



Mt Arthur Coal Community Consultative Committee

Meeting Date: 13 February 2020

Information provided:

1 October to 31 December 2019

Environmental Management

FY20 Rehabilitation Update

Mt Arthur Coal is on track to exceed our financial year rehabilitation targets thanks to a great effort from our planning, overburden and mine services team. This is despite a dramatic increase in our annual target (36ha in FY18 to 80ha in FY20). There has also been an increase in quality, despite challenging conditions from the ongoing drought, through engagement with line teams and our environment function.

Already approximately 40ha of land has had seed applied, across VD5, CD2 and Saddlers South dumps. These areas are being monitored due to high temperatures and poor rainfall. An additional 58.8 ha of dump space across CD2, Drayton and Saddlers South dumps has had topsoil applied ready. The plan is to complete the seeding in these areas in early Autumn, using aerial methods (drone and plane seeding). We are predicting approximately 90ha of seeded rehab to be completed by the end of the financial year.

Environmental Performance

Air Quality Monitoring (Period 1 October to 31 December 2019)

- This paper (for the reporting period of 1 October to 31 December 2019) covers the performance of all six statutory PM₁₀ monitoring sites using TEOMs, and the two dust deposition gauges identified above.
- During the period it is important to note that NSW experienced extreme bushfire and heat conditions which has influenced the data presented below. Table 2 has been included to summarise the dates where the DPIE have identified that the air quality may have been impacted by regional events.
- 64 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	Regional Event Impacted
3 October 2019	DC02 – Sheppard Avenue PM ₁₀	No
4 October 2019	DC02 – Sheppard Avenue PM ₁₀	No
7 October 2019	DC02 – Sheppard Avenue PM ₁₀ DC04 – South Muswellbrook PM ₁₀ DC07 – Antiene PM ₁₀ DC09 – Wellbrook PM ₁₀	Yes
8 October 2019	DC02 – Sheppard Avenue PM ₁₀ DC07 – Antiene PM ₁₀	No
17 October 2019	DC02 – Sheppard Avenue PM ₁₀ DC04 – South Muswellbrook PM ₁₀ DC07 – Antiene PM ₁₀	No
18 October 2019	DC02 – Sheppard Avenue PM ₁₀	No
19 October 2019	DC02 – Sheppard Avenue PM ₁₀	No
24 October 2019	DC02 – Sheppard Avenue PM ₁₀	No
25 October 2019	DC02 – Sheppard Avenue PM ₁₀	No
26 October 2019	DC02 – Sheppard Avenue PM ₁₀ DC04 – South Muswellbrook PM ₁₀ DC07 – Antiene PM ₁₀ DC09 – Wellbrook PM ₁₀	Yes
27 October 2019	DC02 – Sheppard Avenue PM ₁₀ DC04 – South Muswellbrook PM ₁₀ DC07 – Antiene PM ₁₀ DC09 – Wellbrook PM ₁₀	Yes
28 October 2019	DC02 – Sheppard Avenue PM ₁₀ DC04 – South Muswellbrook PM ₁₀ DC05 – Roxburgh Rd PM ₁₀ DC07 – Antiene PM ₁₀ DC09 – Wellbrook PM ₁₀	Yes
29 October 2019	DC02 – Sheppard Avenue PM ₁₀ DC04 – South Muswellbrook PM ₁₀	No
30 October 2019	DC02 – Sheppard Avenue PM ₁₀ DC04 – South Muswellbrook PM ₁₀ DC05 – Roxburgh Rd PM ₁₀ DC06 – Edderton Rd PM ₁₀ DC07 – Antiene PM ₁₀ DC09 – Wellbrook PM ₁₀	Yes
31 October 2019	DC02 – Sheppard Avenue PM ₁₀ DC04 – South Muswellbrook PM ₁₀ DC05 – Roxburgh Rd PM ₁₀ DC06 – Edderton Rd PM ₁₀ DC07 – Antiene PM ₁₀	Yes

Date	Monitoring Location	Regional Event Impacted
	DC09 – Wellbrook PM10	
1 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
2 November 2019	DC02 – Sheppard Avenue PM10 DC09 – Wellbrook PM10	No
3 November 2019	DC02 – Sheppard Avenue PM10	No
7 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
8 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
12 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
13 November 2019	DC02 – Sheppard Avenue PM10	No
14 November 2019	DC02 – Sheppard Avenue PM10	No
15 November 2019	DC02 – Sheppard Avenue PM10	No
16 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
17 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
18 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC09 – Wellbrook PM10	No
19 November 2019	DC02 – Sheppard Avenue PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
20 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10	Yes

Date	Monitoring Location	Regional Event Impacted
	DC06 – Edderton Rd PM10 DC09 – Wellbrook PM10	
21 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
22 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
23 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
26 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
27 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
28 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
29 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
30 November 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
1 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC06 – Edderton Rd PM10	Yes

Date	Monitoring Location	Regional Event Impacted
	DC07 – Antiene PM10 DC09 – Wellbrook PM10	
2 December 2019	DC04 – South Muswellbrook PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
3 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
4 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
5 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
6 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
7 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
8 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
9 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
10 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
11 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
12 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10	Yes

Date	Monitoring Location	Regional Event Impacted
	DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	
14 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
15 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
16 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
18 December 2019	DC02 – Sheppard Avenue PM10 DC09 – Wellbrook PM10	Yes
19 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
20 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
21 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
22 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC06 – Edderton Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
24 December 2019	DC02 – Sheppard Avenue PM10	No
27 December 2019	DC02 – Sheppard Avenue PM10 DC09 – Wellbrook PM10	Yes
28 December 2019	DC02 – Sheppard Avenue PM10 DC06 – Edderton Rd PM10 DC09 – Wellbrook PM10	Yes
29 December 2019	DC02 – Sheppard Avenue PM10 DC07 – Antiene PM10	Yes

