

Mt Arthur Coal Community Consultative Committee

Planned meeting date:

8 November 2023

Information provided:

1 July to 30 September 2023

Environmental Management

FY24 Rehabilitation Update



The rehabilitation target for the FY24 year is 145ha. 5ha of the OOPD was topsoiled and seeded with a pasture species mix during the reporting period. Bulk shaping in at the Visual Dump 5 (VD5) area has commenced and was ongoing throughout the reporting period.

Land Management

Weed treatment outside of the rehabilitation continues to focus on the species within the table below. MAC has been in contact with local weed management officials to ensure there is alignment on focus species. Work in the following areas was completed during the reporting period:

- CD1 – spraying African Box Thorn
- VD1 – spraying African Box Thorn, Exotic Grasses, Thistles and Galenia
- OOPD - spraying Exotic Grasses, Thistles and Galenia
- Drayton Void – spraying St John's Wort

Species	Common Name
<i>Cirsium arvense</i>	Thistle
<i>Cortaderia sp.</i>	Pampas grass
<i>Galenia pubescens</i>	Galenia (Carpet Weed)
<i>Hyparrhenia hirta</i>	Coolatai Grass
<i>Hypericum perforatum</i>	St. John's Wort
<i>Lycium ferocissimum</i>	African Box Thorn
<i>Opuntia sp.</i>	Prickly Pear Cactus

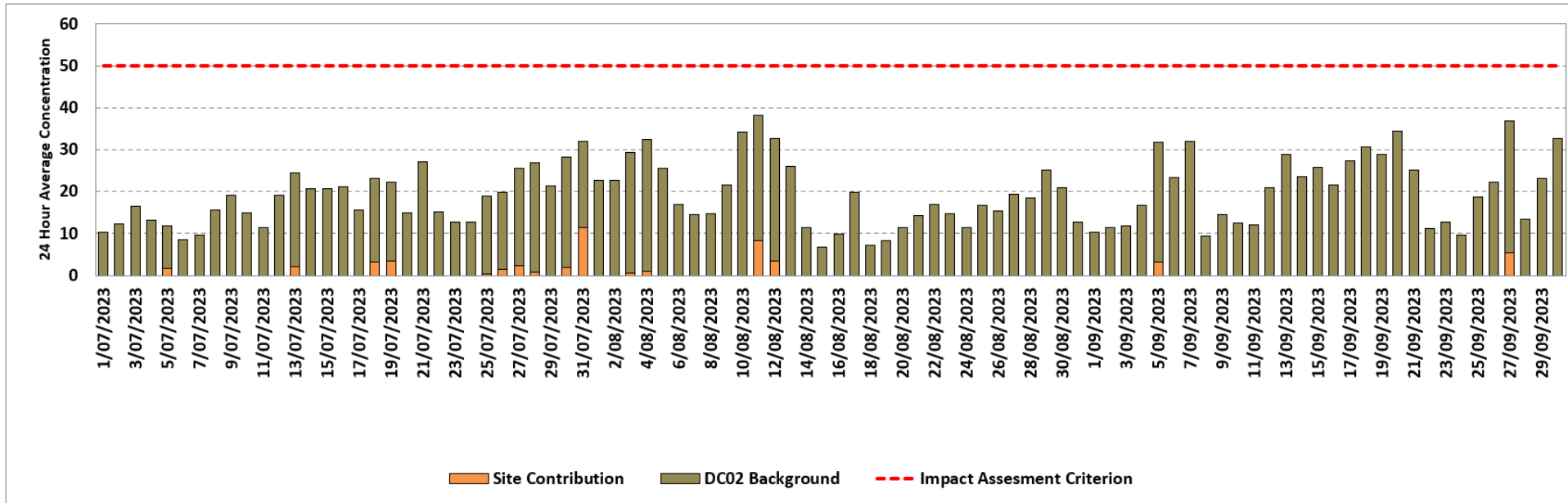
Environmental Performance

Air Quality Monitoring (Period 1 July 2023 to 30 September 2023)

- This paper (for the reporting period of 1 July 2023 to 30 September 2023) covers the performance of all six statutory PM10 monitoring sites using TEOMs, and the two dust deposition gauges.
- During the reporting period, the absolute impact assessment criteria was exceeded 8 times at statutory TEOM monitoring sites over a total of 6 days. However, MAC contribution PM10 levels remained below limit. Exceedances recorded were notified to the Department of Planning and Environment as per Project Approval. Further information provided on the Section *Environmental Incidents*.
 - 21 July 2023 at Wellbrook – DC09.
 - 5 August 2023 at Roxburgh Rd – DC05.
 - 17 September 2023 at Roxburgh Rd – DC05.
 - 18 September 2023 at Roxburgh Rd – DC05, Edderton Rd – DC06 and Wellbrook – DC09.
 - 19 September 2023 at Edderton Rd – DC06.
 - 30 September 2023 at Wellbrook – DC09
- 100% of dust data captured from all six statutory PM10 monitoring sites during the reporting period. Uptime percentages have continued to improve on the back of several improvement initiatives including the purchase of new TEOMs, UPS battery units & communication loggers.
- A guide has been provided at the end of this section to assist in the interpretation of the results and figures. The figures within this section have been developed in line with consultation with members of the CCC.

