

# Mt Arthur Coal Community Consultative Committee

Planned meeting date: 14 August 2020 Information provided: 1 April to 30 June 2020

# **Environmental Management**

#### FY20/FY21 Rehabilitation Update

The Rehabilitation Management Plan was approved in June. The document included improvements to the species mix for rehabilitation, completion criteria, monitoring and rehabilitation methodologies.

At the end of FY20, 81ha of rehabilitation was completed (target of 81ha) with an additional 31.3ha in the rehabilitation process (bulked shaped or with topsoil spread). Approximately 84.5ha of rehabilitation on VD1 was improved and maintained over FY20 with weed treatment and stem density reduction being the primary methods used.

Mt Arthur Coal completed 17.37ha of rehabilitation in July of the 73ha target for FY21, with 19ha with topsoil spread. These areas are in Saddlers Central, VD4 and VD5. Since the last reporting period, Mt Arthur Coal completed rabbit baiting and wild dog baiting programs.

## **Environmental Performance**

#### Air Quality Monitoring (Period: 1 April to 30 June 2020)

- This paper (for the reporting period of 1 April to 30 June 2020) covers the performance of all six statutory PM10 monitoring sites using TEOMs, and the two dust deposition gauges.
- Zero days within the reporting period experienced elevated absolute PM10 TEOM monitoring results.
- Table 1 provides an equipment performance summary.

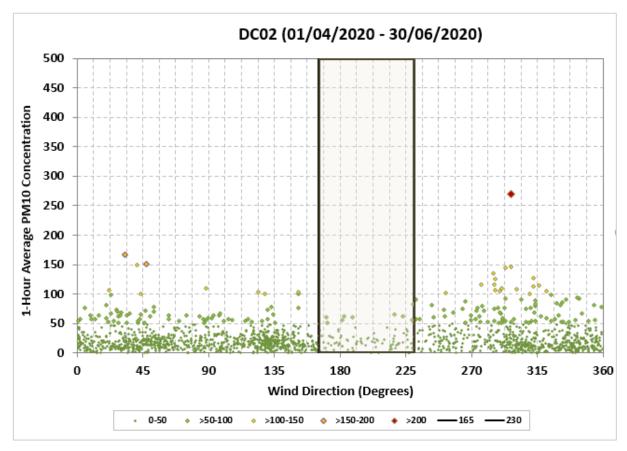
#### **Table 1 Equipment Performance Summary**

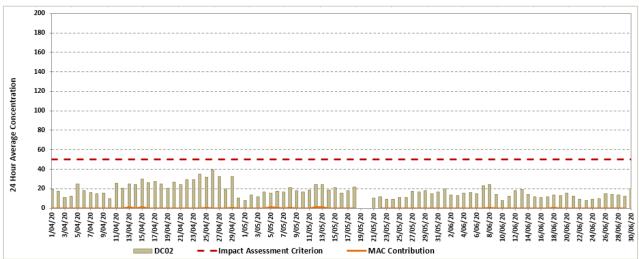
| Site | Date/s                                                                                                    | Reason                                                                                                                                                                                                           |
|------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC02 | 19-20/05/2020                                                                                             | Equipment issues – <75% data capture                                                                                                                                                                             |
| DC05 | 5/05/2020                                                                                                 | Equipment Issues - <75% data capture                                                                                                                                                                             |
| DC06 | 11-21/04/2020<br>9/05/2020 — 2/06/2020                                                                    | Communication issues – <75% data capture Equipment issues – <75% data capture                                                                                                                                    |
| DC09 | 2-7/4/2020<br>28/05/2020<br>31/05/2020 - 04/06/2020<br>14/06/2020 - 24/06/2020<br>26/06/2020 - 30/06/2020 | Communication issues – <75% data capture Equipment issues – <75% data capture Communication issues – <75% data capture Internal Computer issues – <75% data capture Internal Computer issues – <75% data capture |