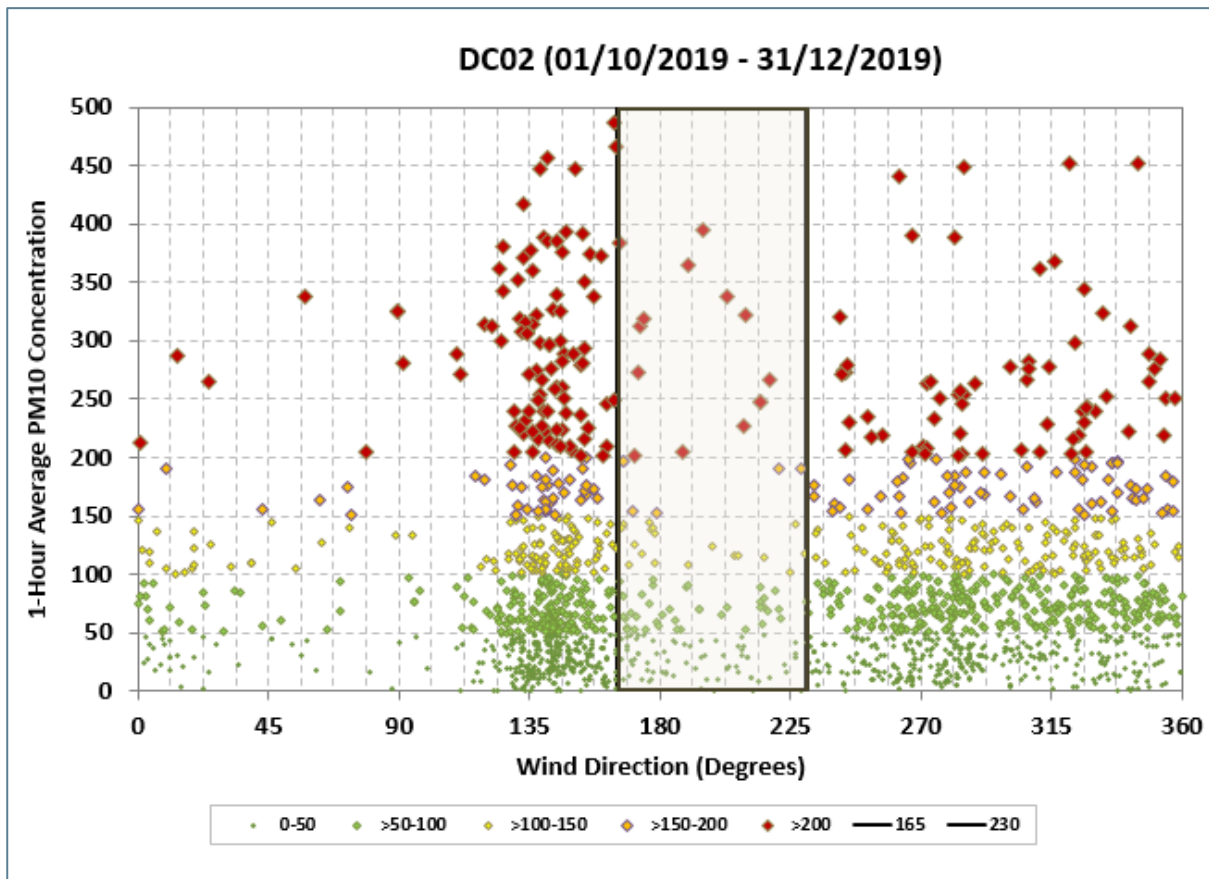
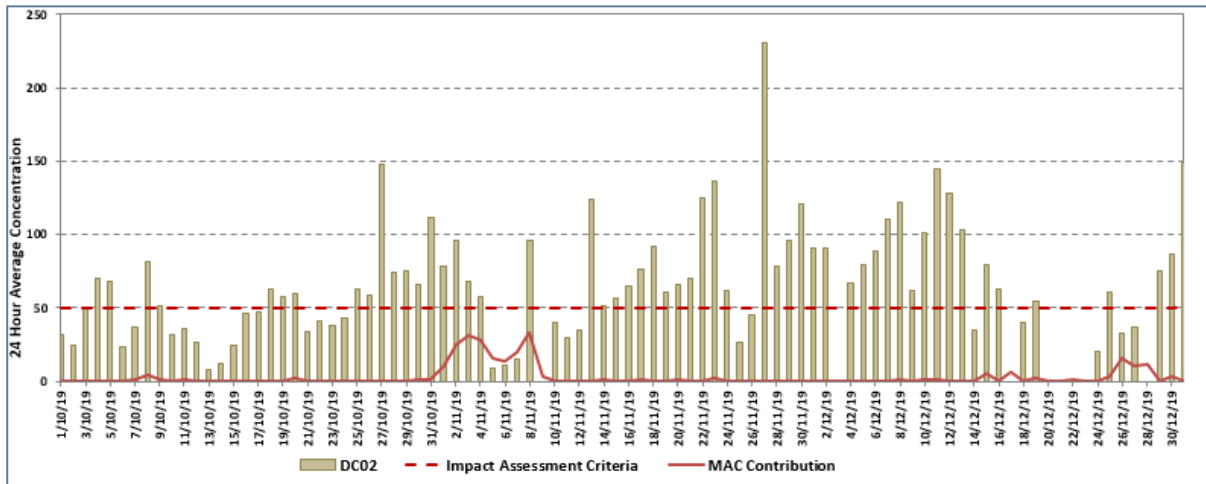
Date	Monitoring Location	Regional Event Impacted
	DC09 – Wellbrook PM10	
30 December 2019	DC02 – Sheppard Avenue PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes
31 December 2019	DC02 – Sheppard Avenue PM10 DC04 – South Muswellbrook PM10 DC05 – Roxburgh Rd PM10 DC07 – Antiene PM10 DC09 – Wellbrook PM10	Yes

