

## Mt Arthur Coal Community Consultative Committee

Meeting Date: 22 November 2019

Information provided:

1 July to 30 September 2019

### Environmental Management

#### FY19 Rehabilitation Update

Due to poor weather conditions 17.5 ha of completed rehabilitation on the VD5 dump. An additional 32.4 ha was available for seeding with topsoil applied on the VD5, CD2 and Saddlers South dumps.

#### FY20 Rehabilitation Update

Rehab is progressing well in FY20. Already approximately 40ha of land has had seed applied, across VD5, CD2 and Saddlers South dumps. Some Spring rain allowing germination in these areas as well as areas seeded in FY19. An additional 38.1 ha of dump space across Drayton and Saddlers South dumps has had topsoil applied ready for seeding at the end of October 2019.

### Environmental Performance

#### Air Quality Monitoring (Period 1 July to 30 September 2019)

- This paper (for the reporting period of 1 July 2019 to 30 September 2019) covers the performance of all six statutory PM<sub>10</sub> monitoring sites using TEOMs, and the two dust deposition gauges identified above.
- 9 days within the reporting period experienced elevated absolute PM<sub>10</sub> 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
8 August 2019	DC02 – Sheppard Avenue PM <sub>10</sub> DC09 – Wellbrook PM <sub>10</sub>
9 August 2019	DC02 – Sheppard Avenue PM <sub>10</sub> DC09 – Wellbrook PM <sub>10</sub>
19 August 2019	DC02 – Sheppard Avenue PM <sub>10</sub>

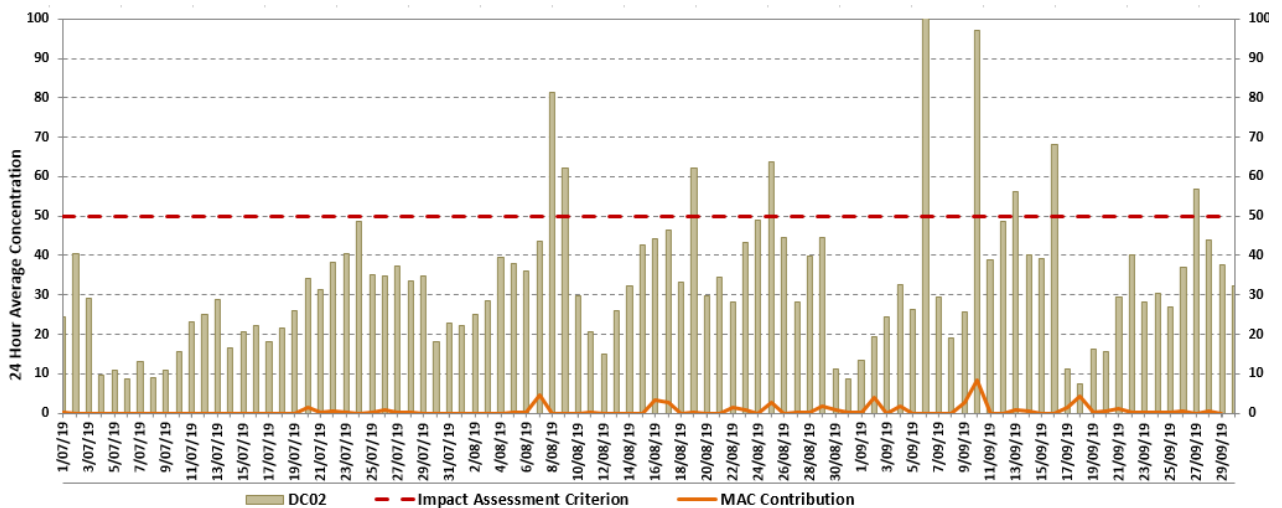
Date	Monitoring Location
25 August 2019	DC02 – Sheppard Avenue PM <sub>10</sub>
6 September 2019	DC02 – Sheppard Avenue PM <sub>10</sub> DC04 – South Muswellbrook PM <sub>10</sub> DC05 – Roxburgh Rd PM <sub>10</sub> DC07 – Antiene PM <sub>10</sub> DC09 – Wellbrook PM <sub>10</sub>
10 September 2019	DC02 – Sheppard Avenue PM <sub>10</sub>
13 September 2019	DC02 – Sheppard Avenue PM <sub>10</sub> DC09 – Wellbrook PM <sub>10</sub>
16 September 2019	DC02 – Sheppard Avenue PM <sub>10</sub>
27 September 2019	DC02 – Sheppard Avenue PM <sub>10</sub>