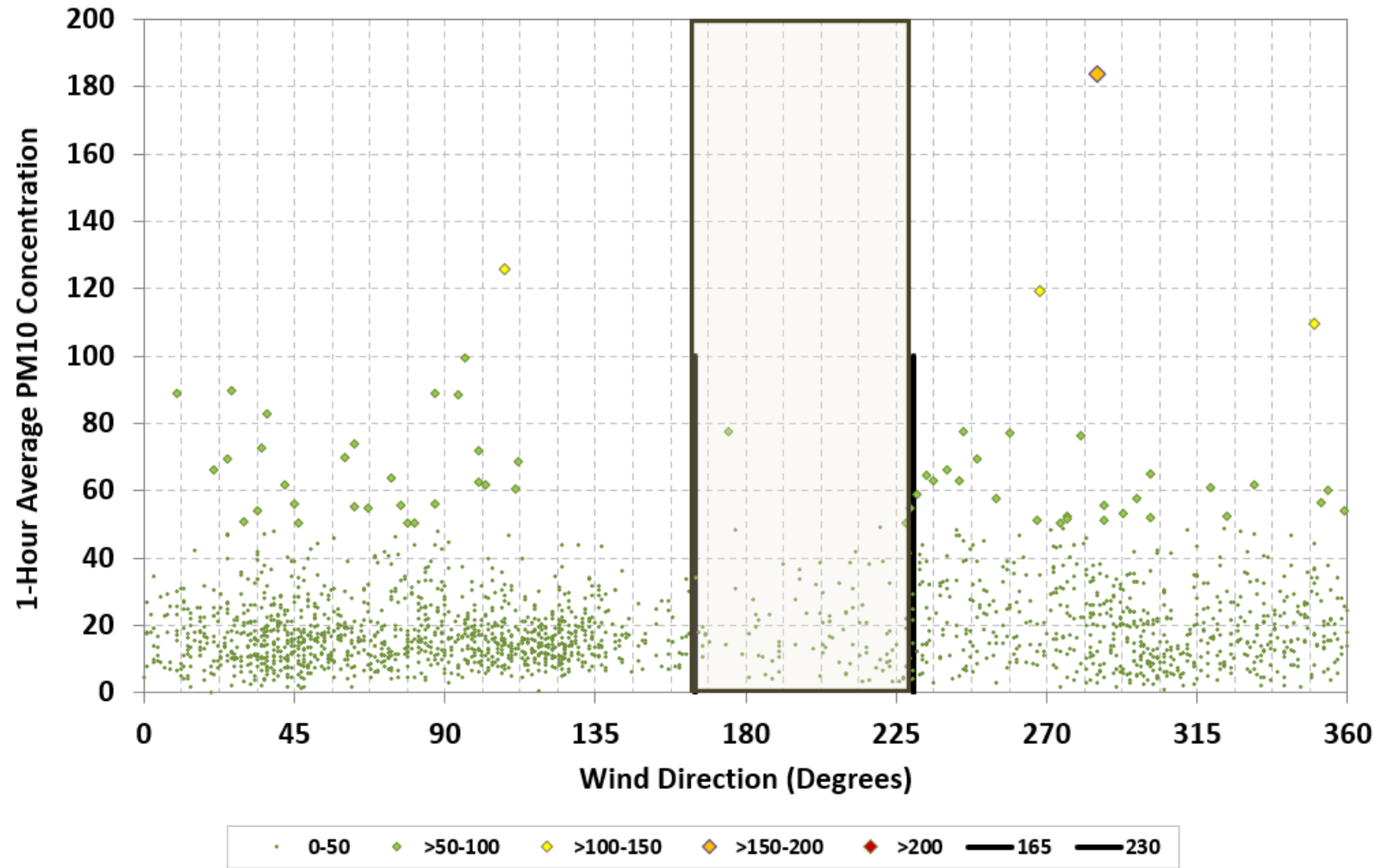
Sheppard Avenue – DC02

Data capture – 100%



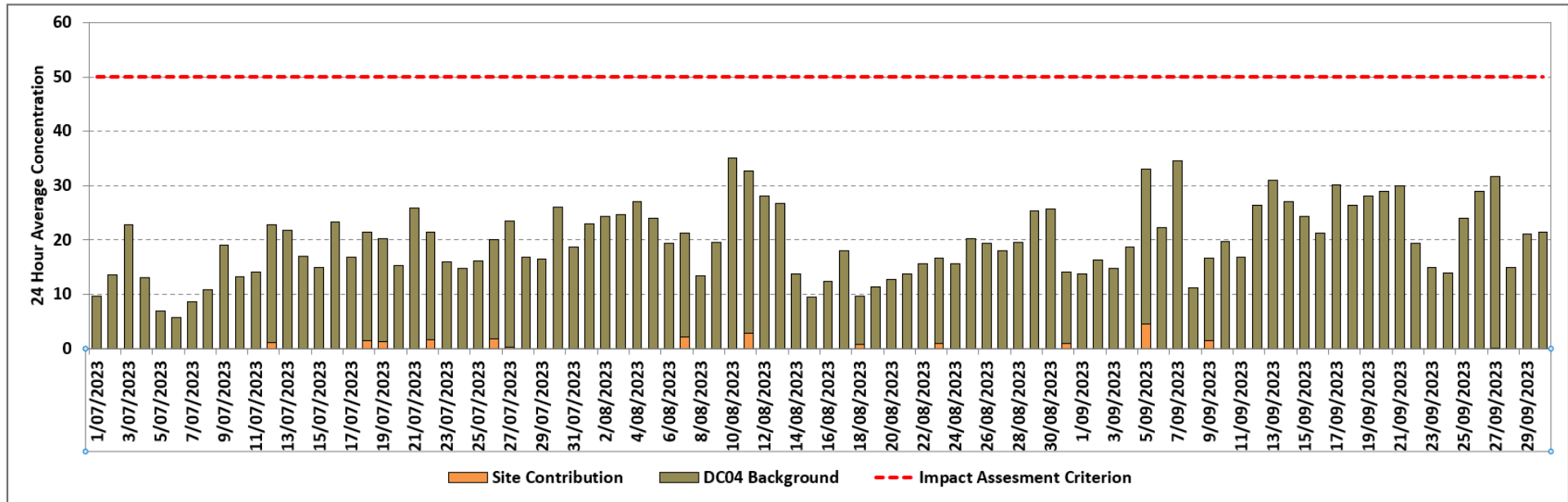
Sheppard Avenue – DC02

DC02