#### Air Quality Monitoring (Period 1 April – 30 June 2020)

#### Sheppard Avenue - DC02

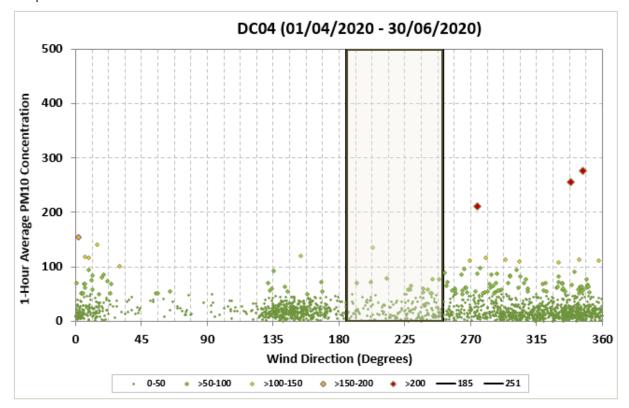
Data capture - 98%

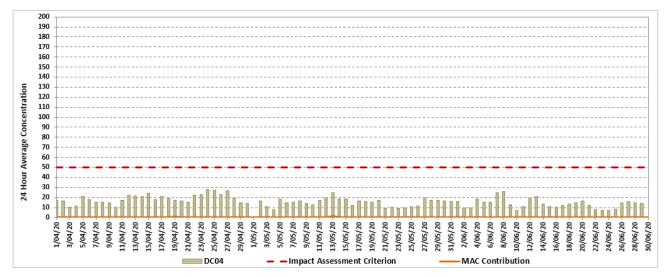




#### South Muswellbrook - DC04

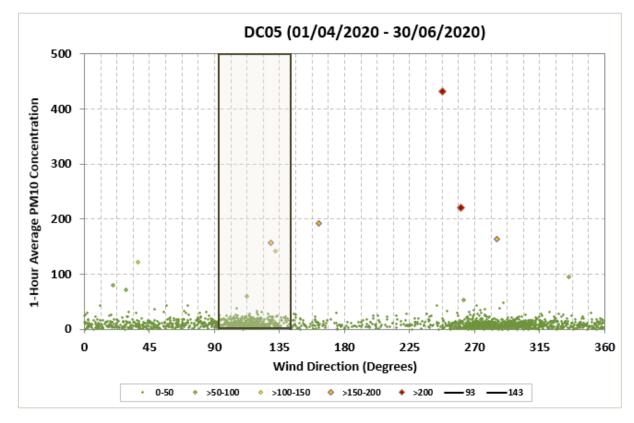
Data capture - 100%

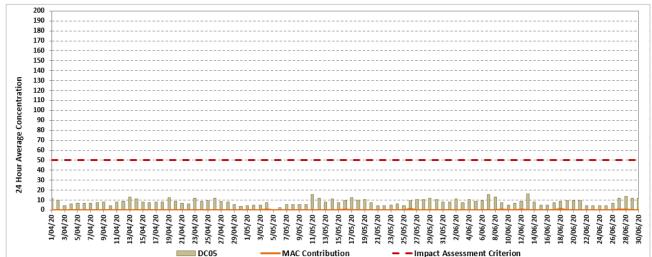




#### Roxburgh Road - DC05

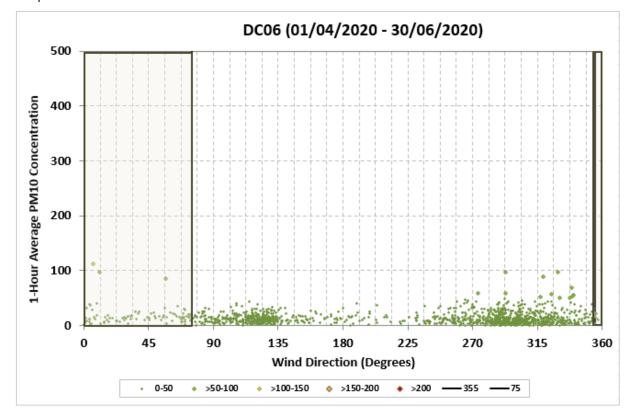
Data capture - 100%