**Equipment Performance issues**

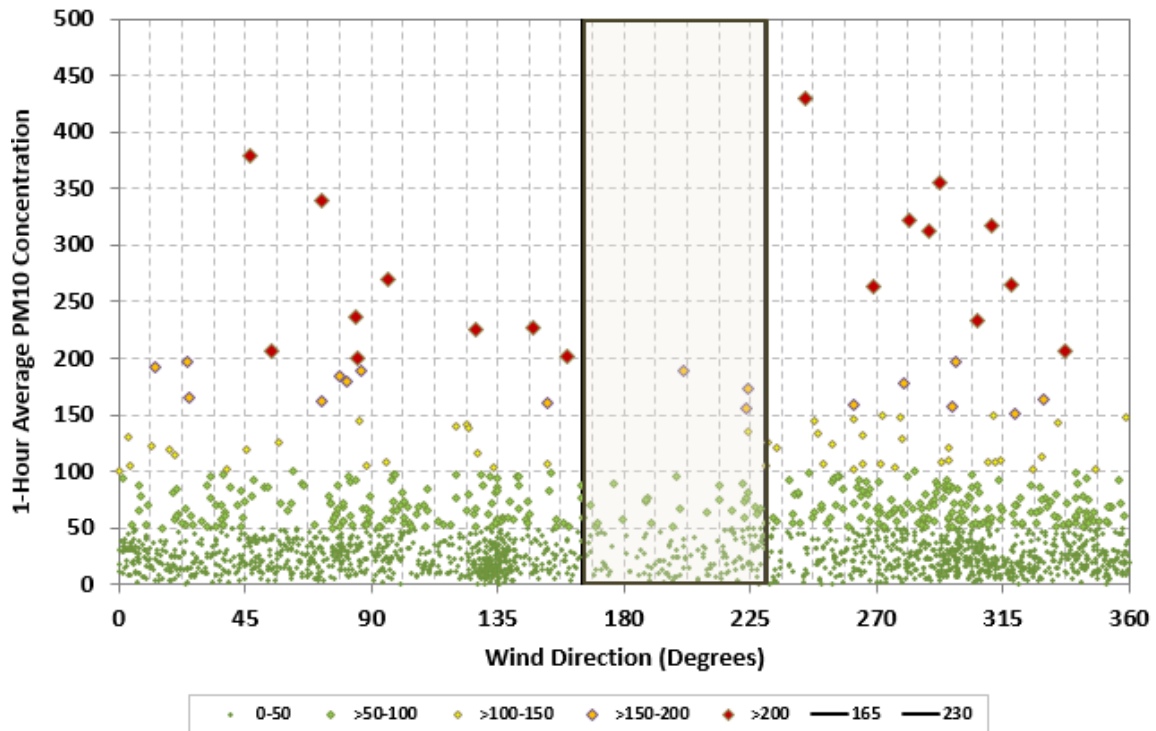
Site	Date/s	Reason
DC05	06/07/2019	Equipment issues – <75% data capture
DC05	07/07/2019	Equipment issues – <75% data capture
DC05	08/07/2019	Equipment issues – <75% data capture