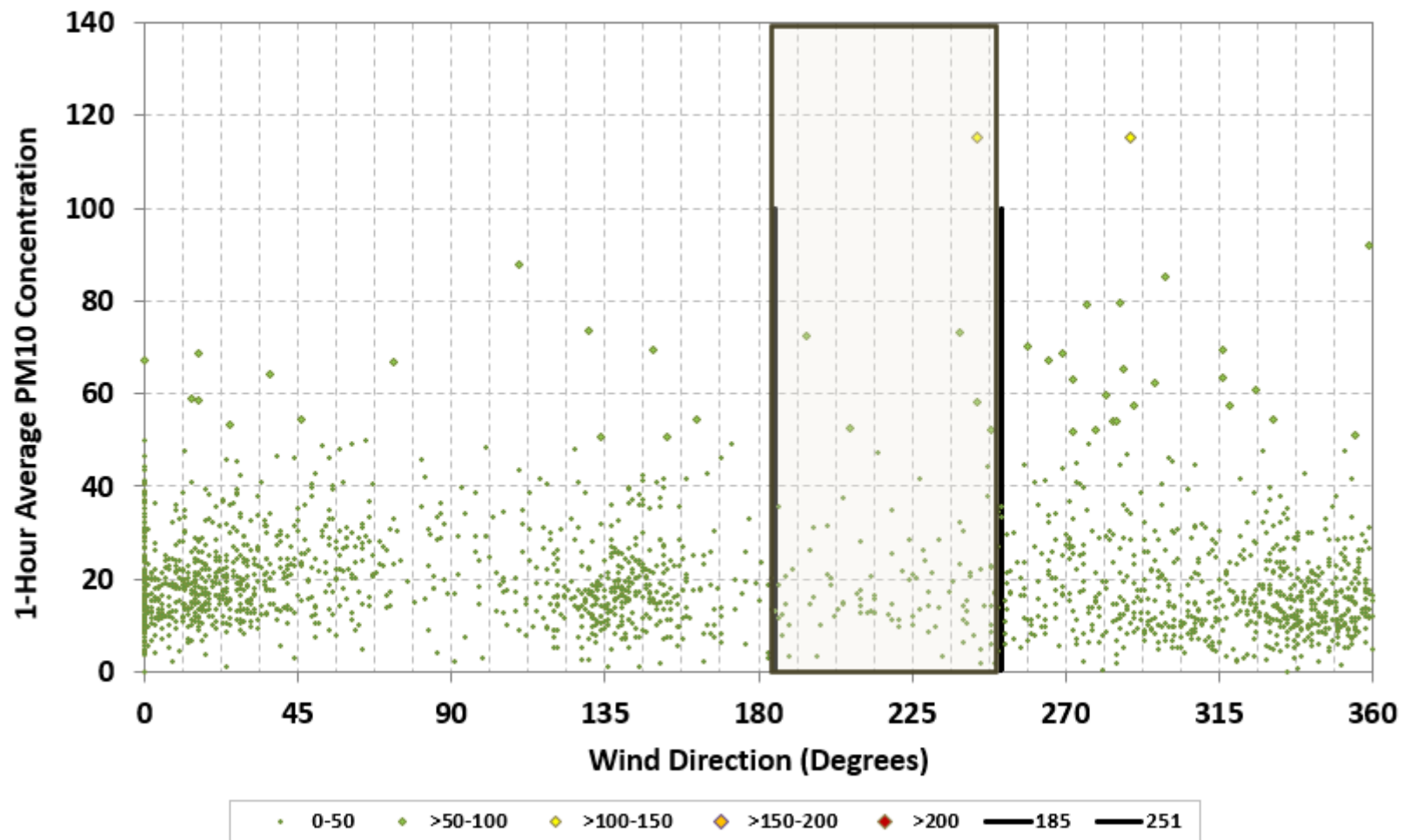
South Muswellbrook – DC04

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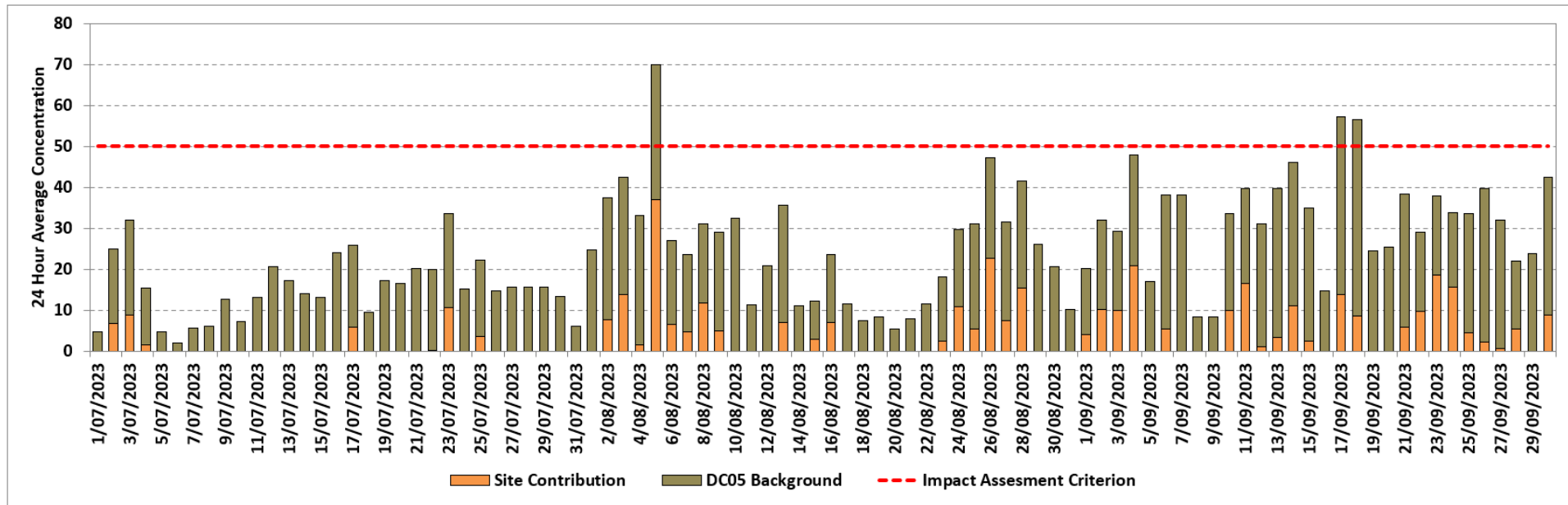
South Muswellbrook – DC04

