

## Mt Arthur Coal Community Consultative Committee

Planned meeting date: 7 May 2020

Information provided:

1 January to 31 March 2020

### Environmental Management

#### FY20 Rehabilitation Update

Mt Arthur Coal completed the financial year target on Tuesday 21 April using aerial seeding. Seeding from a plane has allowed the final 40ha of the FY20 target to be completed in approximately two hours of flight time. The importance of this is not just in the quantity but also in the quality. Being able to complete large areas in short timeframe allows for more precise timing, coordinating seeding with ideal weather for growth and time before winter. This took a lot of effort coordinating various stakeholders, including seed supply, fertiliser supply, weather for ideal flying conditions and harrowing of soils to provide seed bed.

The areas seeded were across most of the mine, with Saddlers, Drayton, CD2 and VD5 dumps all having areas seeded in a mixture of pasture crop and native woodland species. 80ha has been completed to date. An additional 11ha will be shaped and topsoiled during the rest of the FY.

Mt Arthur Coal is also submitting an update to the Rehabilitation Management Plan for public consultation which details further improvement to the rehabilitation process including:

- Improvements in seed mix to include more species and to allow for variable seeding rates;
- Improvements to the completion criteria;
- Improvements to methodology; and
- Improvements to monitoring methodology.

### Environmental Performance

#### Air Quality Monitoring (Period 1 January to 31 March 2020)

- This paper (for the reporting period of 1 January to 31 March 2020) covers the performance of all six statutory PM10 monitoring sites using TEOMs, and the two dust deposition gauges identified above.
- 20 days within the reporting period experienced elevated absolute PM10 TEOM monitoring results. These events (Table 1 below) were investigated accordingly, finding the incremental MAC contribution not exceeding the impact assessment criteria contained within the Project Approval. The investigations were provided to the NSW Government Department of Planning and Environment (DP&E). No exceedances reported for deposited dust.

**Table 1 Air Quality Monitoring Performance Summary**

Note: These notifications are raised using pre-screened data.

Date	Monitoring Location
1 January 2020	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10
2 January 2020	DC02 – Sheppard Avenue PM10 DC09 – Wellbrook PM10
3 January 2020	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC09 – Wellbrook PM10
4 January 2020	DC02 – Sheppard Avenue PM10 DC09 – Wellbrook PM10
5 January 2020	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10
6 January 2020	DC02 – Sheppard Avenue PM10
7 January 2020	DC02 – Sheppard Avenue PM10
8 January 2020	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10
9 January 2020	DC02 – Sheppard Avenue PM10
11 January 2020	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10
12 January 2020	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10
20 January 2020	DC04 – South Muswellbrook PM <sub>10</sub> DC07 – Antiene PM <sub>10</sub> DC09 – Wellbrook PM <sub>10</sub>
21 January 2020	DC02 – Sheppard Avenue PM <sub>10</sub> DC04 – South Muswellbrook PM <sub>10</sub> DC07 – Antiene PM <sub>10</sub> DC09 – Wellbrook PM <sub>10</sub>
23 January 2020	DC02 – Sheppard Avenue PM <sub>10</sub> DC04 – South Muswellbrook PM <sub>10</sub> DC07 – Antiene PM <sub>10</sub> DC09 – Wellbrook PM <sub>10</sub>
1 February 2020	DC02 – Sheppard Avenue PM <sub>10</sub>
2 February 2020	DC02 – Sheppard Avenue PM <sub>10</sub>
3 February 2020	DC02 – Sheppard Avenue PM <sub>10</sub>
4 February 2020	DC02 – Sheppard Avenue PM <sub>10</sub> DC09 – Wellbrook PM <sub>10</sub>

Date	Monitoring Location
19 February 2020	DC02 – Sheppard Avenue PM <sub>10</sub> DC07 – Antiene PM <sub>10</sub> DC09 – Wellbrook PM <sub>10</sub>
2 March 2020	DC02 – Sheppard Avenue PM <sub>10</sub>

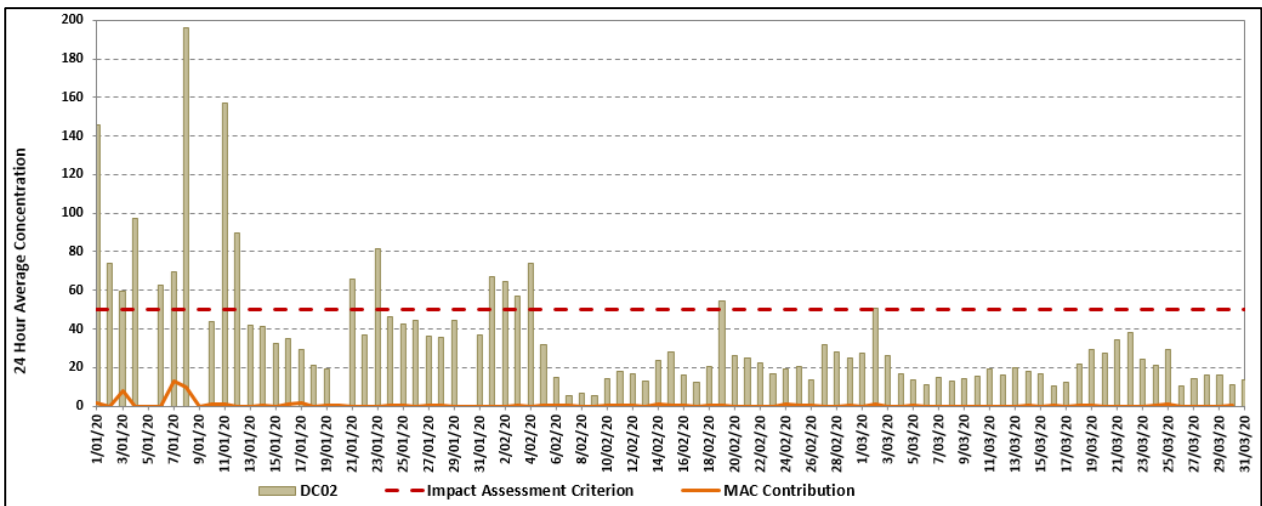
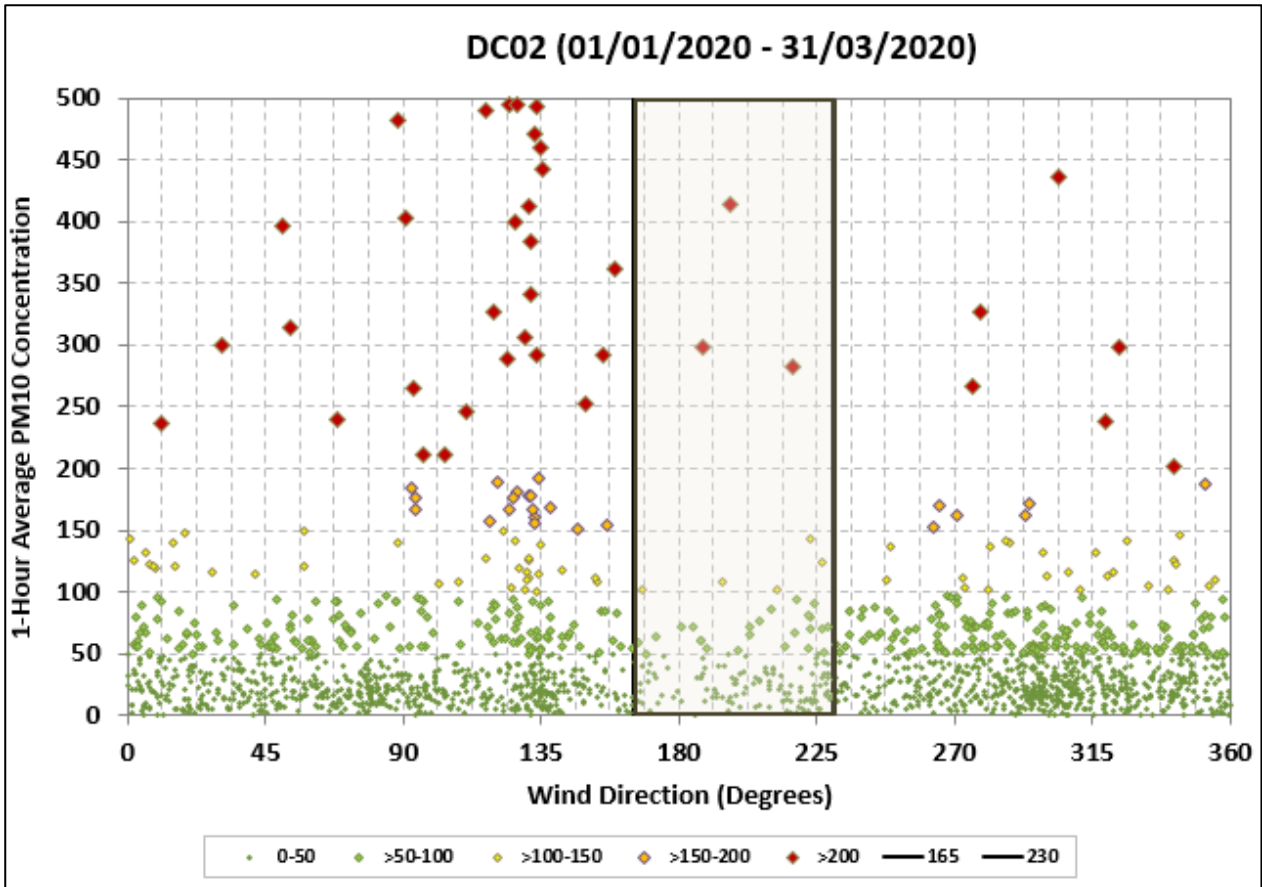
Table 2 Equipment Performance Summary