**Air Quality Monitoring (Period 1 July to 30 September 2019)**

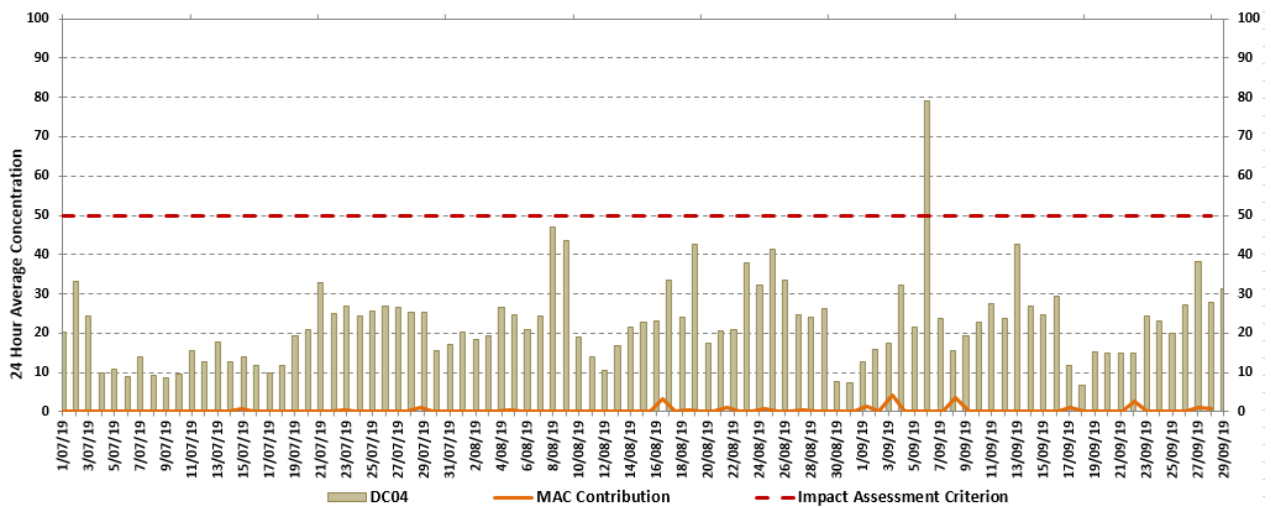
**Sheppard Avenue – DC02**

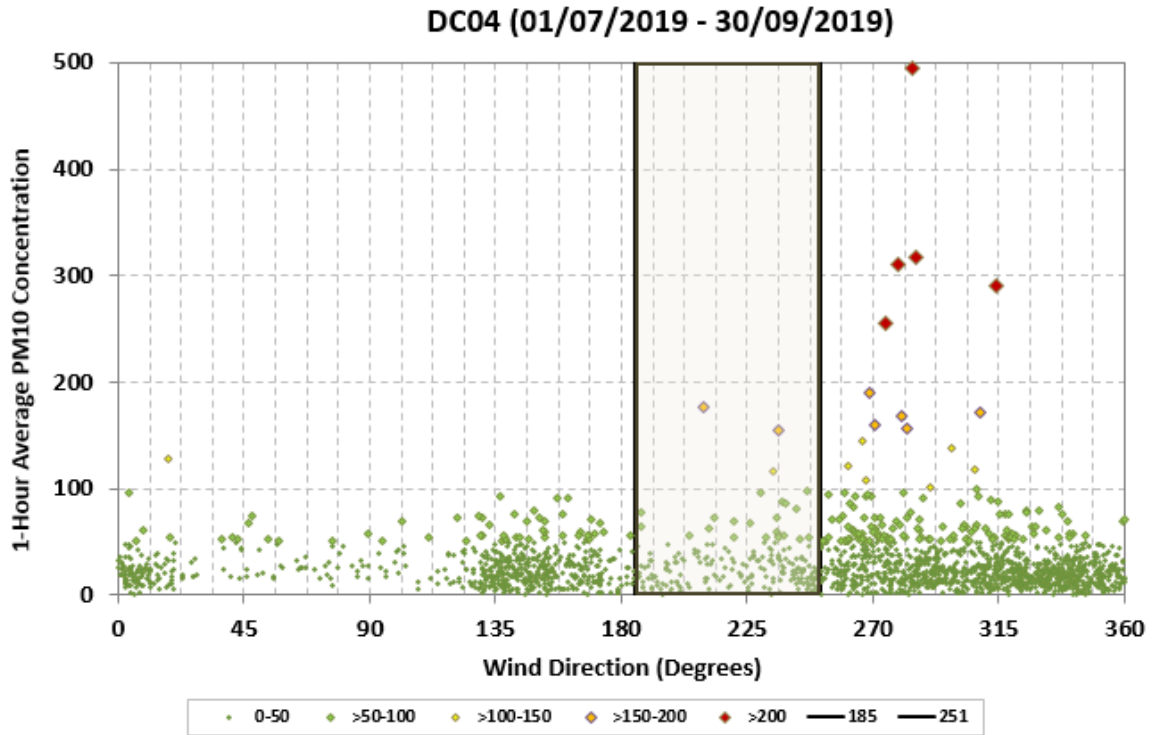


DC02 (01/07/2019 - 30/09/2019)