DC04



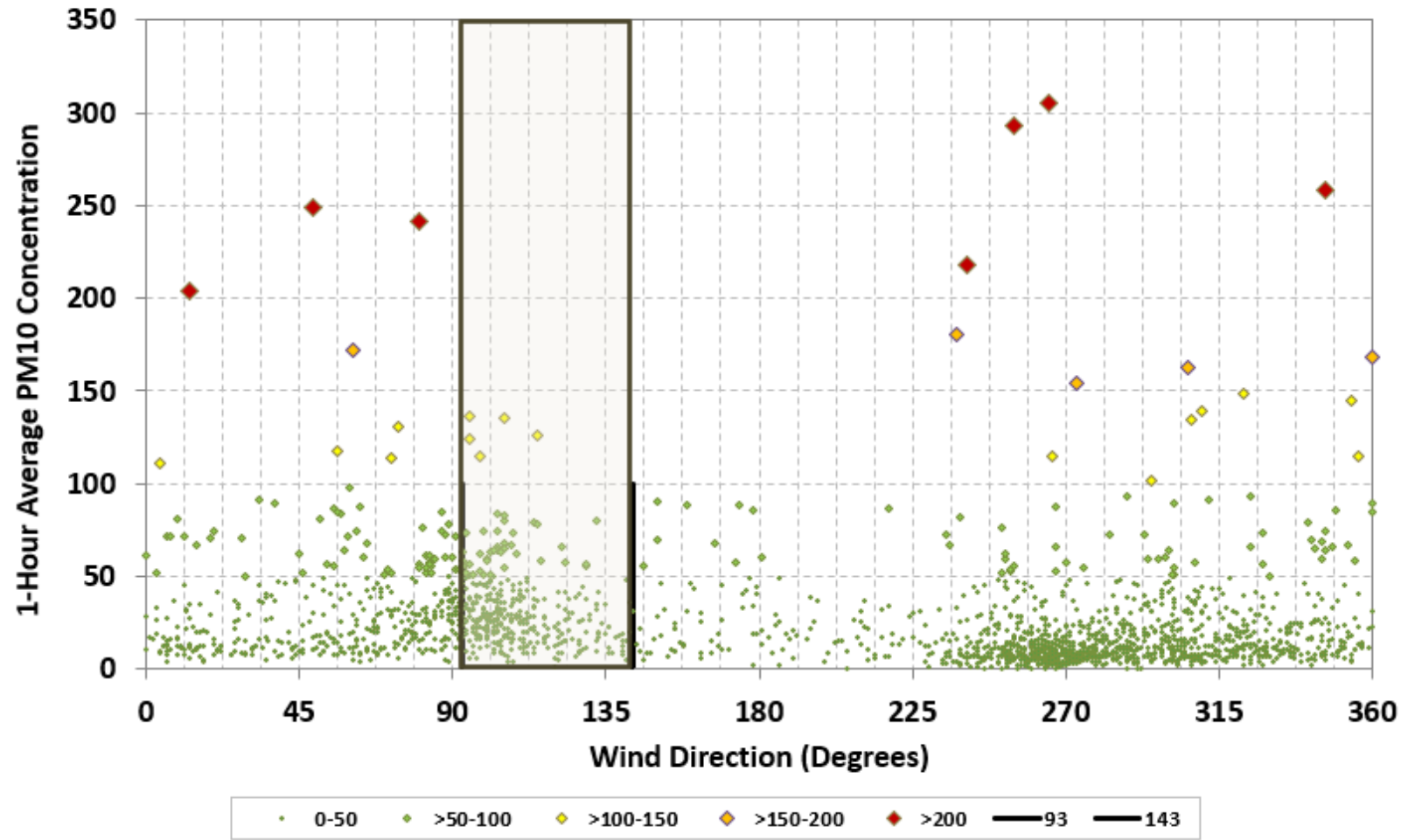
Roxburgh Road – DC05

Data capture – 100%



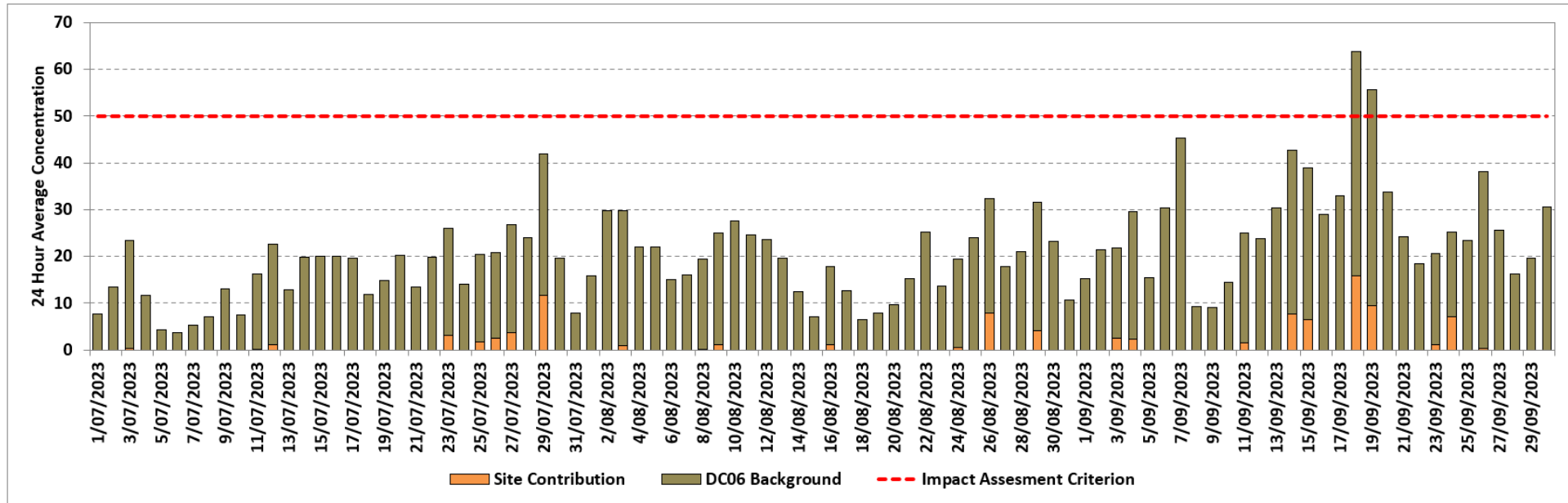
Roxburgh Road – DC05

DC05