Site	Date/s	Reason
DC02	5/01/2020 20/01/2020 30/01/2020	Equipment issues – <75% data capture Equipment issues – <75% data capture 12 monthly Calibrations – <75% data capture
DC04	30/01/2020	12 monthly Calibrations – <75% data capture
DC05	30/01/2020 12/01/2020	12 monthly Calibrations – <75% data capture Equipment Issues - <75% data capture
DC06	1/01/2020 – 6/01/2020 30/01/2020 4/02/2020	Equipment issues – <75% data capture 12 monthly Calibrations – <75% data capture Calibrations – <75% data capture
DC07	4/02/2020	12 monthly Calibrations – <75% data capture
DC09	30/01/2020 17/03/2020 18/03/2020	12 monthly Calibrations – <75% data capture Equipment issues – <75% data capture Equipment issues – <75% data capture

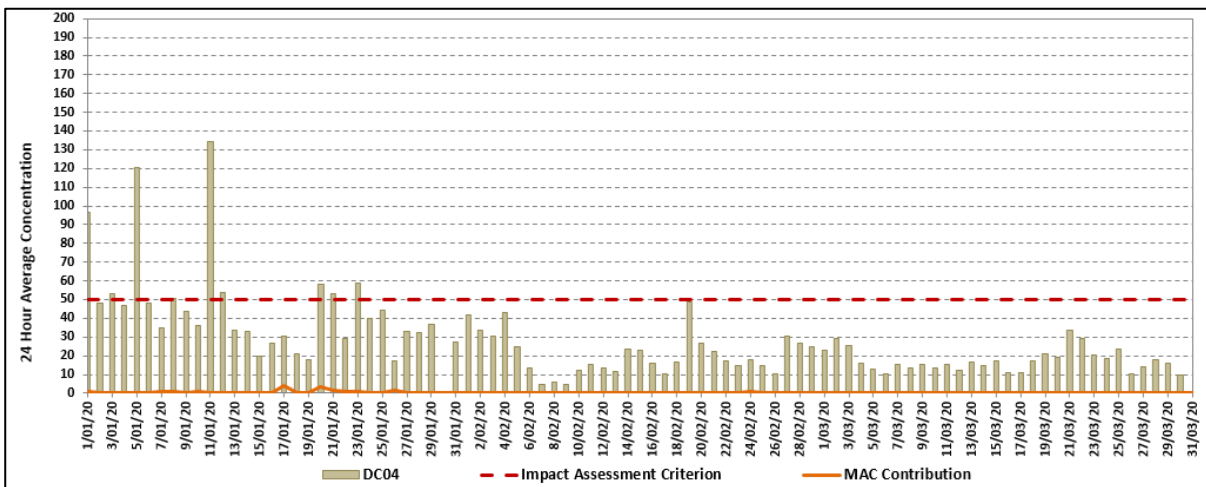
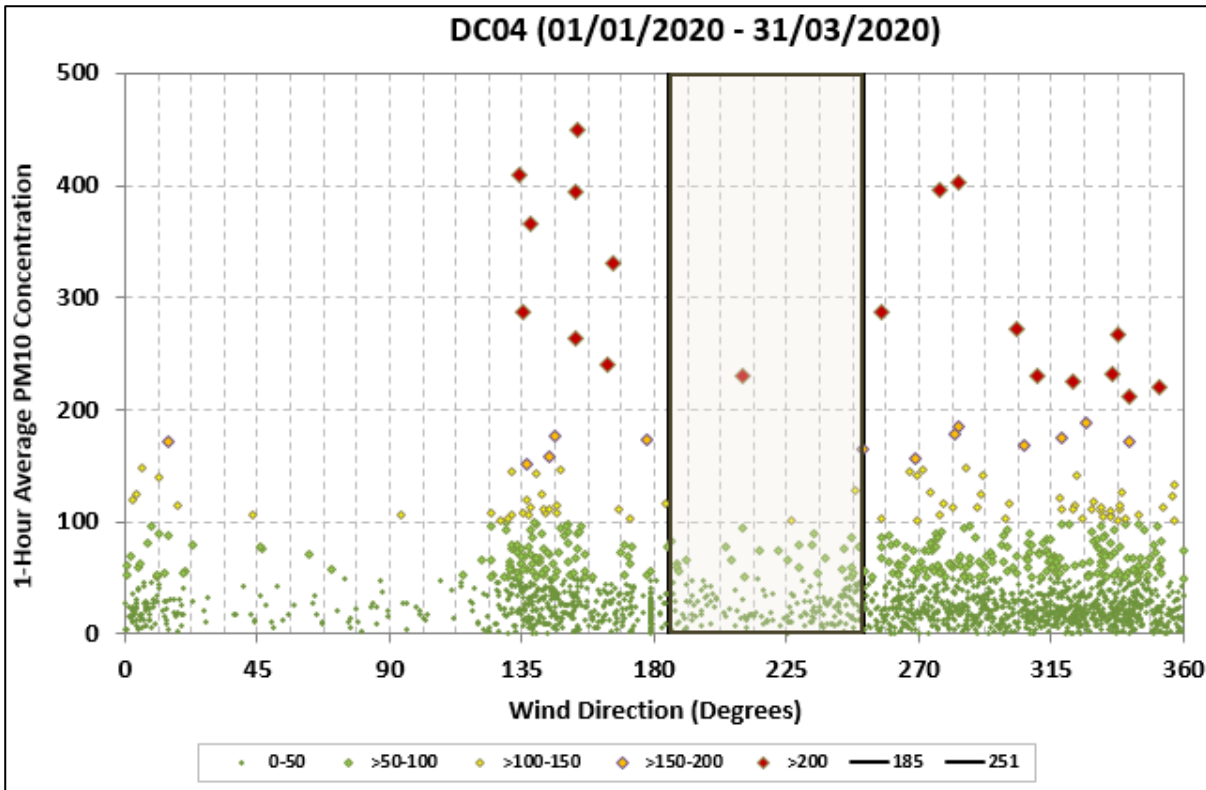
\*12 monthly calibrations cause dust monitors to lost several hours of data due to more extensive testing.