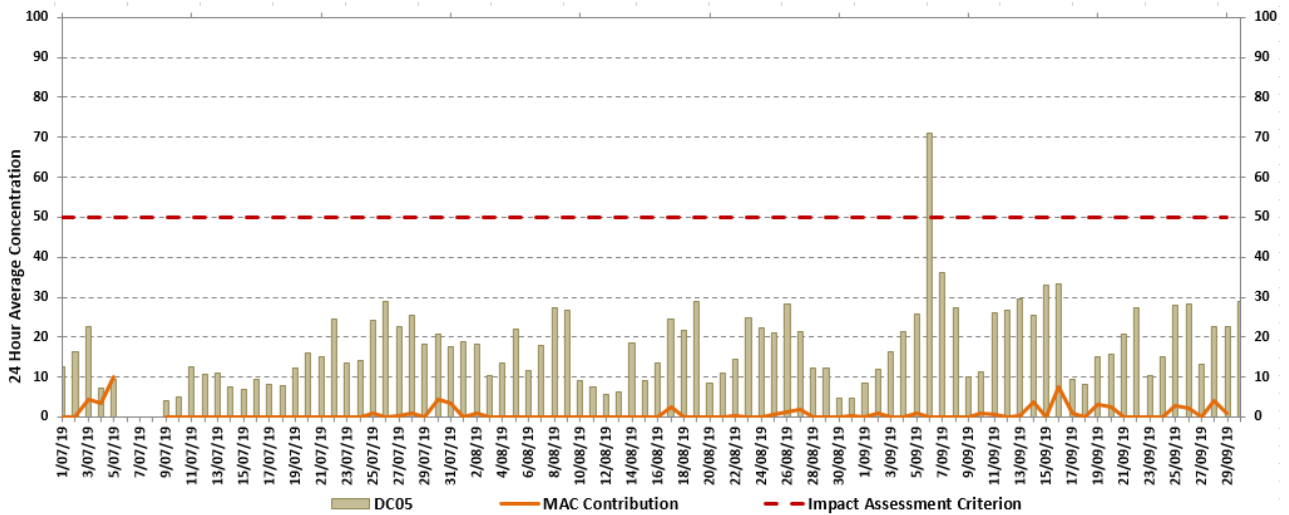


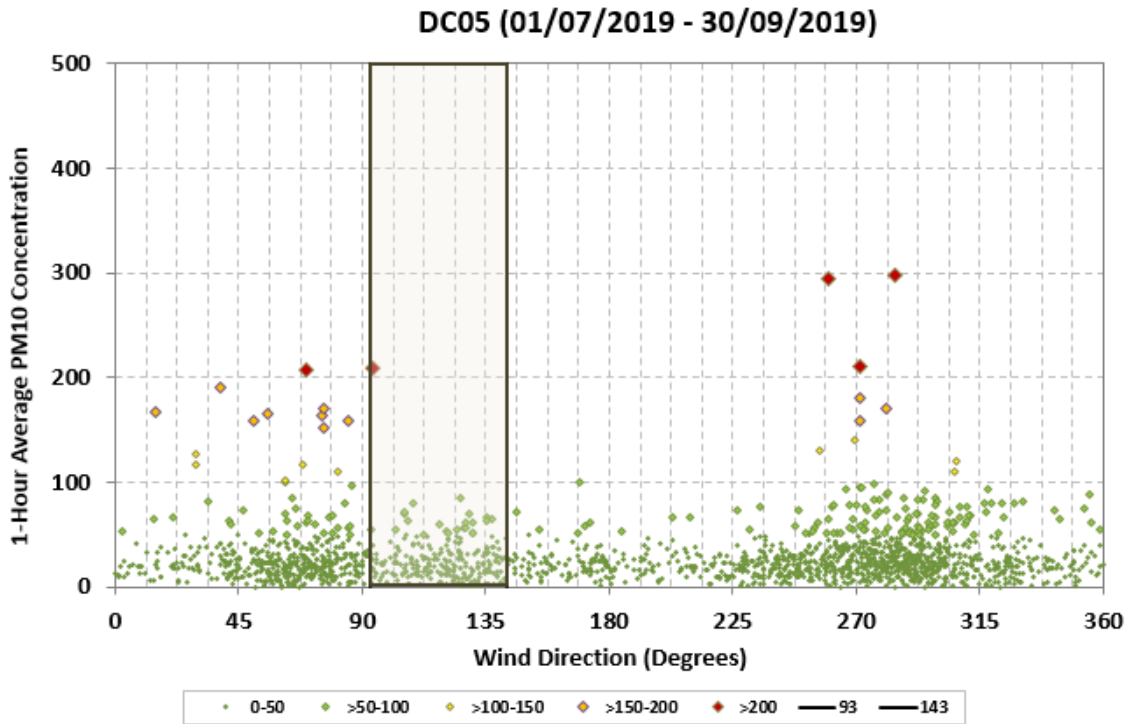
South Muswellbrook – DC04



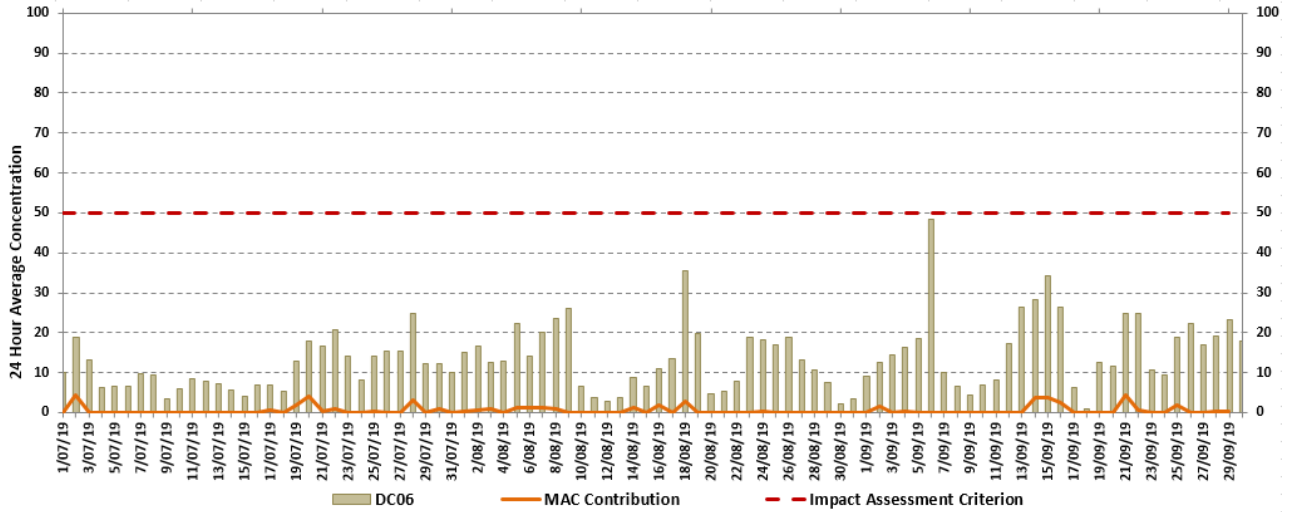


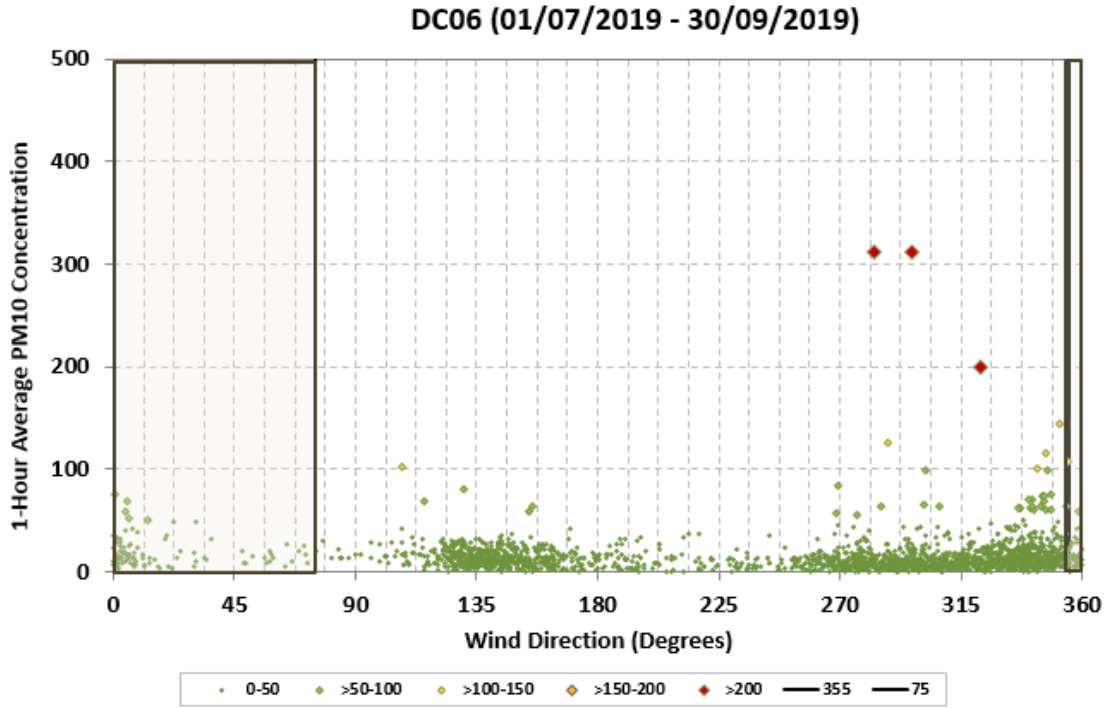