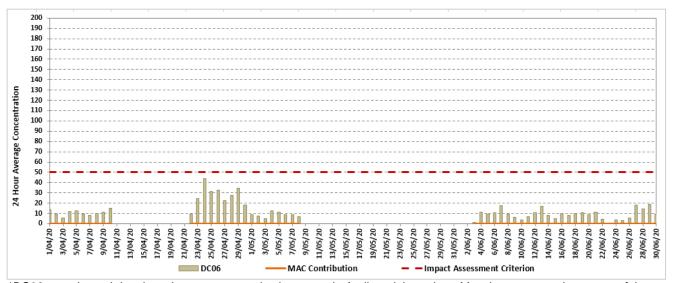




#### **Edderton Homestead - DC06**

Data capture - 60%

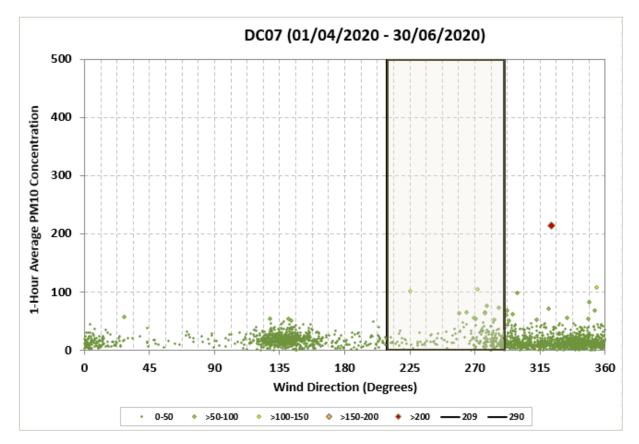


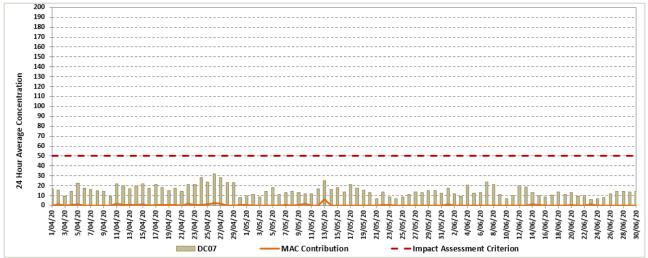


\*DC06 experienced data loss due to a communications error in April, and throughout May there were various parts of the dust unit that failed during a calibration. Equipment failures were repaired as soon as parts became available.