Table 2 Equipment Performance Summary

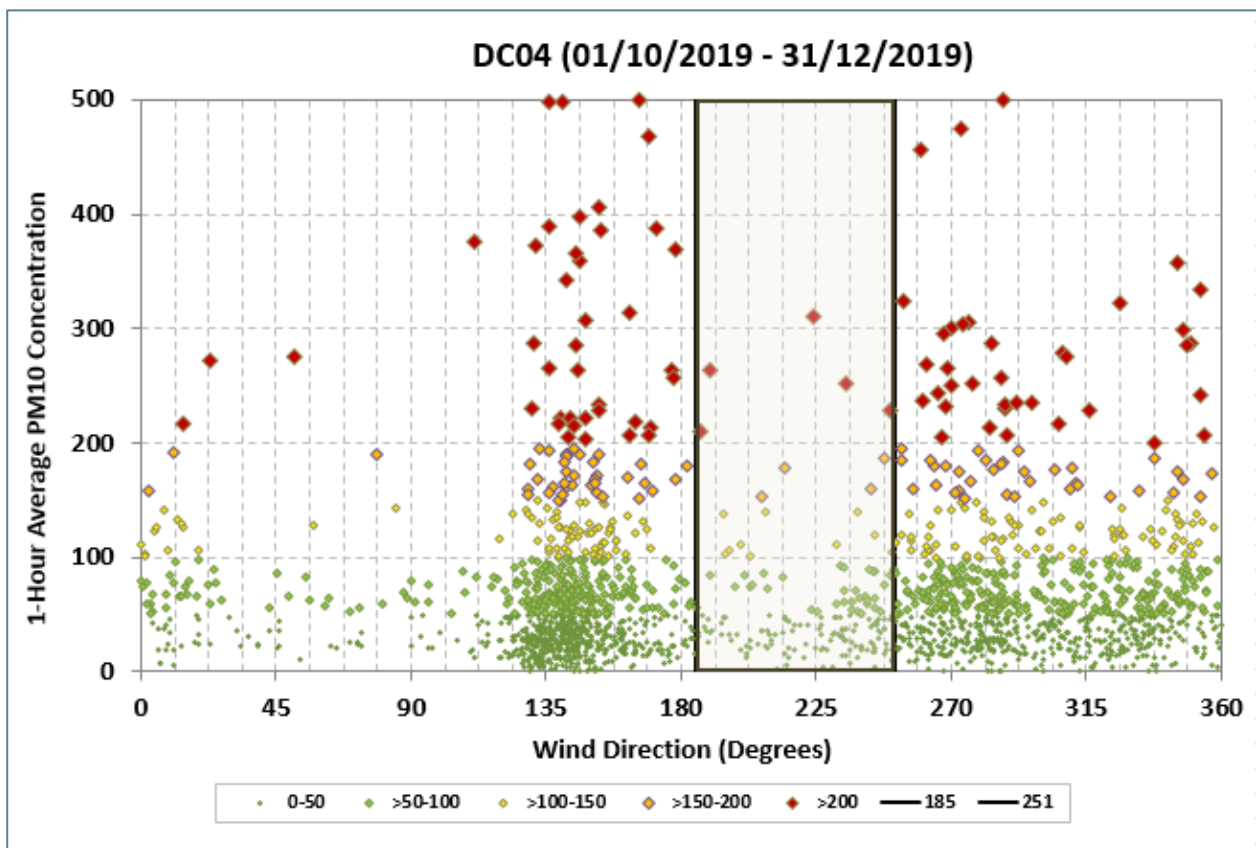
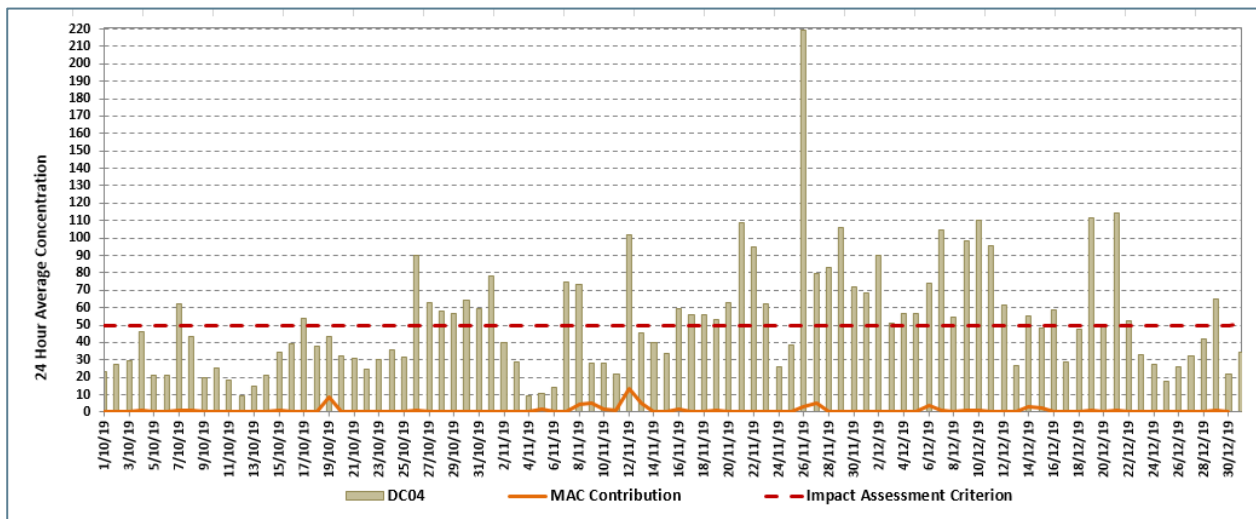
Site	Date/s	Reason
DC02	2/12/2019	Equipment issues – <75% data capture
DC06	6/11/2019 22/11/2019 10/12/2019 11/12/2019 29-31/12/2019	Equipment issues – <75% data capture
DC06	22/11/2019	Equipment issues – <75% data capture
DC07	13/12/2019	Equipment issues – <75% data capture