### Roxburgh Road – DC05



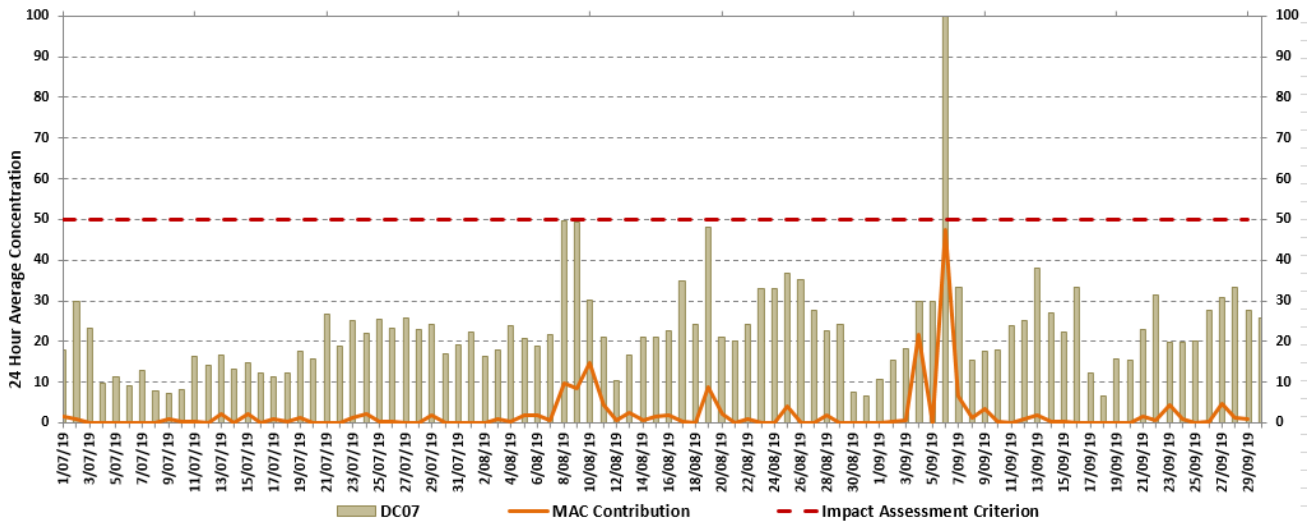


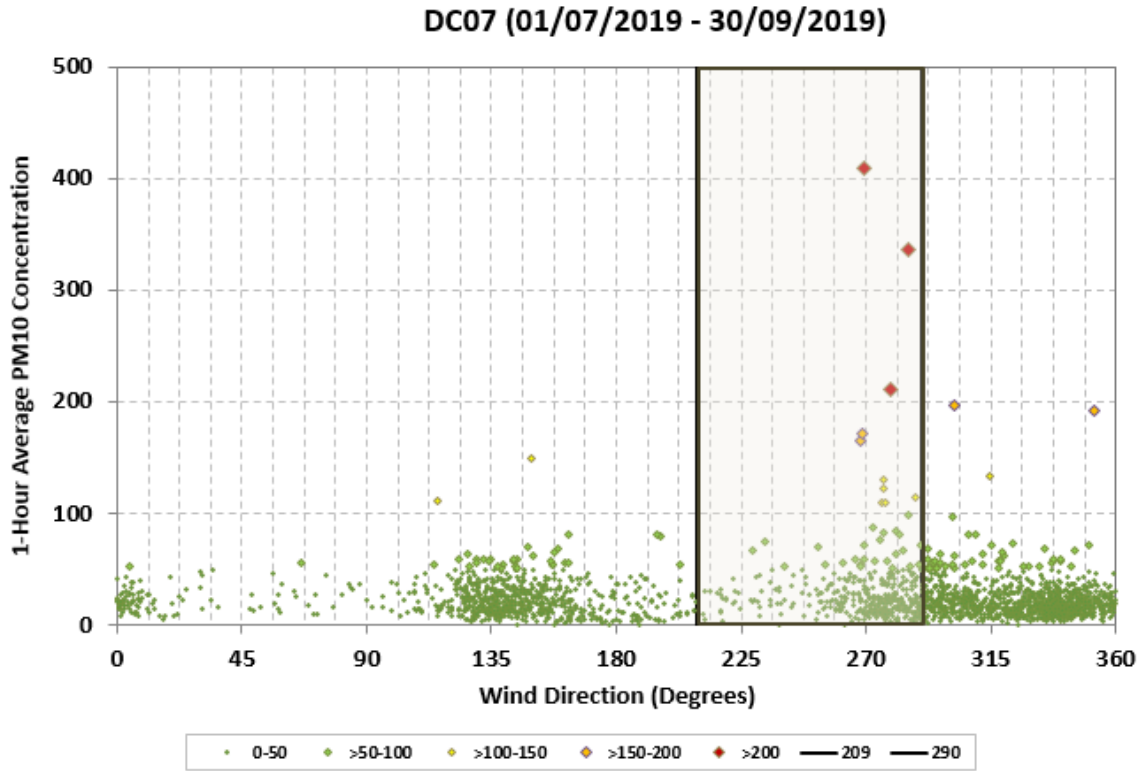
### Edderton Homestead - DC06



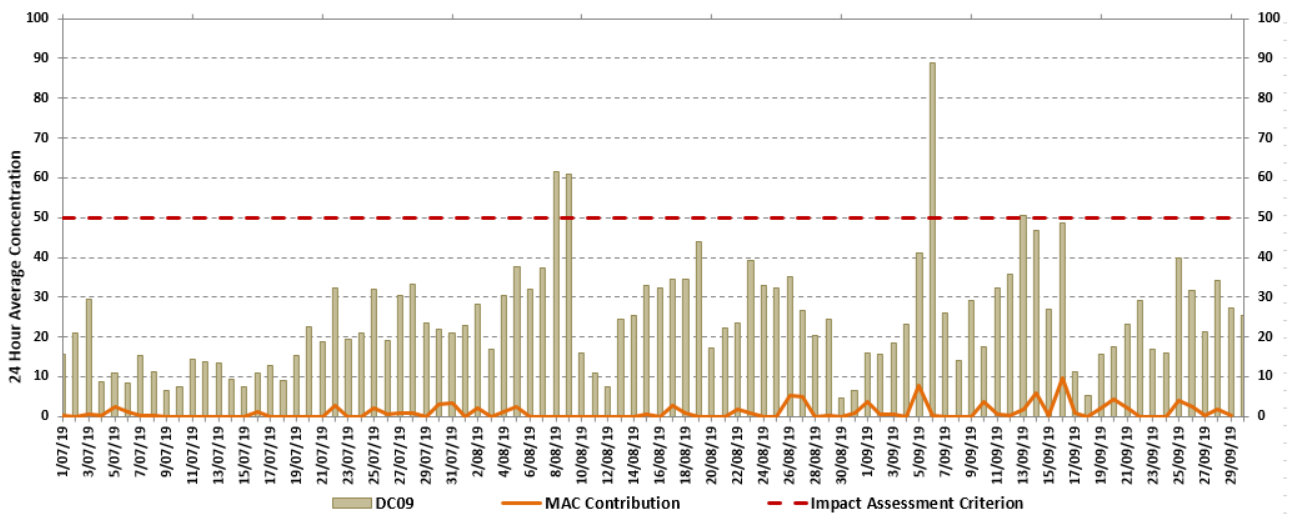