Air Quality Monitoring (Period 1 January to 31 March 2020)

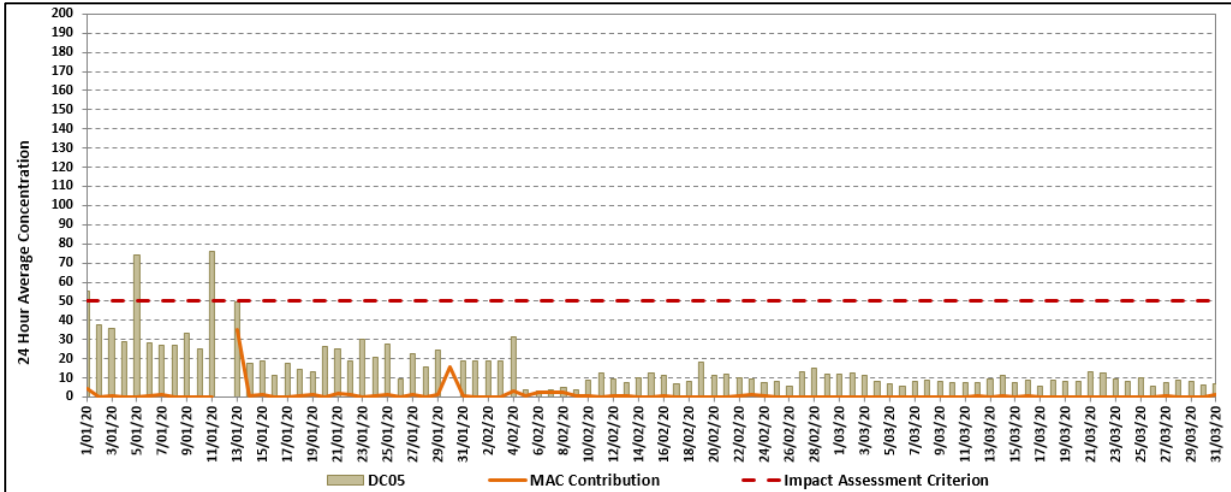
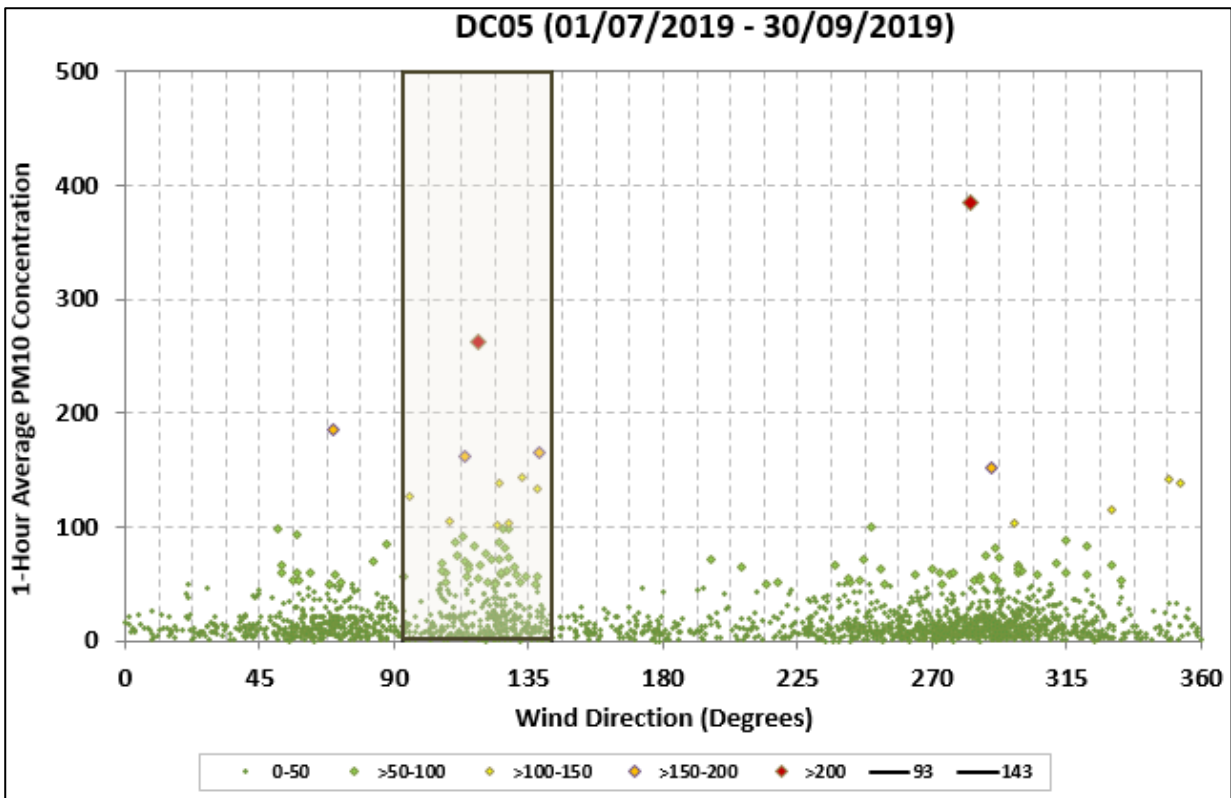
Sheppard Avenue – DC02