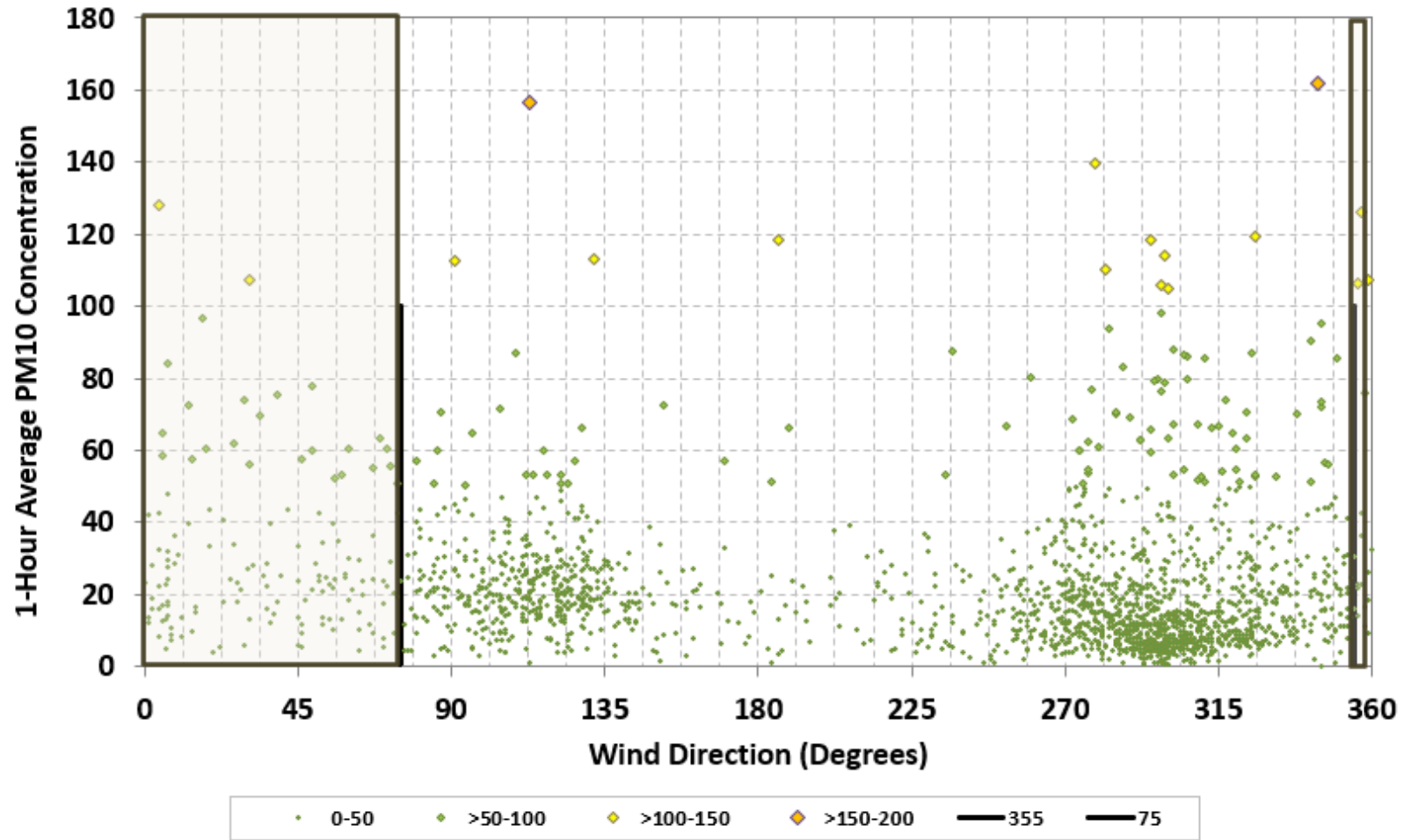
Edderton Homestead - DC06

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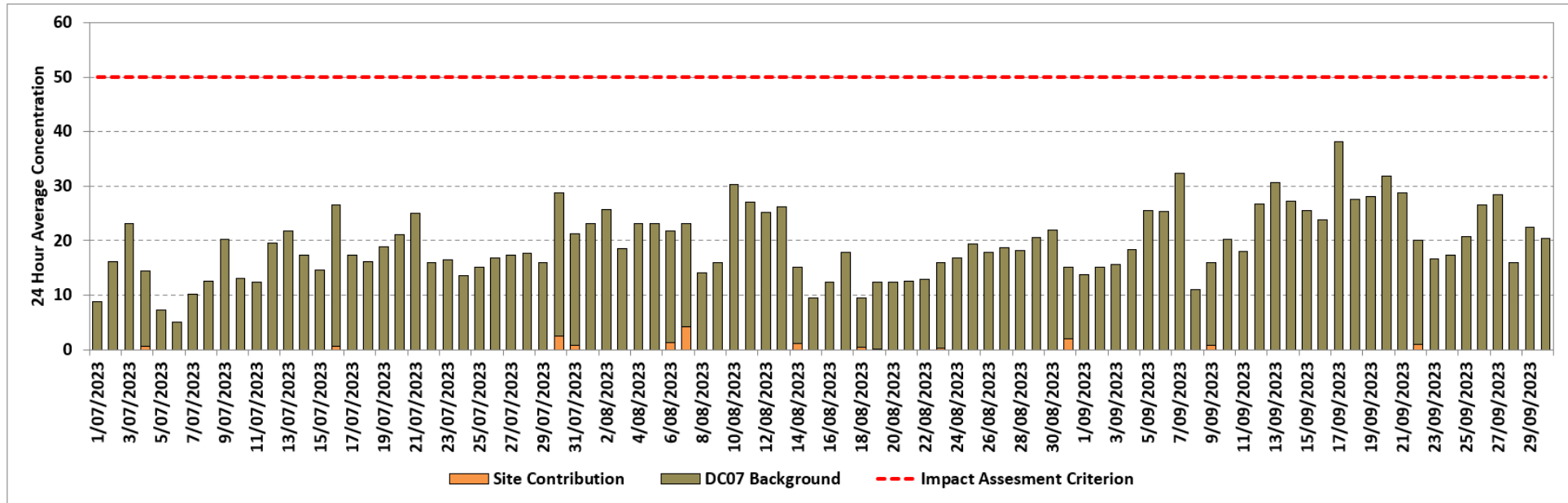
Edderton Homestead - DC06