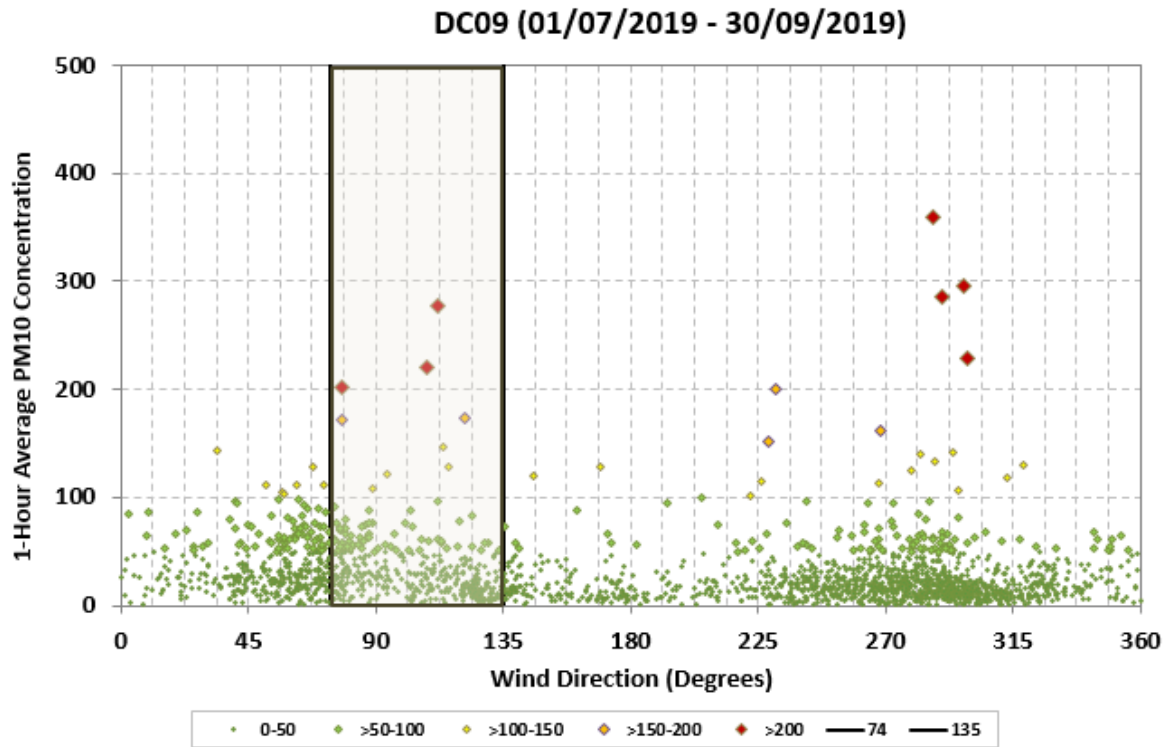
### Antiene - DC07



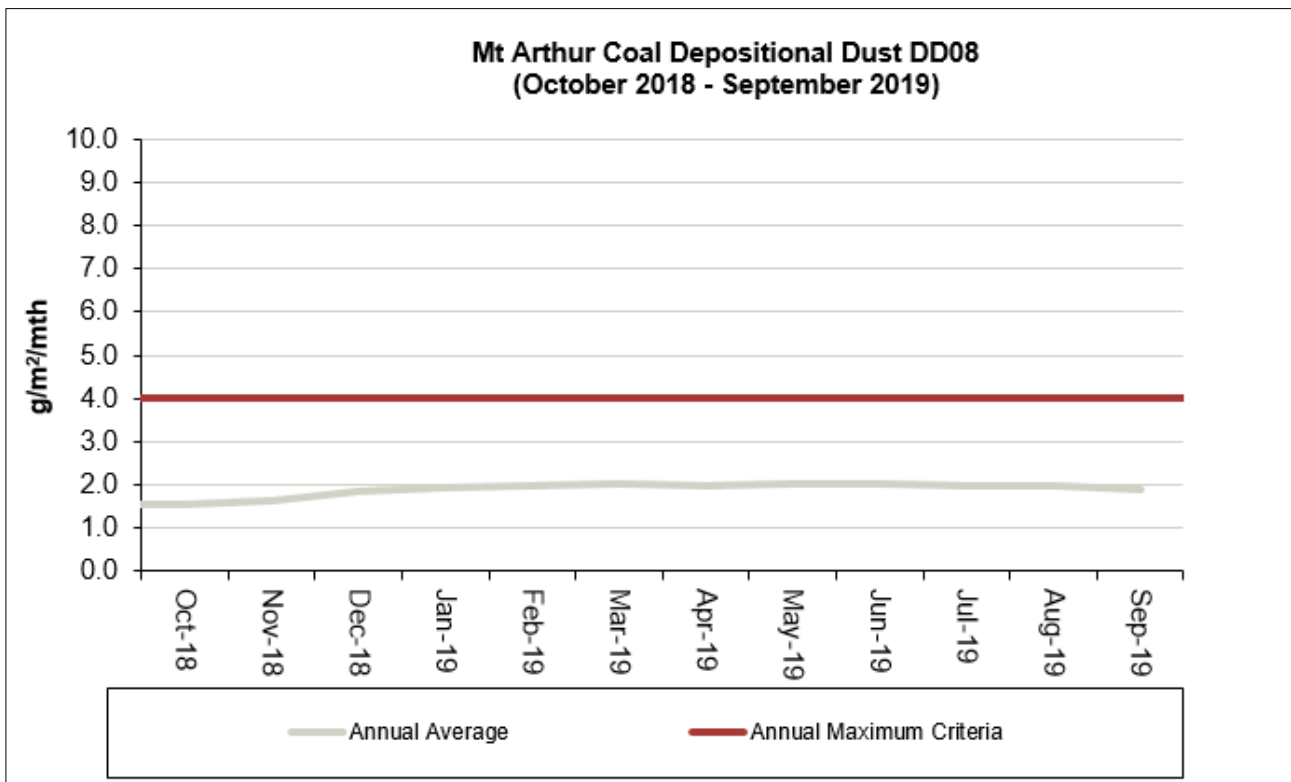


### Wellbrook – DC09



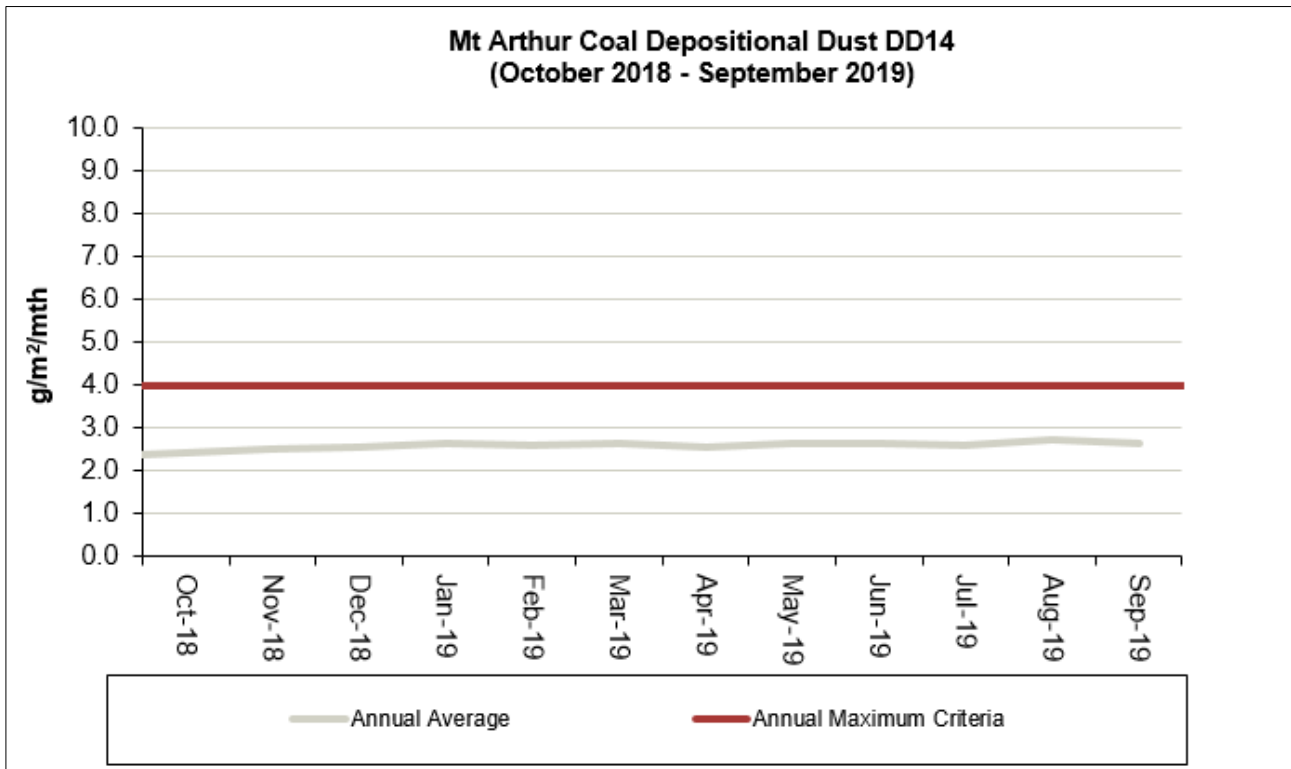


**Deposited Dust**  
**DD08**





DD14



**Water Monitoring (Period 1 July to 30 September 2019):**

- There were no occurrences within the reporting period where either surface or groundwater sampling points exceeded trigger levels.