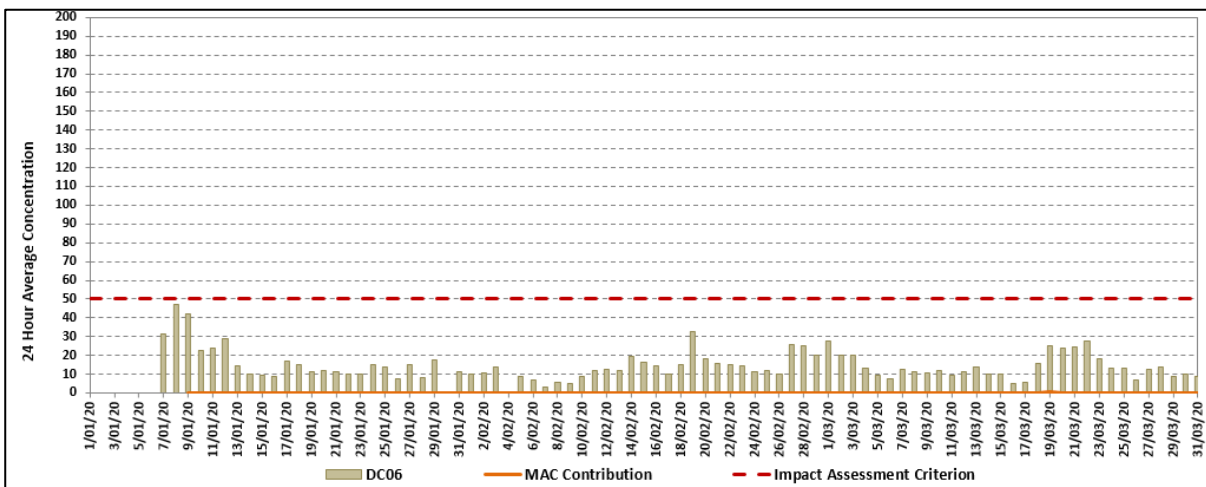
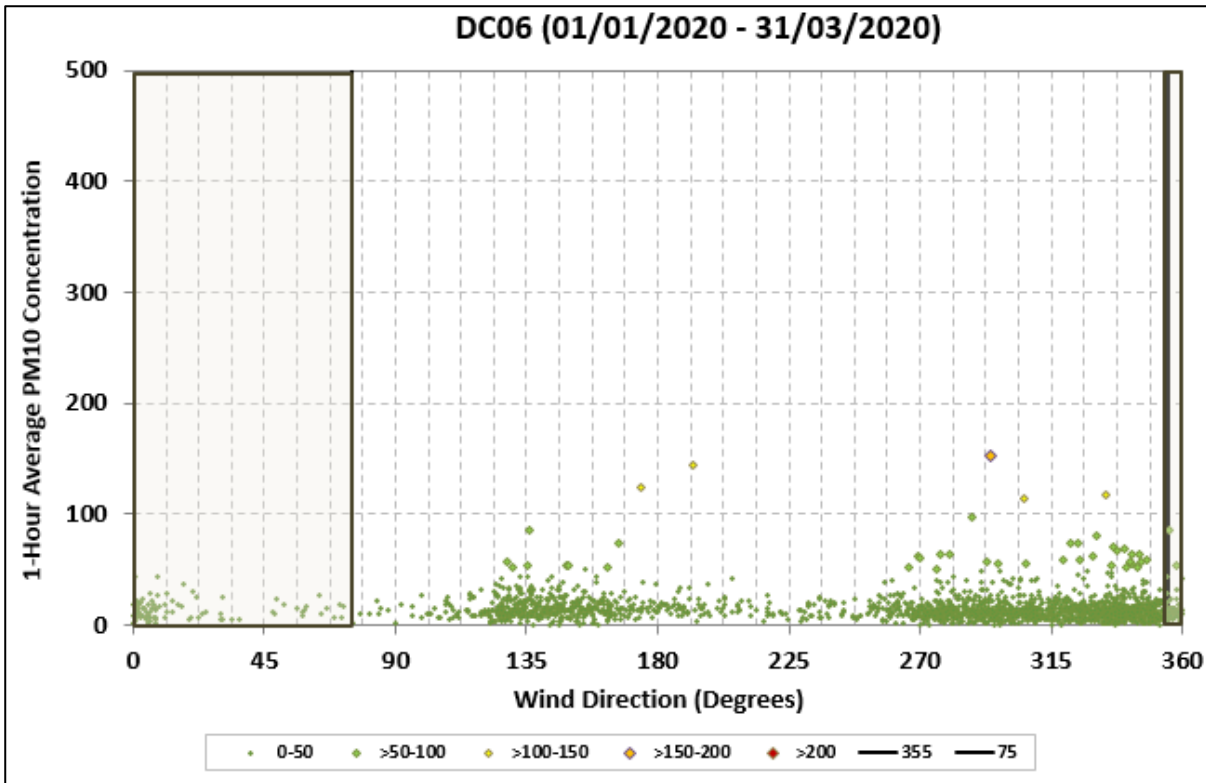
South Muswellbrook – DC04