DC06



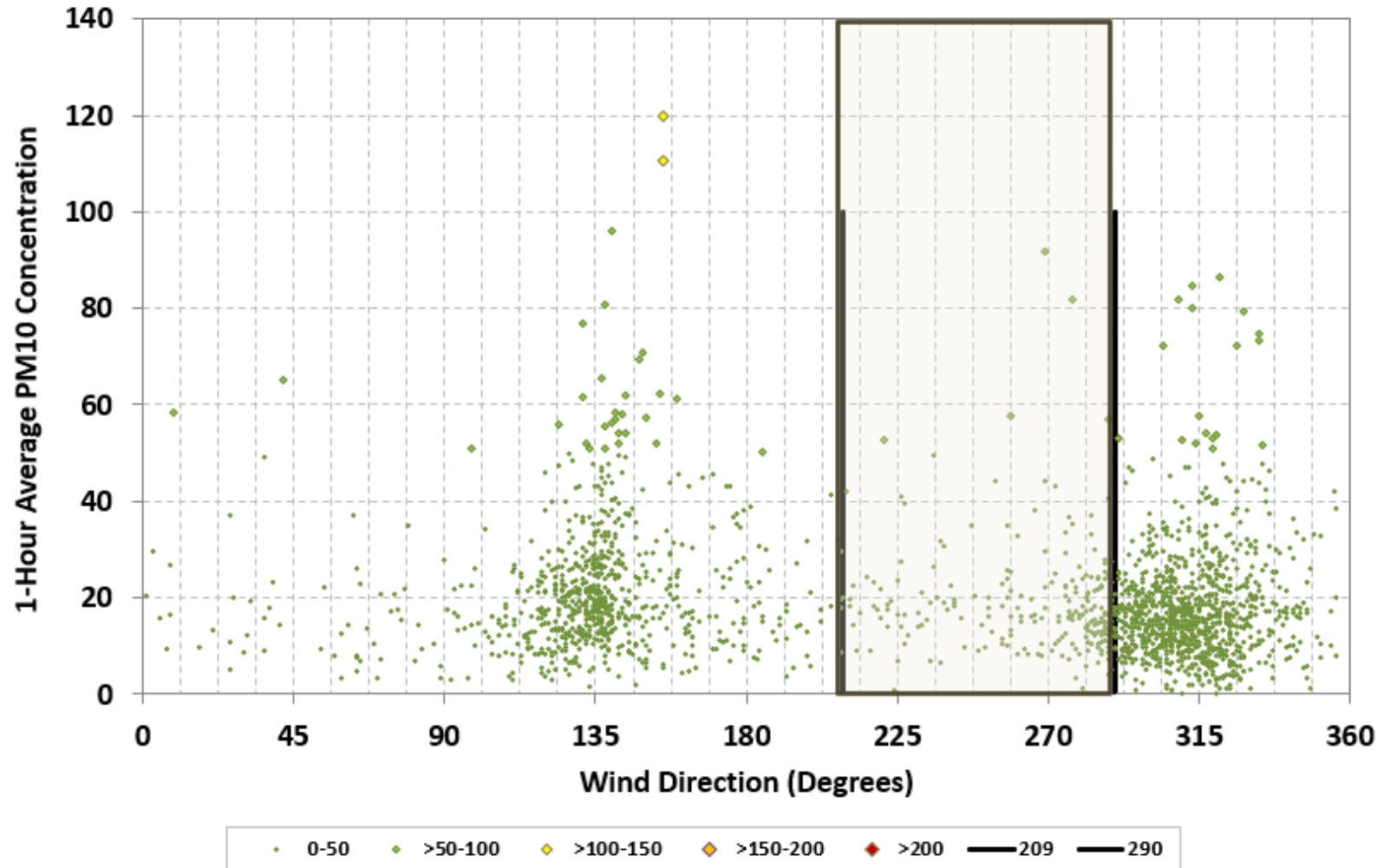
Antiene - DC07

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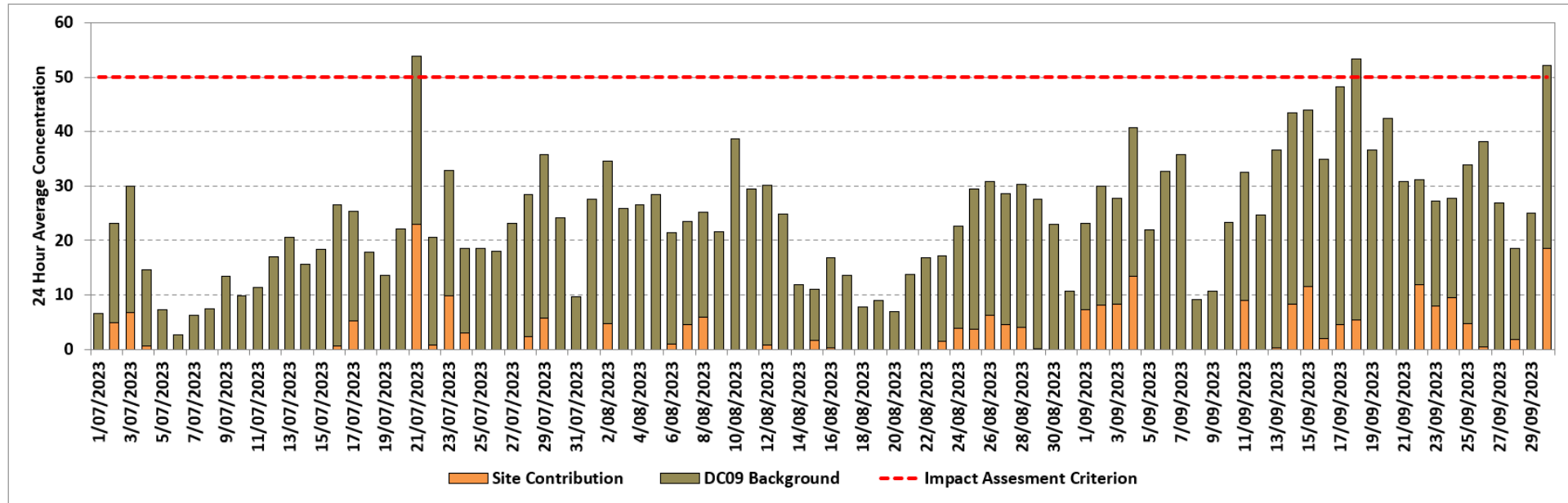
Antiene - DC07