Table 3 Air Quality Regional Event Impacted Days Summary

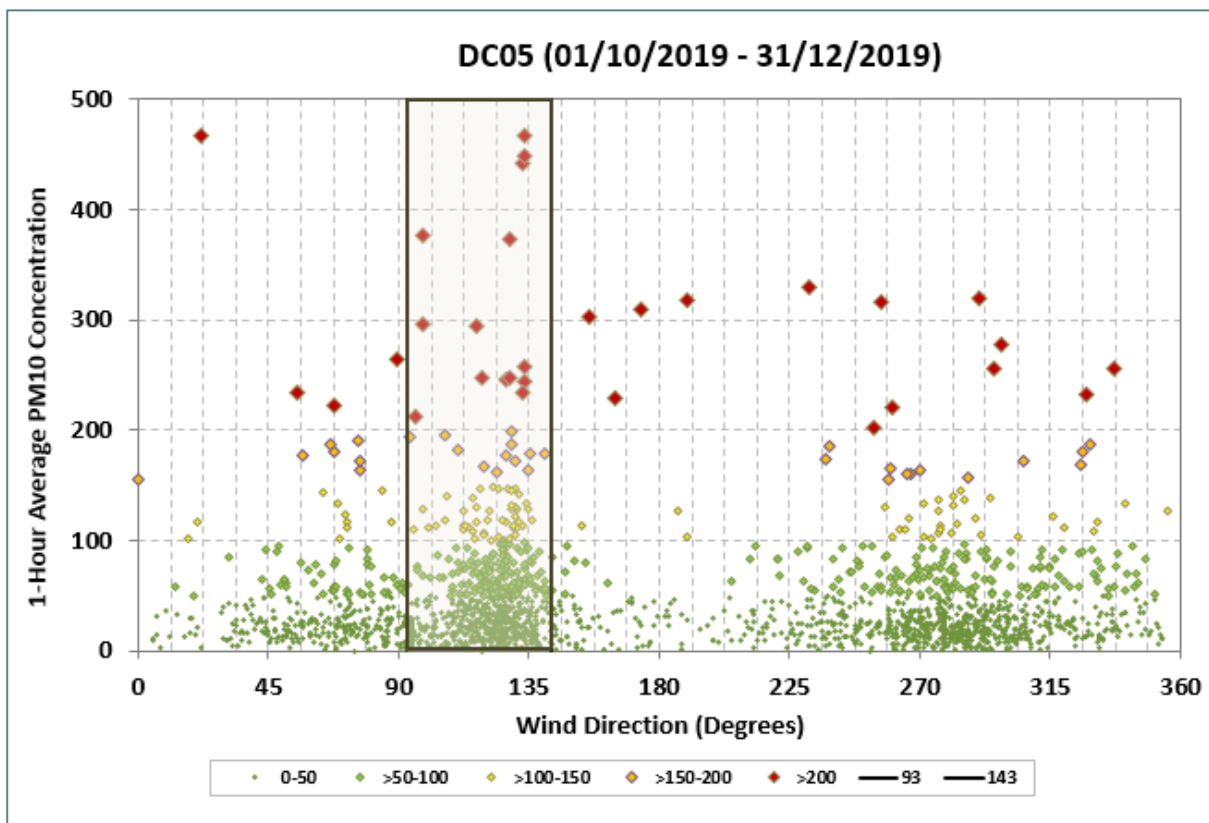
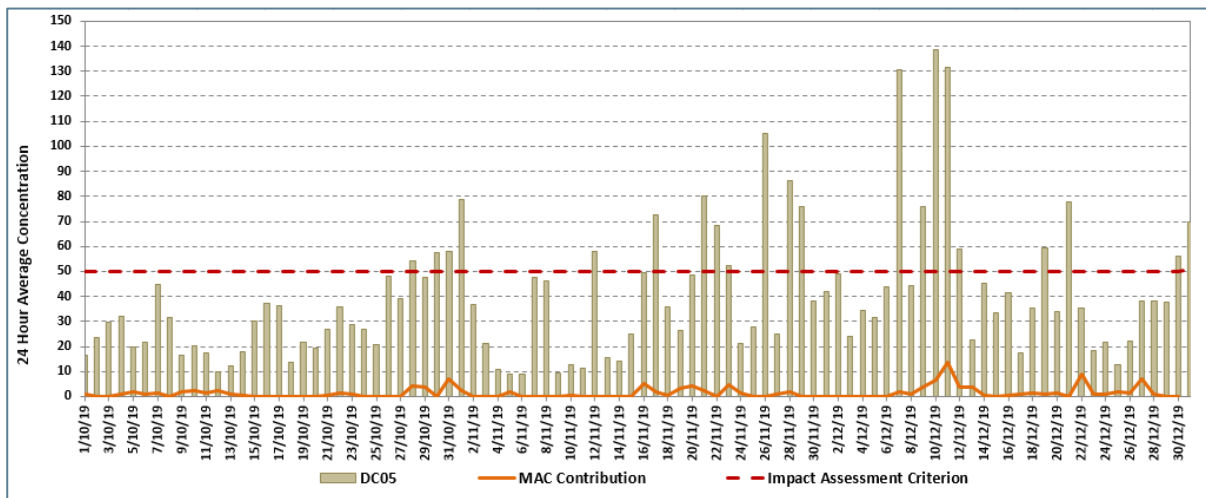
Month	No. of Days	Dates
October	6 of 31	7 th , 26 th , 27 th , 28 th , 30 th , 31 st
November	16 of 30	1 st , 7 th , 8 th , 12 th , 16 th , 17 th , 19 th , 20 th , 21 st , 22 nd , 23 rd , 26 th , 27 th , 28 th , 29 th , 30 th