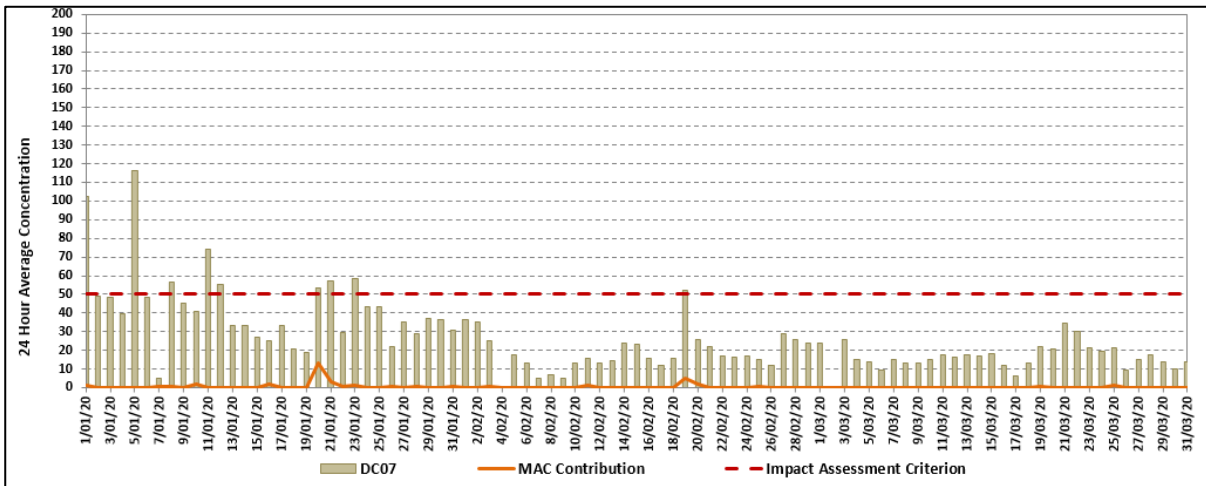
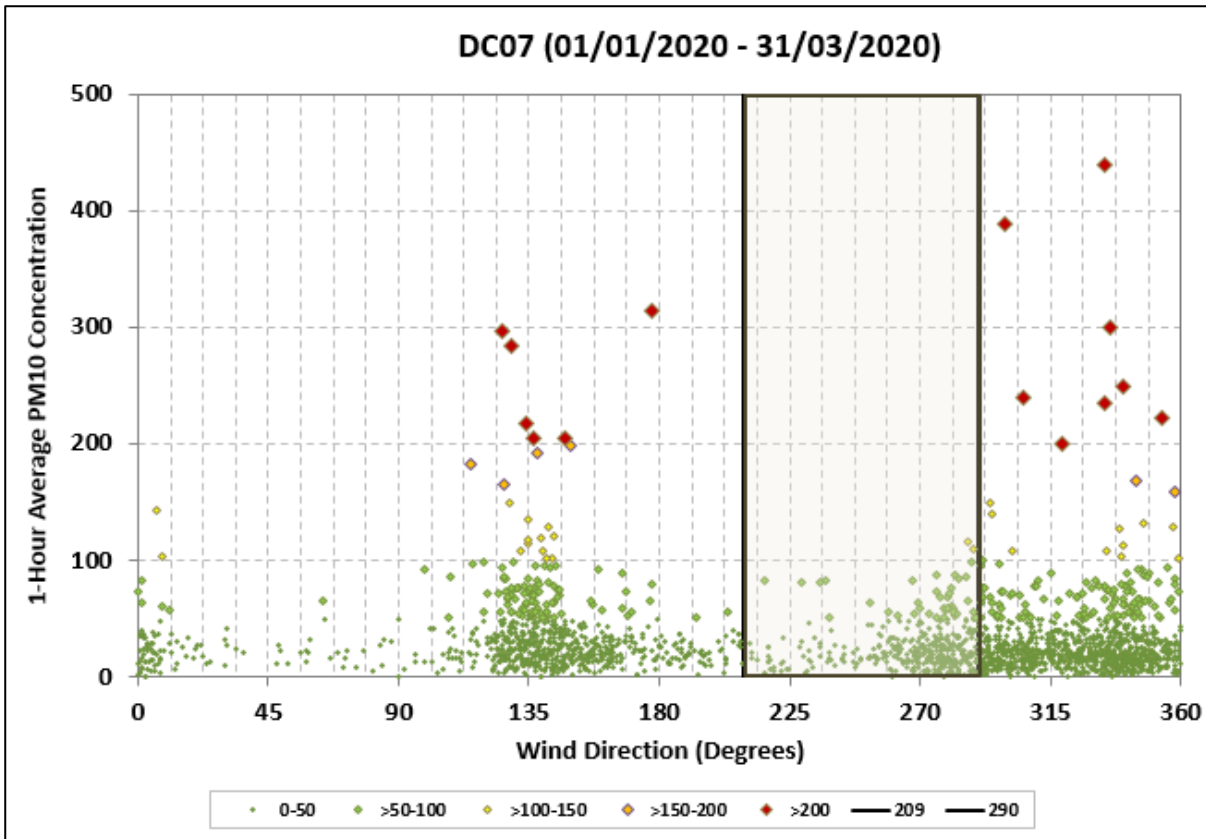
Roxburgh Road – DC05



Edderton Homestead - DC06

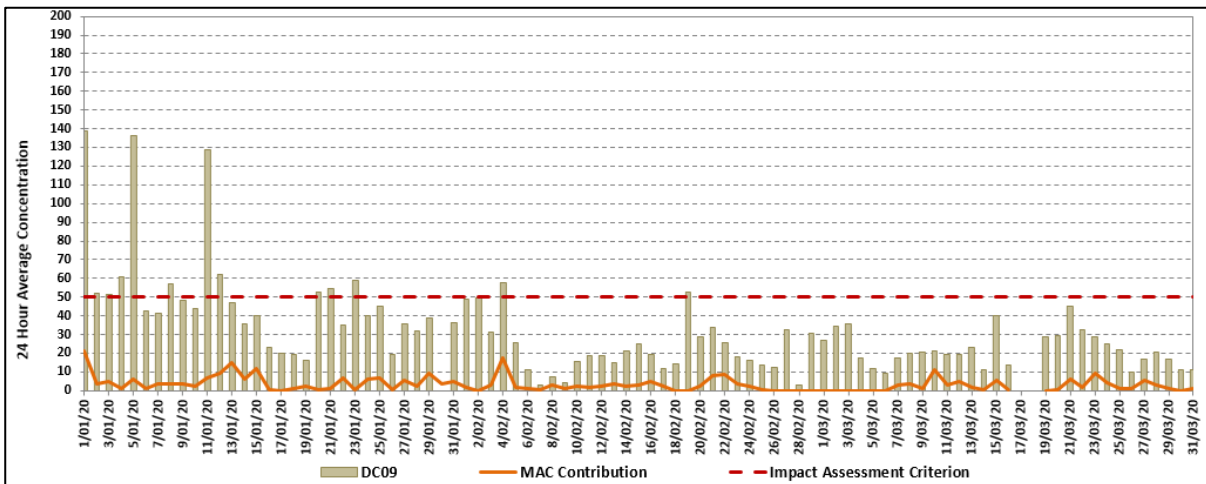
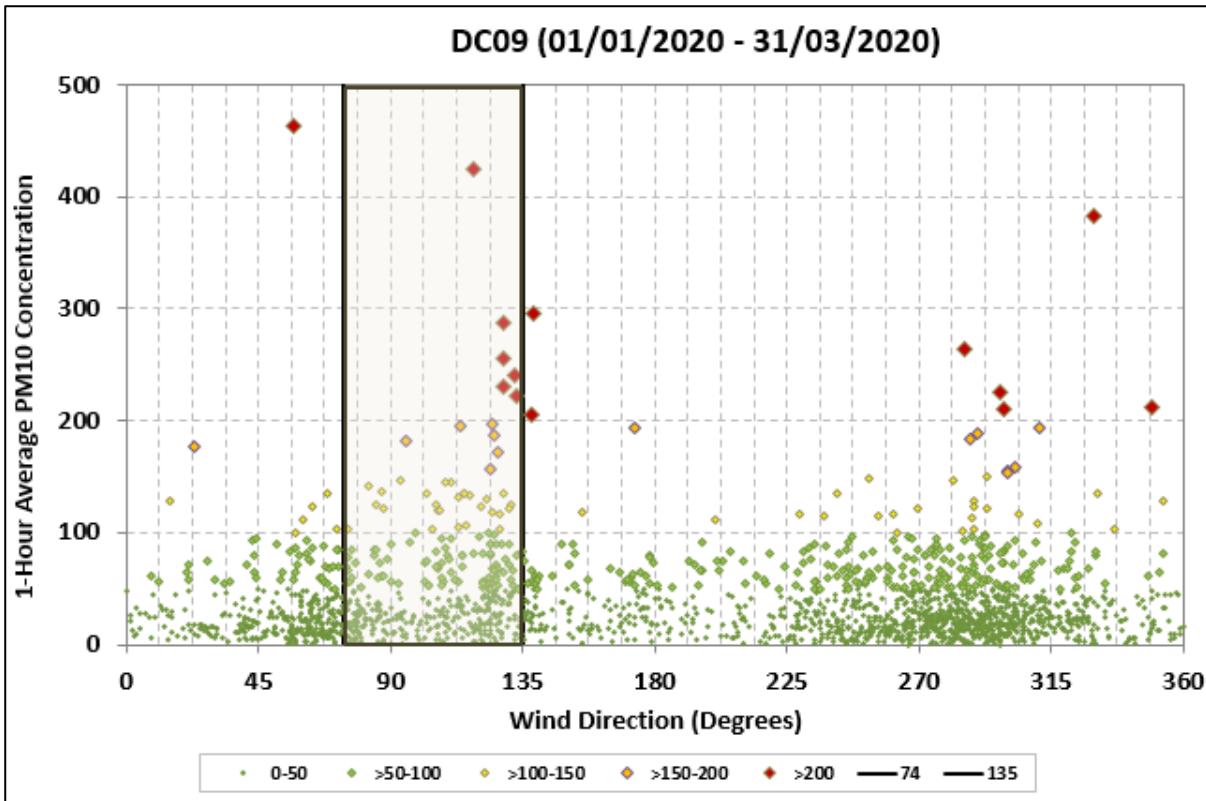