DC07



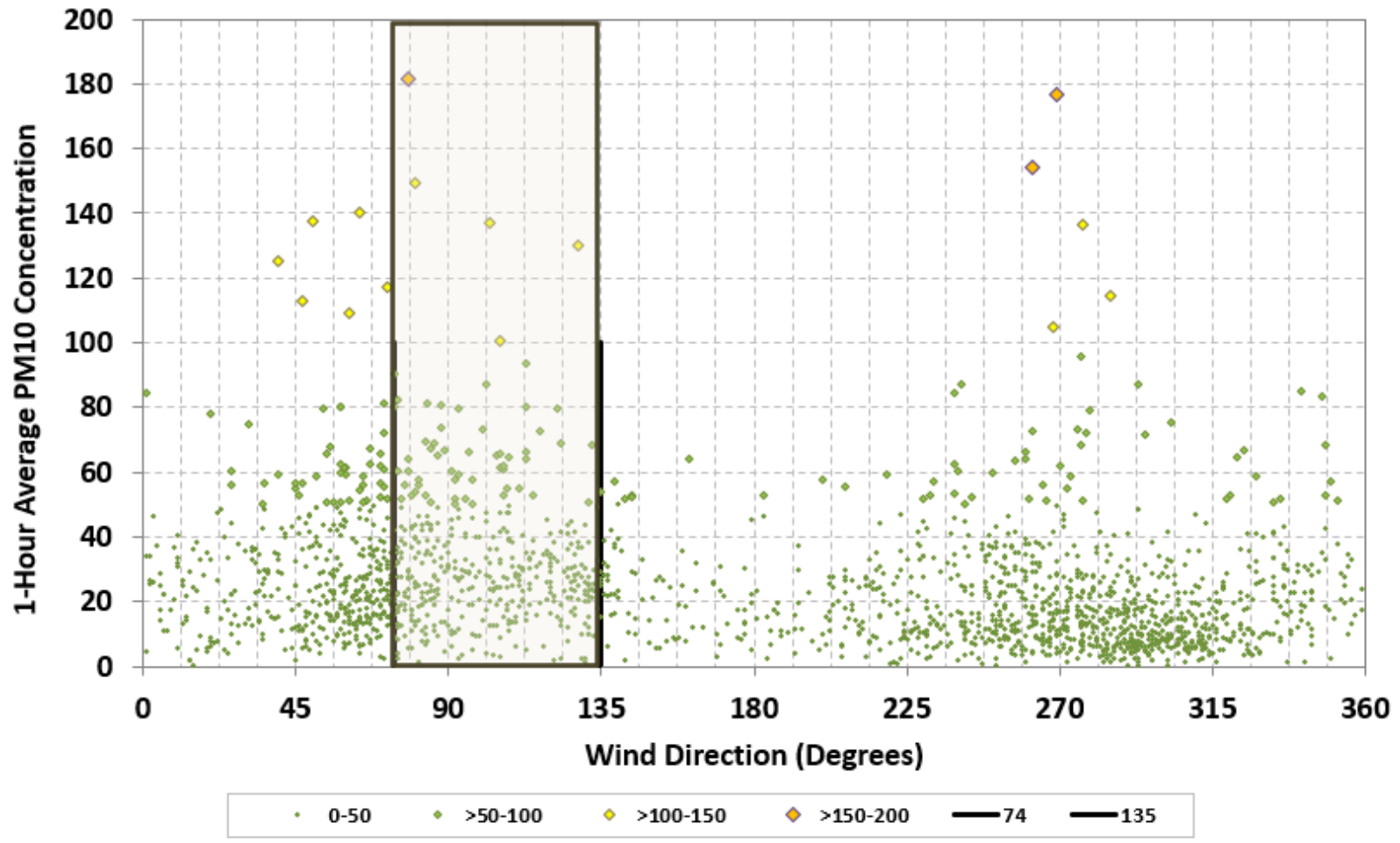
Wellbrook – DC09

Data capture – 100%



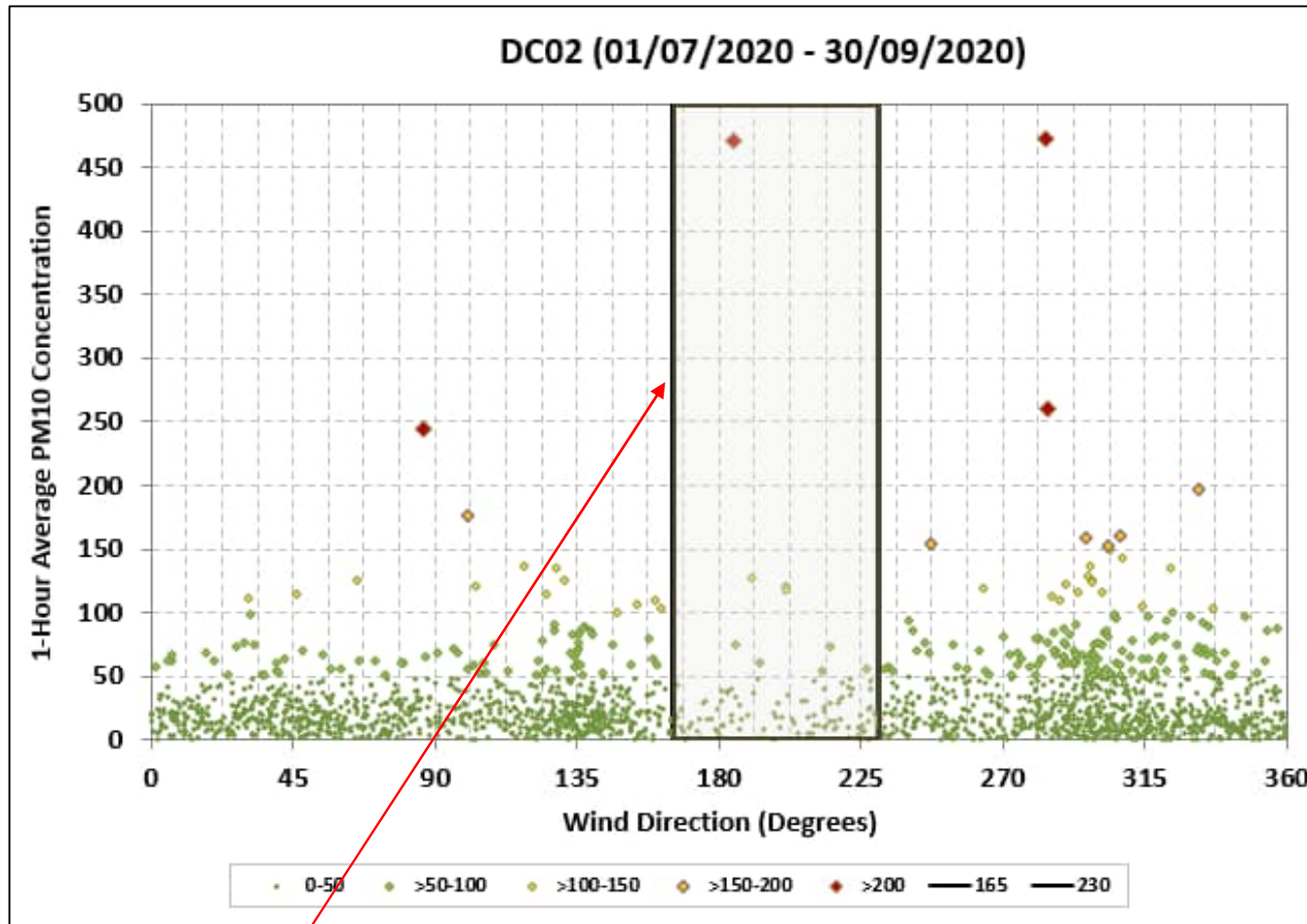
Wellbrook – DC09

DC09



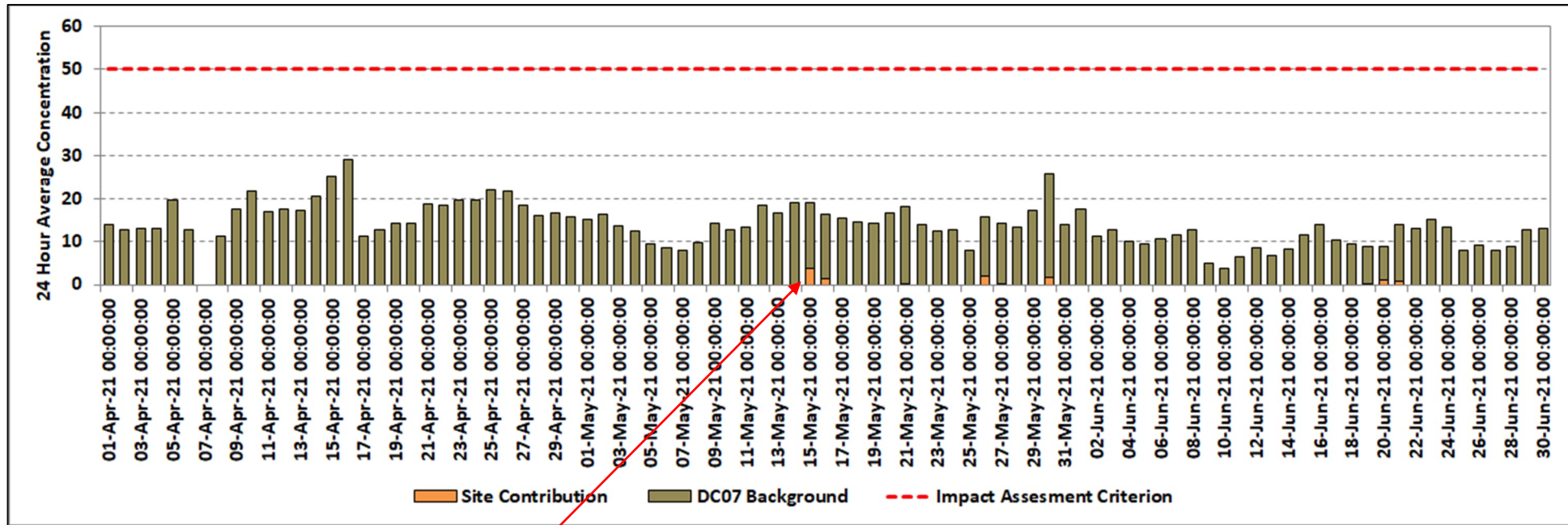
Air Quality Monitoring Interpretation Guidance