December	27 of 31	1 st , 2 nd , 3 rd , 4 th , 5 th , 6 th , 7 th , 8 th , 9 th , 10 th , 11 th , 12 th , 13 th , 14 th , 15 th , 16 th , 17 th , 18 th , 19 th , 20 th , 21 st , 22 nd , 27 th , 28 th , 29 th , 30 th , 31 st

Air Quality Monitoring (Period 1 October to 31 December 2019)**Sheppard Avenue – DC02**

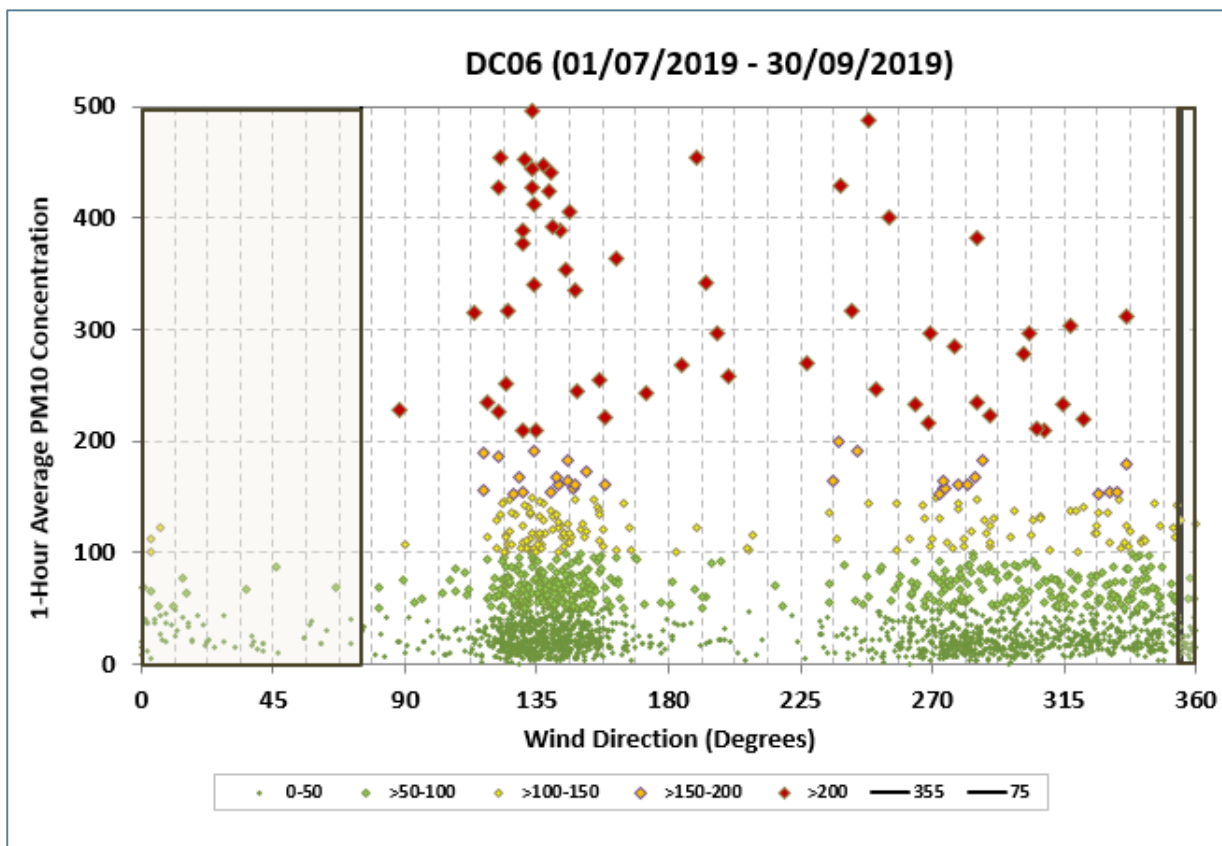
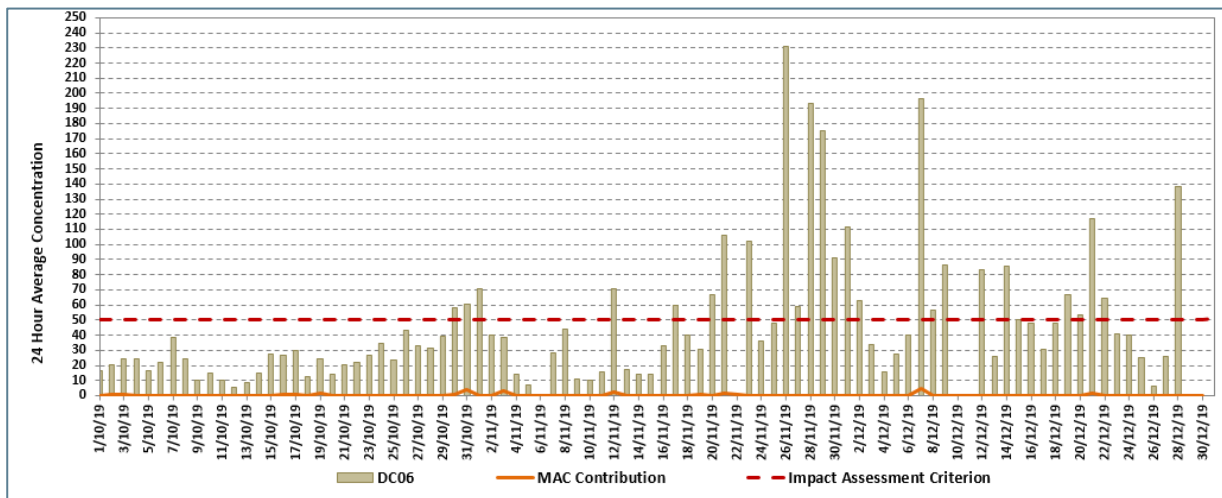
South Muswellbrook – DC04