Antiene - DC07



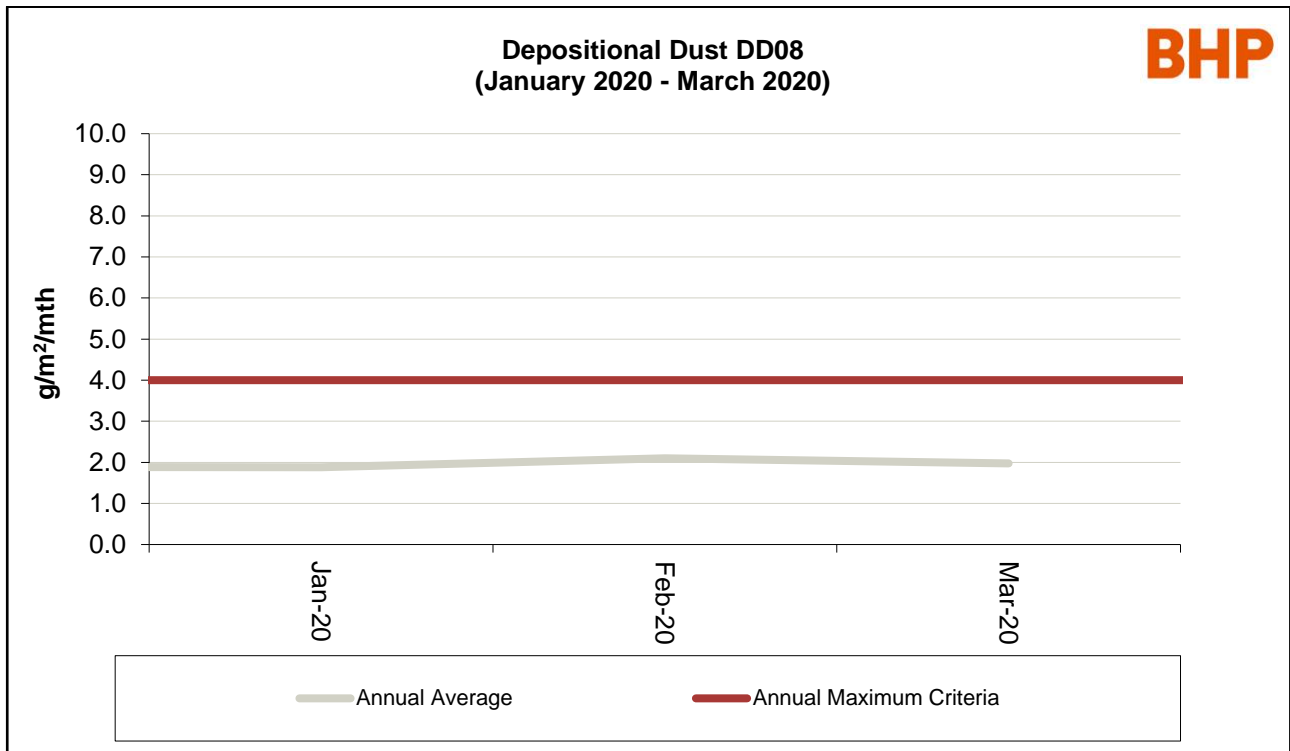


Wellbrook – DC09

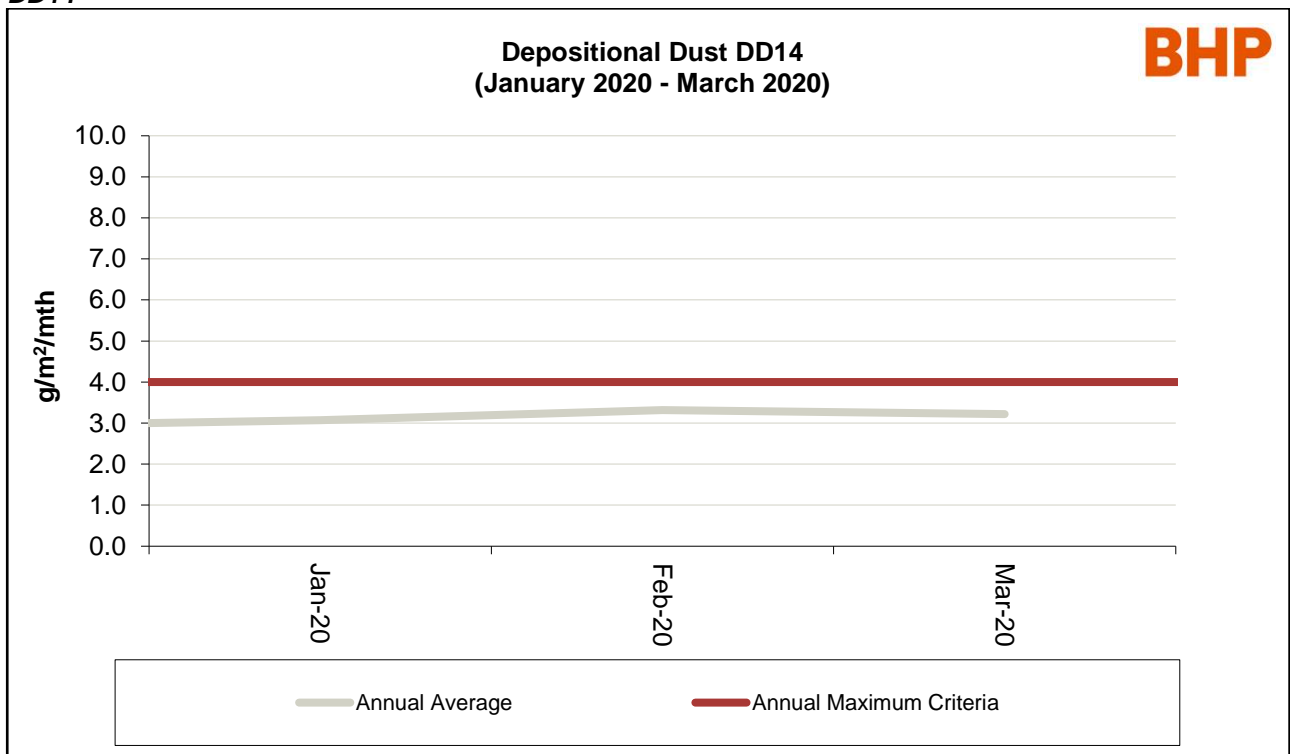


Deposited Dust

DD08



DD14



**Water Monitoring (Period 1 January to 31 March 2020):**

- There were nine occurrences within the reporting period sampling points exceeded trigger levels.

**Table 4 Water Monitoring Performance Summary**

<b>Date</b>	<b>Monitoring Location</b>	<b>Details</b>
March 2020	GW2	<b>Standing Water level</b> GW2 exceeded the currently approved groundwater level trigger in March. The groundwater levels and the cumulative rainfall departure (CRD) in this area show a strong correlation. The site received less than average rainfall. Therefore, it is considered likely that the current drought (sharp decreasing trend in the CRD curve since 2017/2018 until present) is the dominant cause of the trigger exceedance within this bore.
March 2020	GW3	<b>Standing Water Level</b> GW3 exceeded the currently approved groundwater level trigger in March. The groundwater levels and the CRD in this area show a strong correlation. Therefore, it is considered likely that the current drought (sharp decreasing trend in the CRD curve since 2017/2018 until present) is the dominant cause of the trigger exceedance within this bore.
March 2020	GW21	<b>Standing Water Level</b> The trigger level in this bore has been intermittently exceeded since 2014. Its level began declining in 2012 and has oscillated around a relatively stable value (~126.3 mAHD) since 2014. A comparison of the water level within this bore against the Hunter River water level trends does not suggest a correlation with the decline recorded in the bore. The water level trend displays seasonal oscillations correlated with the CRD, but it also displays a long term trend not fully associated with the CRD. Therefore, it is possible this bore has been slightly affected by mining; however there remains some uncertainty in this conclusion given the relatively limited water level change and the magnitude of the natural variability.
March 2020	GW23	<b>Standing Water Level</b> GW23 exceeded the currently approved groundwater level trigger in March. Investigations revealed that the change in groundwater level was likely due to the mining related fractured rock aquifer depressurisation of the coal seam and was consistent with modelled predictions in the environmental assessment.
March 2020	GW39P	<b>Standing Water Level</b> GW39P exceeded the currently approved groundwater level March. Investigations revealed that the depressurisation of the coal seams within the open cut mine was the likely cause of the decreasing water level in GW39P and the drawdown was within the predicted order of magnitude, which was comparable to model predictions.