**Table 2 Water Monitoring Performance Summary**

Date	Monitoring Location	Details
September 2019	GW2	<p><b>Standing Water level and Electrical Conductivity</b></p> <p>GW2 exceeded the currently approved groundwater level and EC triggers in September. The groundwater levels and the cumulative rainfall departure (CRD) in this area show a strong correlation. Historically, EC values show a correlation with both rainfall trends and groundwater elevations and during, 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.</p>
September 2019	GW3	<p><b>Standing Water Level</b></p> <p>GW3 exceeded the currently approved groundwater level trigger in September. 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.</p>

Date	Monitoring Location	Details
September 2019	GW21	<b>Standing Water Level</b> GW21 exceeded the currently approved groundwater level trigger in September. The groundwater level and the CRD in this area show a correlation. The trigger level in this bore has been intermittently exceeded since 2014. The water level trend displays seasonal oscillations correlated with the CRD. 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.
September 2019	GW23	<b>Standing Water Level</b> GW23 exceeded the currently approved groundwater level trigger in September. 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.
September 2019	GW39P	<b>Standing Water Level and Electrical Conductivity</b> GW39P exceeded the currently approved groundwater level and EC triggers in September. 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. Historically, EC values show a correlation with both rainfall trends and groundwater elevations. Therefore, it is considered likely that the current drought is the dominant cause of the trigger exceedance within this bore.
September 2019	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.

### Blast Monitoring (Period 1 July to 30 September 2019)

- There was an overpressure exceedance during the reporting period at BP07 Sheppard Avenue. Details below.

**Table 3 Blast Monitoring Performance Summary**

Date	Monitoring Location	Details
08/08/2019	BP07 Sheppard Avenue	Investigation by external consultants determined that the exceedance occurred due to a high wind event rather than mining activities.

### **Environmental Incidents**

- Blast fume event on the 17 April 2019. EPA Notice to Provide Information (and subsequent Variation Notice/s) complied with. EPA closed out investigation with no further action or notices.
- Overpressure exceedance event on the 8 August 2019 currently still under investigation by the DPIE. However external consultant determined exceedance due to high wind event.
- Air quality investigation on the 8 August 2019 provided to DPIE following a notice, still under review by DPIE with no further action or notices at this time.

### **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

### July 2019

Date	Time	From	Issue	Lodgment type	Investigation and response to caller
10/07/2019	5.57pm	Racecourse Road/Sheppard Avenue	Lighting	Community Response Line	Investigation revealed location of lights, which were redirected or turned off. Caller was advised of investigation results and issue rectified.
10/07/2019	9.35pm	Racecourse Road/Sheppard Avenue	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.
13/07/2019	6.08pm	Racecourse Road/Sheppard Avenue	Lighting	Community Response Line	Investigation revealed location of lights, which were redirected or turned off. Caller was advised of investigation results and issue rectified.
18/07/2019	8.38pm	Roxburgh Road	Lighting	Community Response Line	Investigation revealed location of lights, which were redirected or turned off. Caller was advised of investigation results and issue rectified.
19/07/2019	6.38pm	Roxburgh Road	Lighting	Community Response Line	Investigation revealed location of lights, which were redirected or turned off. Caller was advised of investigation results and issue rectified.
25/07/2019	7.21pm	Racecourse Road/Sheppard Avenue	Lighting	Community Response Line	Investigation revealed location of lights, which were redirected or turned off. Caller was advised of investigation results and issue rectified.
27/07/2019	7.08pm	Roxburgh Road	Lighting	Community Response Line	Investigation revealed location of lights, which were redirected or turned off. Caller was advised of investigation results and issue rectified.
27/07/2019	7.10pm	Racecourse Road/Sheppard Avenue	Lighting	Community Response Line	Investigation revealed location of lights, which were redirected or turned off. Caller was advised of investigation results and issue rectified.
29/07/2019	9.44pm	Racecourse Road/Sheppard Avenue	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.
30/07/2019	6.09pm	Roxburgh Road	Lighting	Community Response Line	Investigation revealed location of lights, which were redirected or turned off. Caller was advised of investigation results and issue rectified.

## August 2019

Date	Time	From	Issue	Lodgment type	Investigation and response to caller
3/08/2019	6.48pm	Roxburgh 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.
4/08/2019	5.52pm	Linden/Roxburgh Road	General Dust	Community Response Line	Investigation revealed no unusual mining activities were occurring at the time, however action was taken to minimise dust. 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 actions taken.
7/08/2019	6.30pm	Roxburgh 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.
8/08/2019	2.41pm	Muswellbrook	General Dust	Community Response Line	Pending further investigation.
12/08/2019	10.21am	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.
12/08/2019	10.22am	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.
12/08/2019	12.57pm	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.
12/08/2019	7.36pm	Roxburgh 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.
13/08/2019	4.53pm	Denman	Spontaneous Combustion	Community Response Line	Investigation revealed the operations team was managing a spontaneous combustion event in-line with the site procedure. Caller was advised of investigation.
15/08/2019	1:55pm	Roxburgh 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.

27/08/2019	6.56pm	Roxburgh 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.
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**September 2019**

<b>Date</b>	<b>Time</b>	<b>From</b>	<b>Issue</b>	<b>Lodgment type</b>	<b>Investigation and response to caller</b>
9/09/2019	7.04pm	Roxburgh Road	Lighting	Community Response Line	Investigation revealed location of lights, which were redirected or turned off. Caller was advised of investigation results and actions taken.
29/09/2019	6.04am	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.
29/09/2019	9.39pm	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.