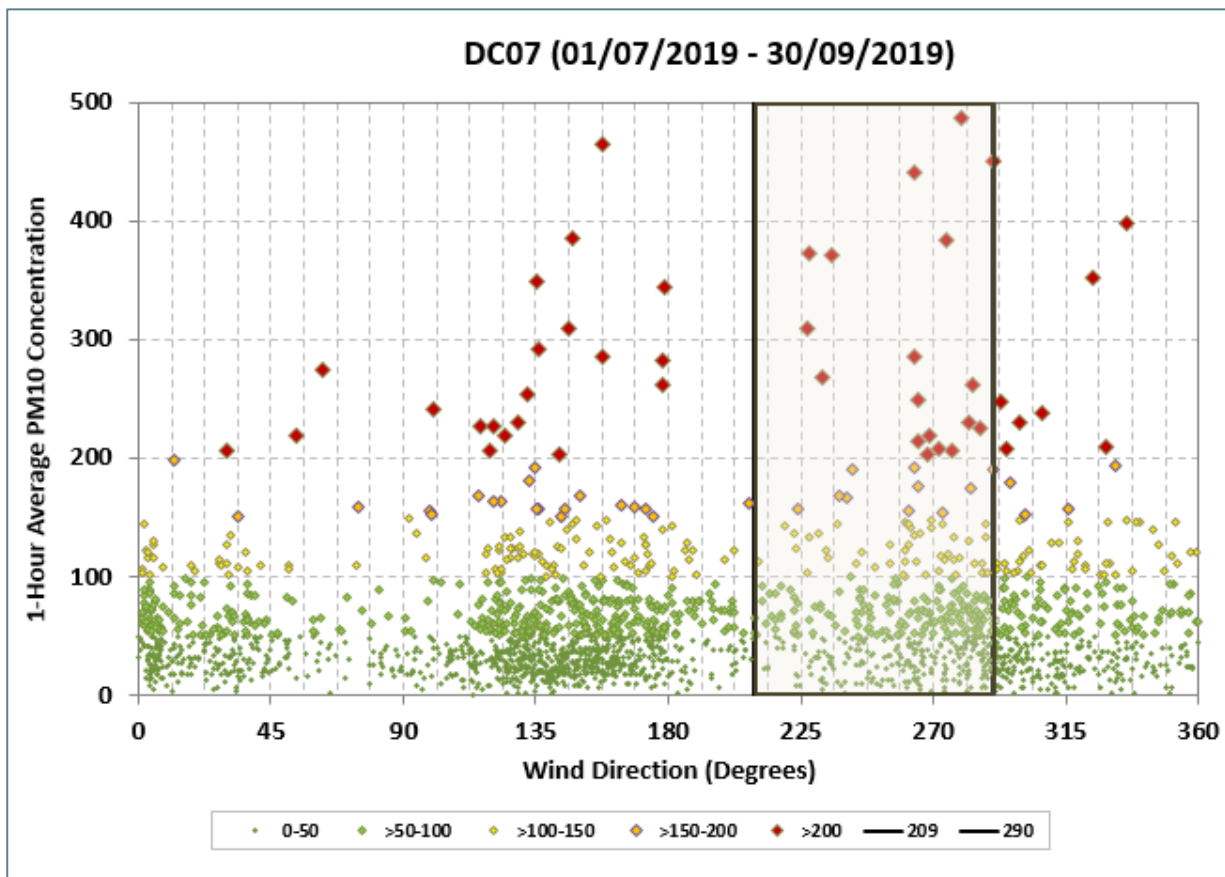
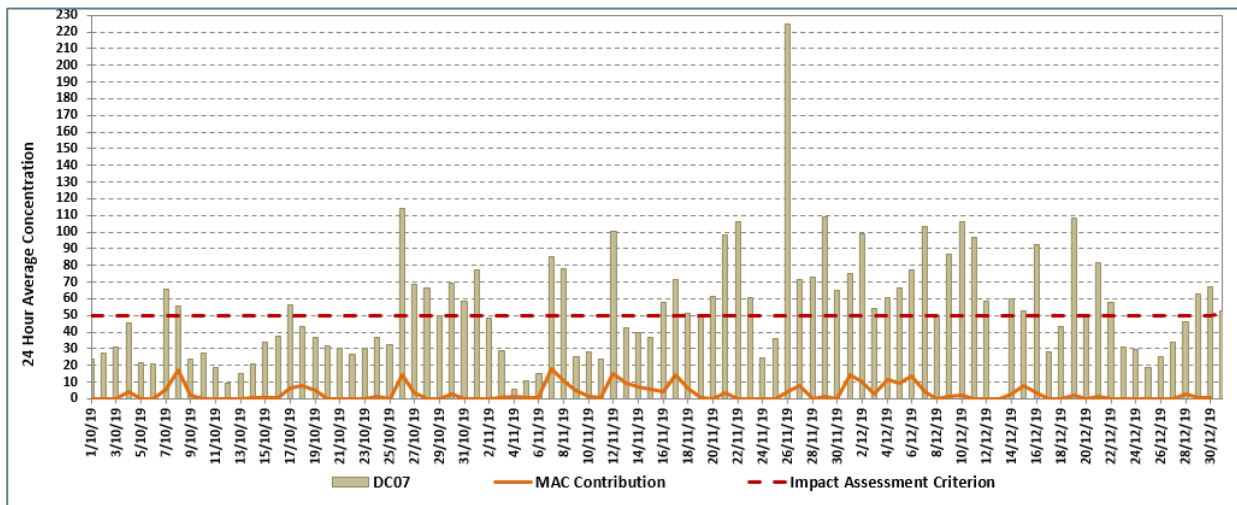
Roxburgh Road – DC05