Antiene - DC07

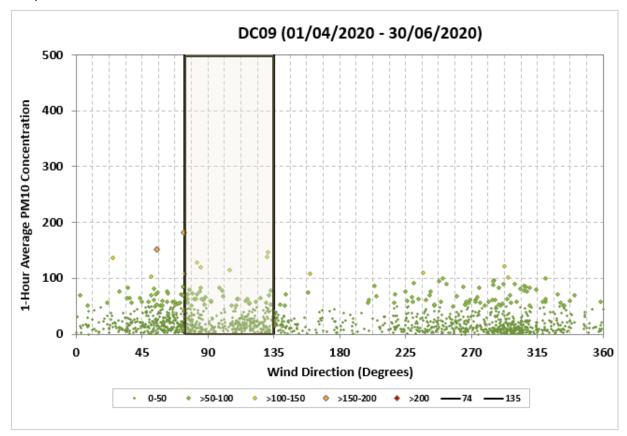
Data capture 100%

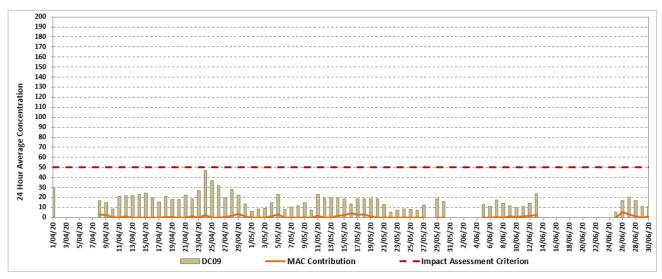




#### Wellbrook - DC09

Data capture - 75%

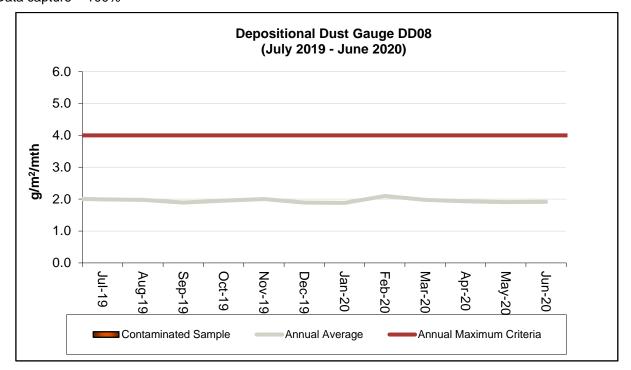




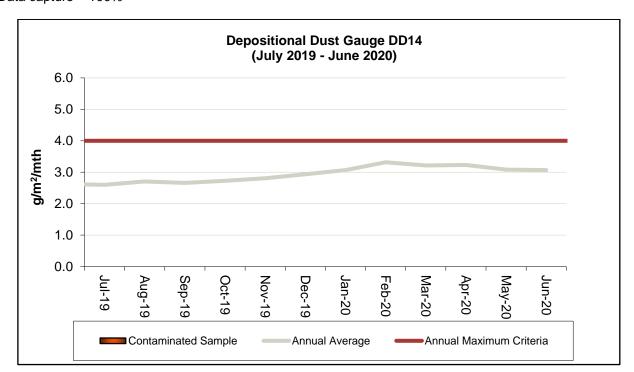
\*DC09 experienced issues related to an internal computer failure where data did not record in the database of the dust unit. This part has since been replaced.

## **Deposited Dust**

*DD08*Data capture – 100%



*DD14*Data capture – 100%



## Water Monitoring (Period 1 April to 30 June 2020):

- There were nine occurrences within the reporting period sampling points exceeded trigger levels.
- The Annual Groundwater Assessment Report is currently being completed by an expert groundwater consultant the assessment will investigate these exceedances in detail. The report will be included in the MAC Annual Review and discussed at the next CCC meeting.

**Table 4 Water Monitoring Performance Summary** 

| Date      | Monitoring<br>Location | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|-----------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| June 2020 | GW2                    | Standing Water level / EC 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.                                                                                                                                                                                                                                                                                                              |  |
|           |                        | GW2 exceeded the currently approved groundwater level trigger. Investigations revealed that the bore did not appear to be impacted by mining activities. 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.                                                                                                                                                                                                                                                                                                                                                                                       |  |
| June 2020 | GW3                    | Standing Water Level 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.                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| June 2020 | GW21                   | Standing Water Level 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. |  |
| June 2020 | GW23                   | Standing Water Level 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.                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| June 2020 | GW39P                  | Standing Water Level 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.                                                                                                                                                                                                                                                                                                                                                                                                                         |  |

| Date      | Monitoring<br>Location | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| June 2020 | OD1078-<br>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. |
| June 2020 | GW39A                  | Electrical Conductivity Currently Under Investigation                                                                                                                                                                                                                                                                                                                                                                                                       |
| June 2020 | GW40A                  | Electrical Conductivity Currently Under Investigation                                                                                                                                                                                                                                                                                                                                                                                                       |
| June 2020 | GW41A                  | Electrical Conductivity Currently Under Investigation                                                                                                                                                                                                                                                                                                                                                                                                       |