March 2020	OD1078-PIEZO	<b>Standing Water Level</b> The trigger level in this bore has been exceeded since its initial monitoring records at the end of 2017. Its groundwater level displays a downward trend for the duration of the data series. Since there are no baseline monitoring records, it is not possible to establish accurately the cause of the downward trend, but it could possibly be attributed to the current drought as there is some correlation with the CRD curve.
March 2020	GW39A	<b>Electrical Conductivity</b> Currently Under Investigation
March 2020	GW40A	<b>Electrical Conductivity</b> Currently Under Investigation
March 2020	GW41A	<b>Electrical Conductivity</b> Currently Under Investigation

**Blast Monitoring (Period 1 January to 31 March 2020)**

- There have been no exceedances of overpressure or vibration at any monitoring location in the reporting period. There has been 100% data capture for all monitoring locations in the reporting period.

**Environmental Incidents****10 January 2020 - Unplanned disturbance outside of the Approved Disturbance Boundary**

HVEC confirmed on 10 January 2020 that a reportable incident involving unplanned disturbance outside of the Approved Disturbance Boundary had occurred and verbally notified the DPIE of the incident. HVEC received a Warning Letter from the DPIE on the 12th March, 2020 in response to this event. The following positives were highlighted in the letter and contributed to the DPIE's decision to issue a warning:

- HVEC notified the Department of the event in a timely manner;
- HVEC remediated the area promptly and installed additional measures to mitigate further issues;
- There was no impact on human health and safety; and
- Site personnel were cooperative during the investigation.

**23 January 2020 – Unplanned release of water off site**

On 23 January 2020, HVEC had an unplanned release of water off site due to a failed poly weld on a buried pipeline. Water was observed flowing along the inside of the Denman Road visual bund, then through a rock lined drainage point and silt fence to a set of culverts under Denman Road. The water travelled approximately 300m onto a property owned by HVEC. Pumps were immediately shutdown and an investigation undertaken, the extent of the discharge was assessed which determined that there had been no material harm to the environment. HVEC has notified the relevant Regulators of the event. There is no further update at this stage.

**06 February 2020 – Minor unplanned release of water**

On 6 January 2020, HVEC had an unplanned release of water occurred in the Drayton Void area due to a pipeline puncture during maintenance works. The pipeline was not in use at the time of the puncture and a minimal amount of residual water was released into a mostly disturbed area. It was determined that there was no material harm to the environment. The event was reported to the relevant Regulators and has since been closed with no further action required by HVEC.