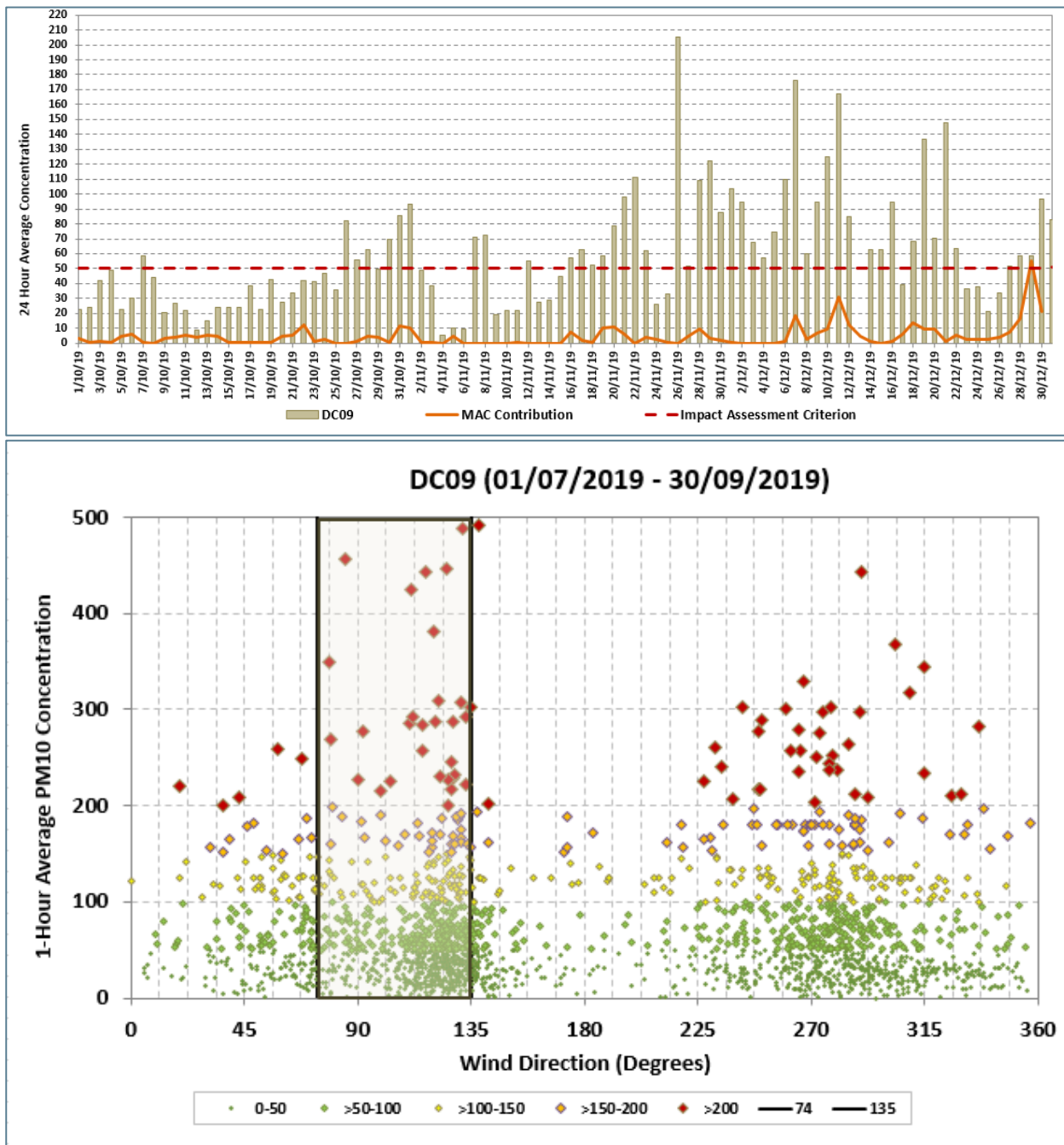
Edderton Homestead - DC06

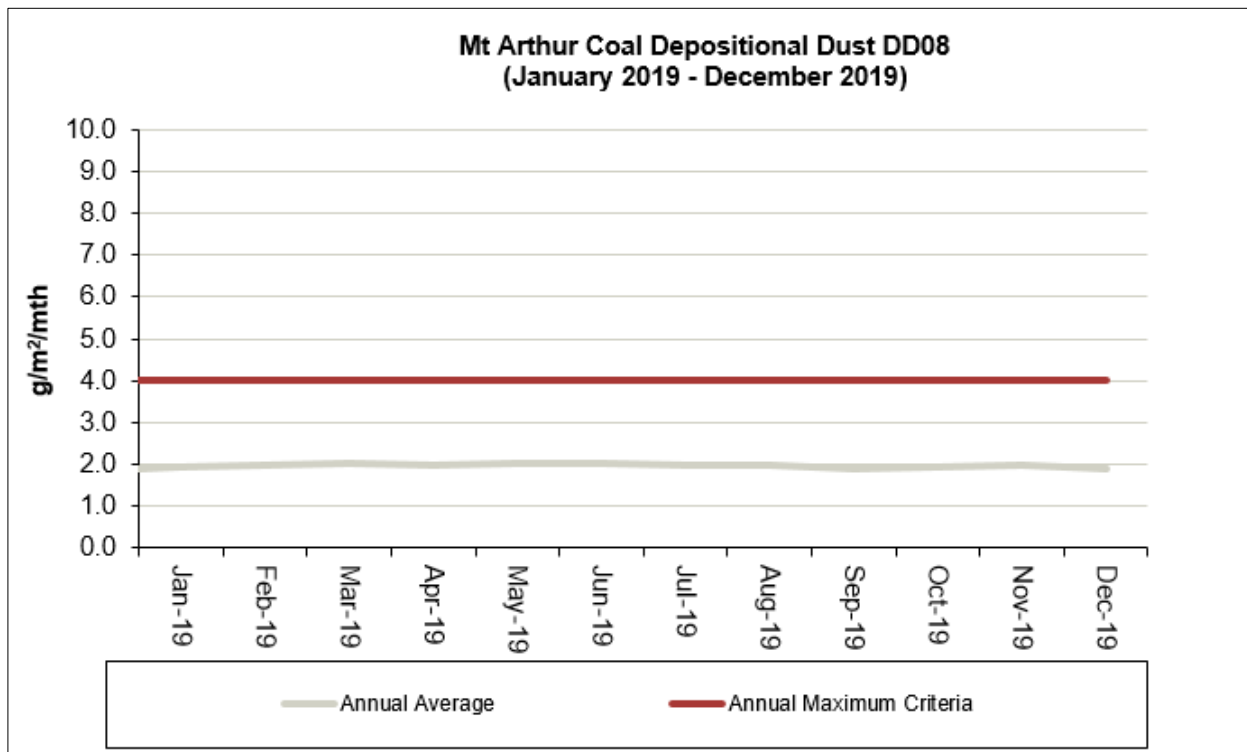
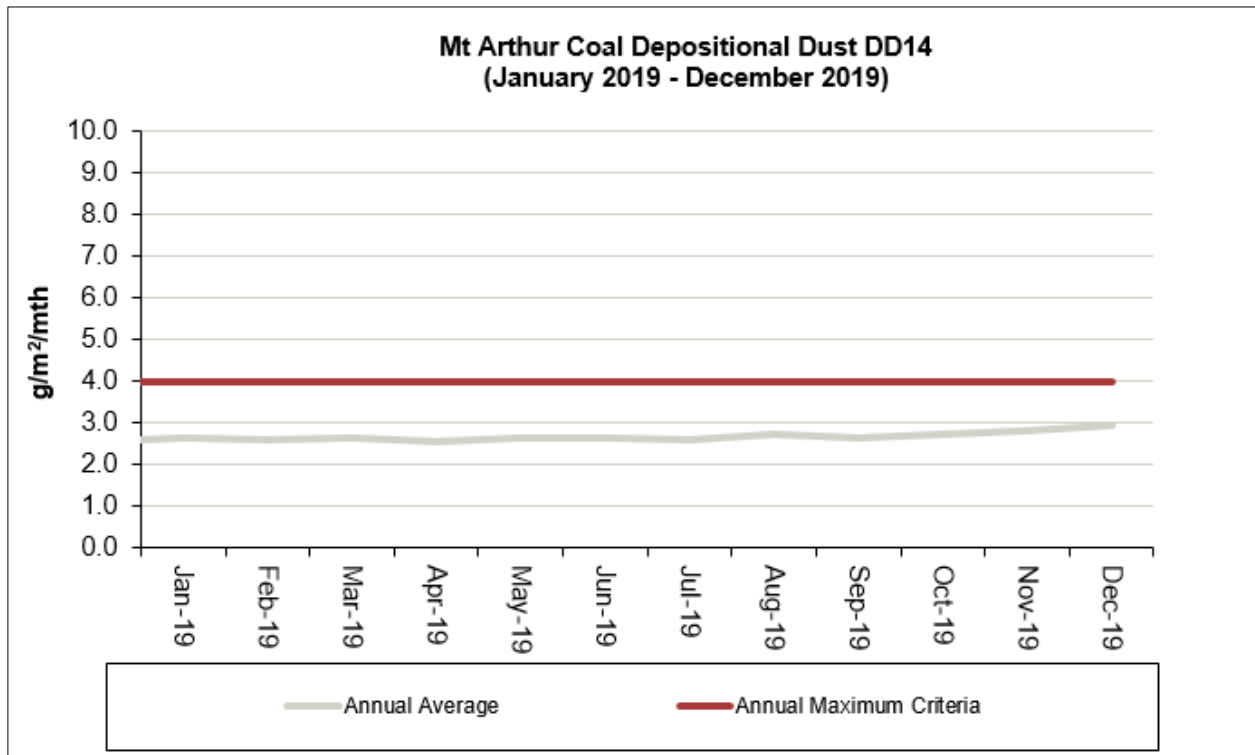


Antiene - DC07



Wellbrook – DC09



Deposited Dust**DD08****DD14**

Water Monitoring (Period 1 October to 31 December 2019):

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

Table 4 Water Monitoring Performance Summary

Date	Monitoring Location	Details
December 2019	GW2	Standing Water level GW2 exceeded the currently approved groundwater level trigger in December. 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.
December r 2019	GW3	Standing Water Level GW3 exceeded the currently approved groundwater level trigger in December. 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.
December 2019	GW23	Standing Water Level GW23 exceeded the currently approved groundwater level trigger in December. 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.
December r 2019	GW39P	Standing Water Level GW39P exceeded the currently approved groundwater level December. 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.
December 2019	OD1078-PIEZO	Standing Water Level 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.

Blast Monitoring (Period 1 October to 31 December 2019)

- 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. A survey of the area on 10 January 2020 confirmed that an area of 250.79m² (0.025 hectares) had been disturbed outside of the Approved Disturbance Boundary. A subsequent survey carried on the 10 January 2020 by HVEC confirmed our initial findings that only a small area outside the Approved Disturbance Boundary had been affected, no disturbance had occurred outside the approved mining lease boundary, no environmental harm had been caused and no disturbance had been caused to any Conservation Areas. A high visibility mesh barrier had been installed along the Approved Disturbance Boundary to prevent further access to the area and remediation works have been completed, which included spreading of topsoil over the area in question. A detailed report has been provided to the DPIE.

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.

