31 March 2021. Mt Arthur Coal received six (6) complaints during this period. Of the six complaints, one was related to lighting; two to noise; one to dust and two in the other category related to concerns around rubbish and cigarette butts and the other related to language used on a public two way channel.



Of the six complaints received for the three-month reporting period, three came from residents at Roxburgh Rd, one was from Denman Road and two from the Muswellbrook (Thomas Mitchel Drive) area.

Community Complaints by location



Community Complaints Summary: 1 January to 31 March

Date	Time	From	Issue	Lodgement type	Investigation and response to caller
15/01/2021	12:00pm	Muswellbrook	Other	Community Response Line	Alleged and unsubstantiated inappropriate language on public two way radio.
19/01/2021	2:03pm	Denman Rd, Muswellbrook	Dust	Community Response Line	Mining operations immediately modified to suit strong Southerly conditions which caused a sudden increase in generation of wind-blown dust. Results at the nearest monitor indicated 24 hour average dust levels remained within regulatory criteria.
14/02/2021	1:49AM	Roxburgh Rd, Muswellbrook	Noise	Community Response Line	Nearest real-time monitor did not record any exceedances or distribute any alerts. Caller was advised of investigation and monitoring results.
27/02/2021	11:31PM	Roxburgh Rd, Muswellbrook	Noise	Community Response Line	Nearest real-time monitor did not record any exceedances or distribute any alerts. Caller was advised of investigation and monitoring results.
2/03/2021	4:26PM	Thomas Mitchell Dr, Muswellbrook	Other	Community Response Line	Littering of cigarette butts causing potential fire hazard. Liaison with caller to install water-filled bollards to prevent public access to land.
4/03/2021	9:14PM	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Investigation revealed location of light, which was modified (redirected). Caller was advised of investigation results.

Actions from previous meeting/s

The actions from previous meetings are listed below.

Action	Status
Actions from 17 February 2020 meeting	
ACTION 1: JN is going to review better formatting and scaling of Graphs.	Graphs altered in this pre-read. Options to be discussed in meeting 12 May for review.
ACTION 2 JN is going to send out pdf version of the water licence map via email	To be send out with pre-read on May 5.
ACTION 3: AM will investigate and report on whether people who sell "The Big Issue" are responsible for paying for unsold issues or whether they can be returned to the publisher without incurring financial penalties.	As "The Big Issue" is a micro-business enterprise to equip people with business skills those involved are encouraged to manage the stock they purchase based on what they intent to be able to sell. Many vendors only purchase the magazines they intend to sell for the given day and return to the post office to buy more if their sales are going better than expected.
Actions remaining open from previous meetings Nil	