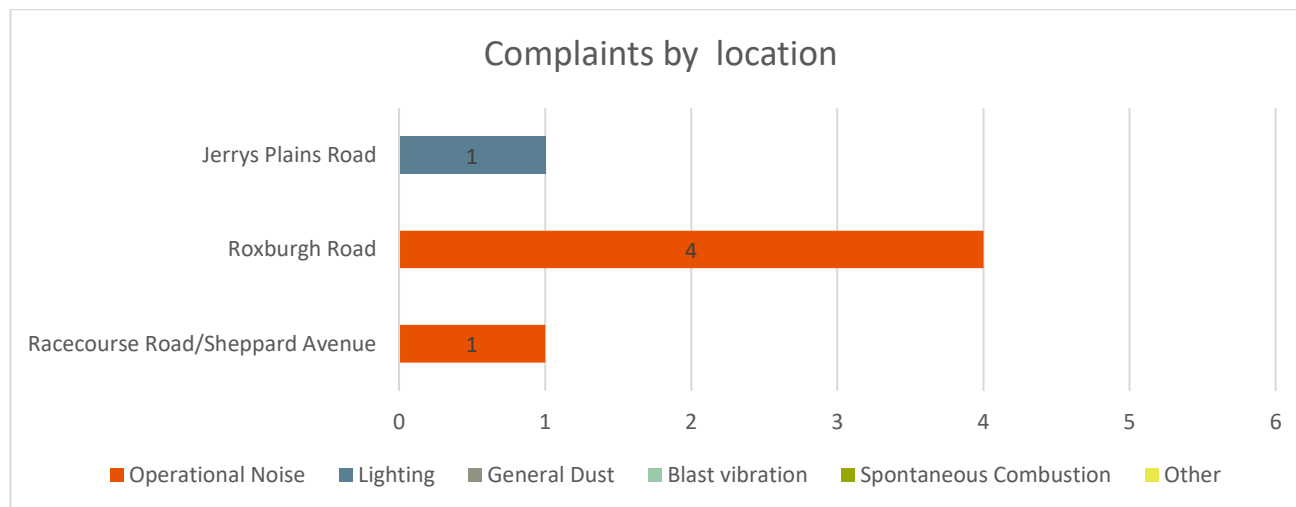
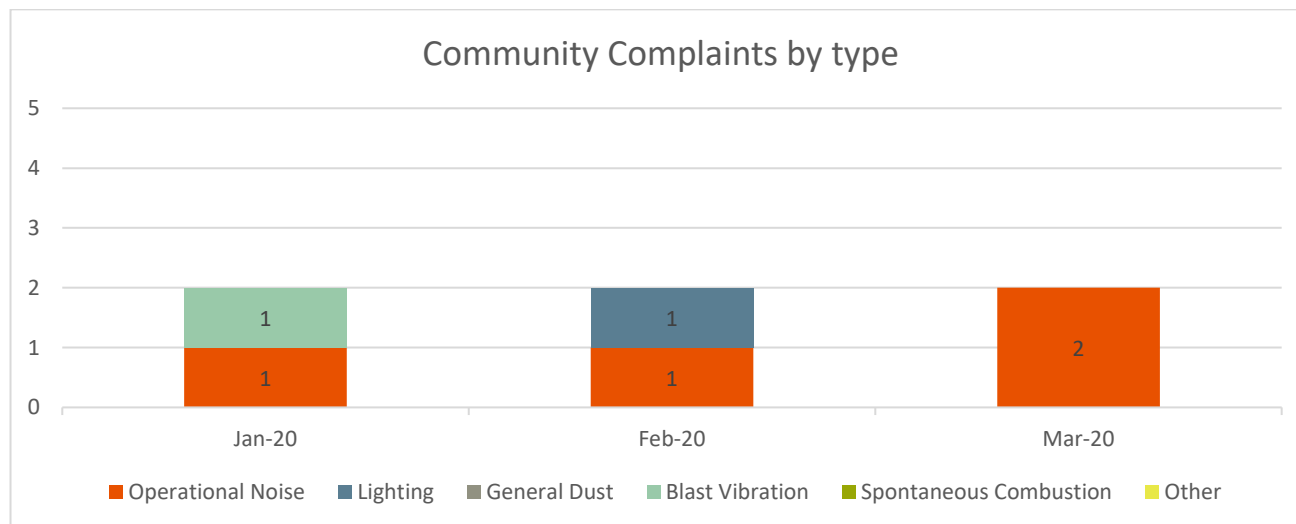
**Environmental Reporting**

MAC has completed, and therefore complied with, all annual reporting requirements under licence conditions. These are available to view on the BHP website using the following link:

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

## Community Complaints

The Community Complaints included in this report are for the period 1 January to the 31 March 2020. Mt Arthur Coal received six (6) complaints during this period.



## Community Complaints Summary: 1 January to 31 March 2020

January 2020					
15/01/2020	12.10pm	Racecourse Road/Sheppard Avenue	Blast Vibration	Community Response Line	Investigation revealed weather conditions were suitable for blasting at the time. Results indicated overpressure Operational Noise and ground vibration levels were within regulatory criteria. Caller was advised of investigation and monitoring results.
19/01/2020	5.40am	Roxburgh Road	Operational Noise	Community Response Line	Investigation revealed no unusual mining operations were occurring at the time. Results at the nearest real-time monitor indicated Operational Noise levels were within regulatory criteria. Caller was advised of investigation and monitoring results.
February 2020					
9/02/2020	10.42pm	Roxburgh Road	Operational Noise	Community Response Line	Investigation revealed no unusual mining operations were occurring at the time. Results at the nearest real-time monitor indicated noise levels were within regulatory criteria. Caller was advised of investigation and monitoring results.
17/02/2020	8.00pm	Jerrys Plains Road	Lighting	Community Response Line	Investigation revealed location of lights, which were redirected or turned off. Caller was advised of investigation results and action taken.
March 2020					
5/03/2020		Roxburgh Road	Operational Noise	Community Response Line	Investigation revealed no unusual mining operations were occurring at the time. Results at the nearest real-time monitor indicated noise levels were within regulatory criteria. Caller was advised of investigation and monitoring results.
9/03/2020		Roxburgh Road	Operational Noise	Community Response Line	Investigation revealed no unusual mining operations were occurring at the time. Results at the nearest real-time monitor indicated noise levels were within regulatory criteria. Caller was advised of investigation and monitoring results.

**Actions from previous meeting/s**

The actions from previous meetings are listed below.

Action	Status
<b>Actions from 13 February 2020 meeting</b>	
Action 1: At the top of the CCC minutes the mobile contact information is to be added.	Complete. Mobile contact numbers have been included on February 2020 minutes.
Action 2: MAC to seek further advice as to confidentiality issues that may result from providing information regarding the number of complaints from individuals.	Work in progress.
Action 3: JN to update CCC with information regarding what recent rainfall has meant for water use and availability on site.	Work in progress.
Action 4: WP to provide the template for the CCC annual report to CCC members and to liaise with DT and LS about content.	Work in progress.
Action 5: WP to organise a letter of thanks to Rosemary Munn.	Work in progress.
Action 6: Adam to give a response to JB regarding the lighting report and inform WP after completion.	Complete. Letter of response provided to JB 27 February 2020.
<b>Actions remaining open from previous meetings</b>	
Action 2 (Feb 2019): Col to get in touch with the DP&E to ascertain if the Department representative could attend a future CCC meeting to speak about the cumulative impacts of dust. The DP&E have been contacted.	Site visit presentation by department representatives to be rescheduled in-line with COVID-19 requirements for site visits to Mt Arthur Coal.
Action 4 (Sept 2019): DP to enquire about the approvals process and share with the CCC to clarify the required timeframes. Hold over to August meeting.	On hold until August 2020 meeting.
Action 5 (Nov 2019): MAC to arrange a site visit to MacLean's Hill for the CCC to gain a better understanding of the lighting issue. [Noted: JB continued to ask for a definition of 'offensive lighting'] Site visit to also include a visit to rehabilitation areas as requested Feb 2020. Note – Mine tour to be undertaken at May meeting.	Site tour to be rescheduled in-line with COVID-19 requirements for site visits to Mt Arthur Coal.
Action 6 (Nov 2019): WP to arrange a department representative to discuss the lighting issue and associated community impacts particularly through the provision of defining offensive lighting.	Site visit presentation by department representatives to be rescheduled in-line with COVID-19 requirements for site visits to Mt Arthur Coal.