## Blast Monitoring (Period 1 April to 30 June 2020)

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

#### **Environmental Incidents**

Nil Reportable

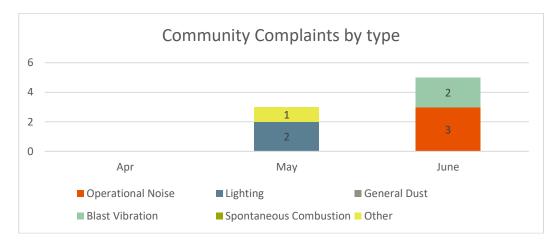
## **Environmental Reporting**

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:

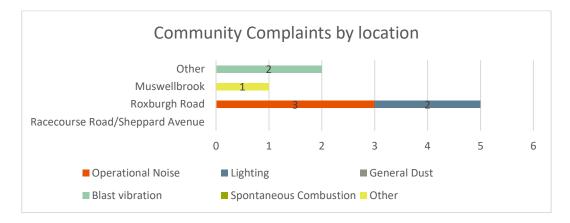
https://www.bhp.com/environment/regulatory-information#

# **Community Complaints**

The Community Complaints included in this report are for the period 1 April to 30 June 2020. Mt Arthur Coal received eight (8) complaints during this period. Of the eight complaints, three were related to operational noise; two blast vibration; two lighting; and one in the other category.



Of the eight complaints received for the three month reporting period, five were from Roxburgh Road area, two outside of Muswellbrook and one from Muswellbrook.



# Community Complaints Summary: 1 April to 30 June 2020

| Date       | Time    | From            | Issue              | Lodgement type             | Investigation and response to caller                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------|---------|-----------------|--------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2/05/2020  | 6.15pm  | Roxburgh Road   | Lighting           | Community Response         | Investigation revealed location of lights, which were redirected or turned off. Caller was advised of investigation results and actions taken.                                                                                                                                                                                                                                                                                                              |
| 7/05/2020  | 8.36am  | Muswellbrook    | Off-site bus route | Email                      | Investigation revealed the Greyhound Bus Service was using Skellatar Stock Route to transport employees to MAC for work. When notified of issue (load limit restriction of 10T), the bus company immediately amended their bus route to exclude Skellatar Stock Route.                                                                                                                                                                                      |
| 22/05/2020 | 7.15pm  | Roxburgh Road   | Lighting           | Community Response<br>Line | Investigation revealed location of lights, which were redirected or turned off. Caller was advised of investigation results and actions taken.                                                                                                                                                                                                                                                                                                              |
| 3/06/2020  | 11.25am | Dorset Road     | Blast vibration    | Community Response<br>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. Caller advised he was unable to find the Community Response Line phone number on the BHP website. The number is listed on the BHP website, under Environment, Regulatory Information, NSWEC Mt Arthur Coal. |
| 3/06/2020  | 11.27am | Ridgelands Road | Blast Vibration    | Community Response         | 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.                                                                                                                                                                                                             |

| Date       | Time    | From          | Issue             | Lodgement type             | Investigation and response to caller                                                                                                                                                                                                         |
|------------|---------|---------------|-------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8/06/2020  | 11.04pm | Roxburgh Road | Operational Noise | Community Response<br>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. |
| 18/06/2020 | 11.53pm | Roxburgh Road | Operational Noise | Community Response<br>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. |
| 27/06/2020 | 9.56pm  | Roxburgh Road | Operational Noise | Community Response<br>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                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Actions from 7 May 2020 meeting                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                              |
| Nil                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                              |
| Actions remaining open from previous meetings                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                              |
| Action 2 (Feb 2020): MAC to seek further advice as to confidentiality issues that may result from providing information regarding the number of complaints from individuals.                                                                                                                                                                   | Number of complaints by individuals will be presented at August 2020 meeting.                                                                                                |
| Action 4 (Feb 2020): WP to provide the template for the CCC annual report to CCC members and to liaise with LS about content.                                                                                                                                                                                                                  | Work in progress.                                                                                                                                                            |
| 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): Adam Lancey (AL) 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. Due to COVID-19, site tour was postponed for May and August 2020 meetings. |
| 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.                                |