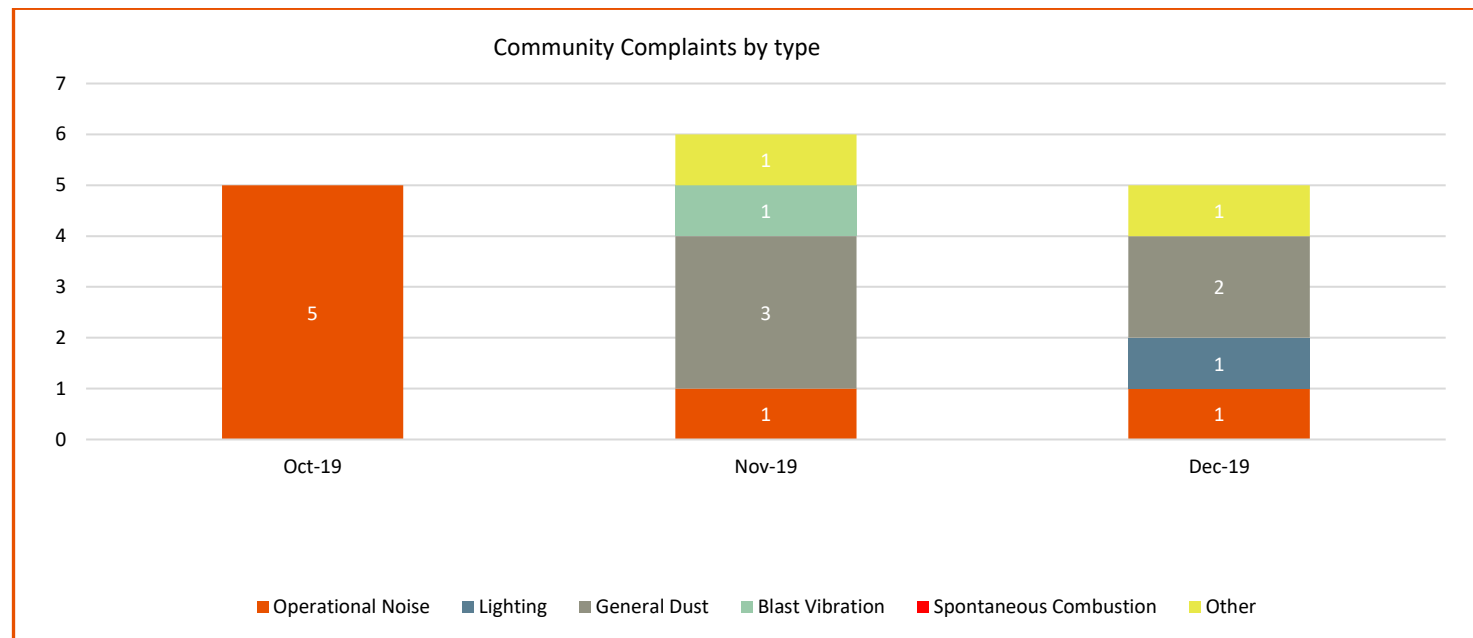
Environmental Reporting

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 October to the 31 December 2019. Mt Arthur Coal received 16 complaints during this period.



October 2019 (5 complaints)

Date	Time	From	Issue	Lodgment type	Investigation and response to caller
6/10/2019	8.15am	Racecourse Road/Sheppard Avenue	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.
13/10/2019	10.42am	Roxburgh Road	Noise	Community Response Line	Investigation revealed no unusual mining operations were occurring at the time. Noise monitoring results indicated noise levels were within regulatory criteria. Caller was advised of investigation and monitoring results.
15/10/2019	11.06pm	Roxburgh Road	Noise	Community Response Line	Investigation revealed no unusual mining operations were occurring at the time. Noise monitoring results indicated noise levels were within regulatory criteria. Caller was advised of investigation and monitoring results.
20/10/2019	10.00pm	Roxburgh Road	Noise	Community Response Line	Investigation revealed no unusual mining operations were occurring at the time. Noise monitoring results indicated noise levels were within regulatory criteria. Caller was advised of investigation and monitoring results.
24/10/2019	7.34pm	Ironbark Road	Noise	Community Response Line	Investigation revealed no unusual mining operations were occurring at the time. Noise monitoring results indicated noise levels were within regulatory criteria. Caller was advised of investigation and monitoring results.

November 2019 (6 complaints)

Date	Time	From	Issue	Lodgment type	Investigation and response to caller
4/11/2019	10.51am	Denman Road	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 advised of investigation results.
4/11/2019	5.00pm	Singleton	Off-site bus pick up/drop off point	Community Response Line	Investigation revealed the existing bus pick up/drop off point would be better suited to a different location to allow for improved traffic flow and parking options. Caller advised of investigation results.
7/11/2019	12.59pm	New England Highway	General Dust	Community Response Line	Investigation revealed operations had been modified. Dust monitoring results indicated levels were within regulatory criteria. Caller advised of investigation and monitoring results.
10/11/2019	10.41am	Racecourse Road/Sheppard Avenue	General Dust	Community Response Line	Operations were modified. Dust monitoring results indicated levels were within regulatory criteria. Caller advised of investigation and monitoring results.
12/11/2019	2.29pm	Racecourse Road/Sheppard Avenue	General Dust	Community Response Line	Investigation revealed operations had been modified. Dust monitoring results indicated levels were within regulatory criteria. Caller advised of investigation and monitoring results.
28/11/2019	10.08pm	Roxburgh Road	Operational Noise	Community Response Line	Investigation revealed no unusual mining operations were occurring at the time. Noise monitoring results indicated noise levels were within regulatory criteria. Caller advised of investigation and monitoring results.

December 2019 (5 complaints)

Date	Time	From	Issue	Lodgment type	Investigation and response to caller
1/12/2019	9.30pm	Roxburgh Road	Lighting	Community Response Line	The on-coming night shift OCE was notified of the complaint and checked the positioning of the light to ensure it was re-directed away from the caller's location.
14/12/2019	7.37pm	Racecourse Road/Sheppard Avenue	General Dust	Community Response Line	Investigation revealed operations had been modified. Caller was advised of investigation and monitoring results.
18/12/2019	5.48am	Roxburgh Road	Operational Noise	Community Response Line	Investigation revealed no unusual mining operations were occurring at the time. Noise monitoring results indicated noise levels were within regulatory criteria. Caller was advised of investigation and monitoring results.
25/12/2019	3.51am	Roxburgh Road	Operational Noise	Community Response Line	Investigation revealed no unusual mining operations were occurring at the time. Noise monitoring results indicated noise levels were within regulatory criteria. Caller was advised of investigation and monitoring results.
27/12/2019	1.03pm	Thomas Mitchell Drive	Chips in vehicle windscreen from coal or rocks near coal train	Community Response Line	Investigation revealed that the coal train was not loaded at time of incident. Caller advised of investigation results.

Actions from previous meeting/s

The actions from previous meetings are listed below.

Actions from CCC meeting held 21 November 2019

- Action 1: MAC to formalise a statement regarding the process for the community, business and department to share complaint information.
- Action 2: MAC to investigate improving the search function of the BHP website to provide search results leading to the MAC section of the site.
- Action 3: Confirm with all community members on the CCC that they are willing for their contact information to be made available for complainants and community members to contact them as they wish.
- Action 4a: WP to confirm the procedures of other CCC committees regarding the provision of complaint information.
- Action 4b: Determine the viability of providing information on number of complaints and the number of complaints by individual complainants (not identified) following feedback from Action 4a.
- Action 5: MAC to arrange a site visit to MacLean's Hill for the CCC to gain a better understanding of the lighting issue.
- Action 6: WP to arrange a department representative to discuss the lighting issue and associated community impacts particularly through the provision of defining offensive lighting.
- Action 7: JN to provide information of how MAC manage their water on site.

Actions remaining open from previous meetings

- Action 4 (Sept19): DP to enquire about the approvals process and share with the CCC to clarify the required timeframes.