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

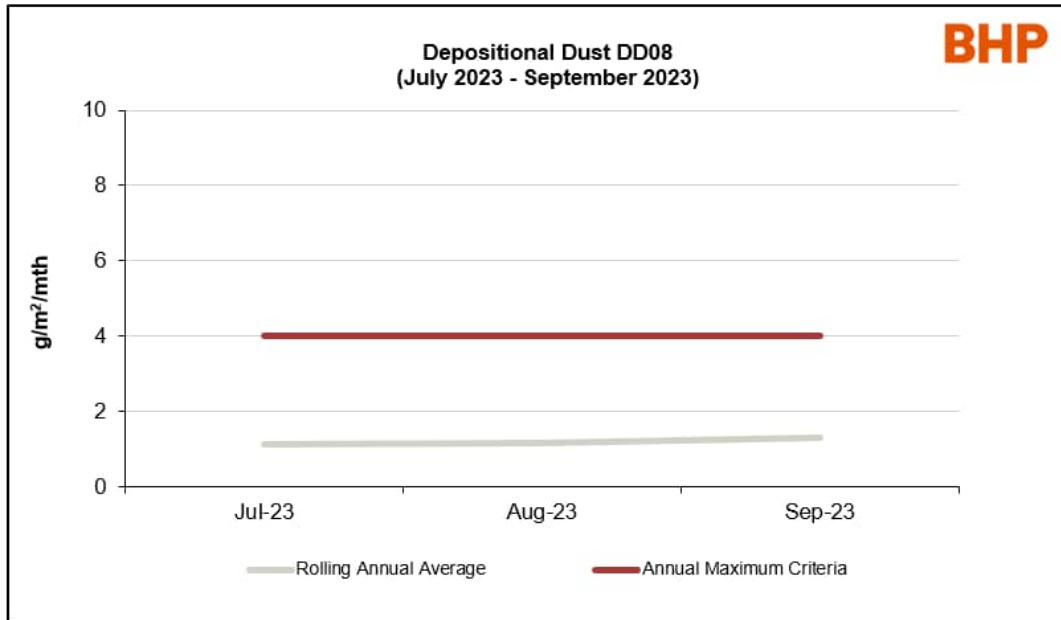


This graphic shows the cumulative Daily 24hr PM10 concentrations along with the incremental Mt Arthur Coal concentrations. This example shows that the cumulative 24hr concentration ('Background') of approximately 20 $\mu\text{g}/\text{m}^3$; the Mt Arthur incremental concentration ('Site Contribution') is represented by the orange coloured portion.

Deposited Dust

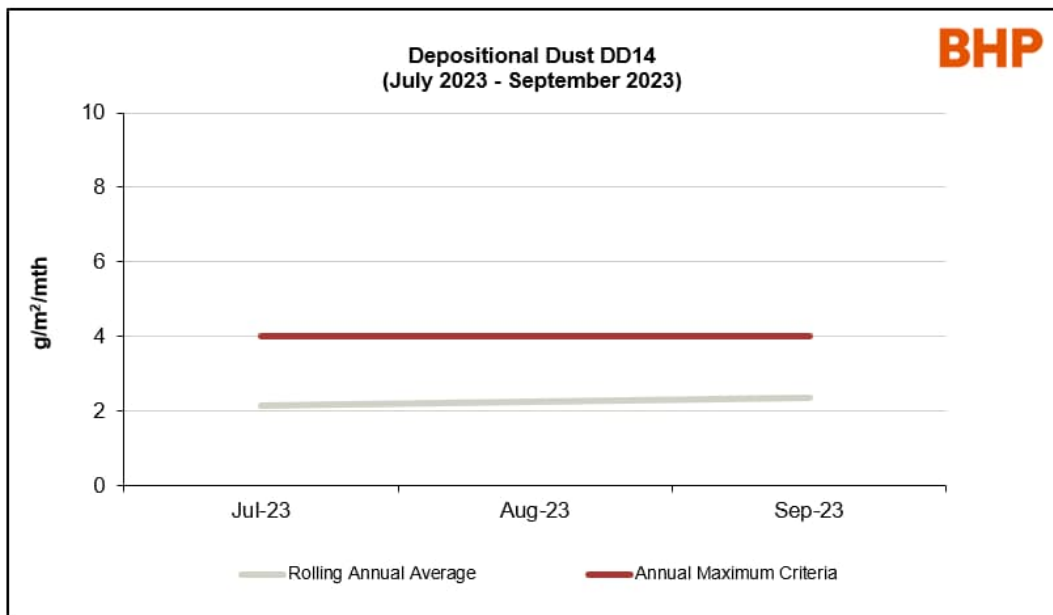
DD08

Data capture – 100%



DD14

Data capture – 100%



Water Monitoring (1 July 2023 to 30 September 2023)*Groundwater*

Groundwater monitoring was undertaken in September 2023 with results currently being analysed. Results from the September 2023 monitoring round will be communicated at the next CCC.

The groundwater monitoring that was undertaken in June 2023 has been analysed with no exceedances of the criteria detected. All groundwater monitoring results for FY23 have been reported in the FY23 Annual Review for consideration by the DPE.

Surface water

Surface water monitoring was conducted monthly during the three-month period. No exceedances of the criteria in accordance with the Groundwater and Surface Water Response Plan were reported to DPE.

Blast Monitoring (1 July 2023 to 30 September 2023)

There were no exceedances of the upper or lower vibration limits during the reporting period. There were no exceedances of the upper overpressure limit.

There were two exceedances of the lower overpressure limit of 115dBL, both recorded on Wednesday 20 September 2023 at the Denman Road West Monitor (116.2 dBL) and Sheppard Avenue Monitor (116.8 dBL), no complaints were received.

These exceedances are within the 5% of allowable exceedances for FY23 and not considered an environmental incident.

Operational Noise Monitoring (1 July 2023 to 30 September 2023)

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.

There were no exceedances of the threshold levels reported for any noise monitoring locations during the reporting period.

Environmental Incidents (1 July 2023 to 30 September 2023)PIRMP Activation 28 August 2023

On the 28th of August 2023 HVEC activated the Pollution Incident Response Management Plan (PIRMP) due to a fire on a Service truck within the Mining Lease. The incident was reported to the relevant authorities as required by the PIRMP. The fire was extinguished with no further action required. No environmental harm was caused due to this incident.

Environmental Protection Licence (EPL) Annual Return <95% Data Capture

Over the 2023 Annual Return reporting period, HVEC captured less than 95% of the required monitoring data from EPL Monitoring Points 13 and 14, 89.9% and 94.8% respectively which resulted in a non-compliance to Condition M9.6 of the EPL.

There was no environmental harm caused due to this incident and no action has been proposed to the EPA. HVEC currently undertakes daily system checks on the air quality monitoring units and regular maintenance and calibrations are also carried out in accordance with the manufacturer's specifications. In addition to this, during the reporting period seven new TEOMs were installed to replace old equipment and eleven new UPA battery units were installed to improve data capture during periods of power interruption.

Dust Level Exceedances

HVEC recorded exceedances of the impact assessment criteria on six separate days throughout the period. Detailed investigation reports were provided to DPE after each exceedance which outlined the project's contribution and the actions taken by the operation in line with the MAC Air Quality Management Plan. The table below provides a summary of each exceedance.

Date	Site	Absolute PM10 level (24-hr average µg/m3)	MAC Contribution (24-hr average µg/m3)	Other details
21 July 2023	DC09	53.8	23	No complaints. Appropriate actions taken by OCEs.
5 August 2023	DC05	70	36.9	No complaints. Appropriate actions taken by OCEs.
17 September	DC05	57.3	13.7	No complaints. Appropriate actions taken by OCEs.
18 September	DC05	56.5	8.5	No complaints. Appropriate actions taken by OCEs.
	DC06	63.9	15.8	No complaints. Appropriate actions taken by OCEs.
	DC09	53.3	5.3	No complaints. Appropriate actions taken by OCEs.
19 September	DC06	55.6	9.4	No complaints. Appropriate actions taken by OCEs.
30 September	DC09	52.1	18.5	No complaints. Appropriate actions taken by OCEs.

Environmental Reporting (1 July 2023 to 30 September 2023)

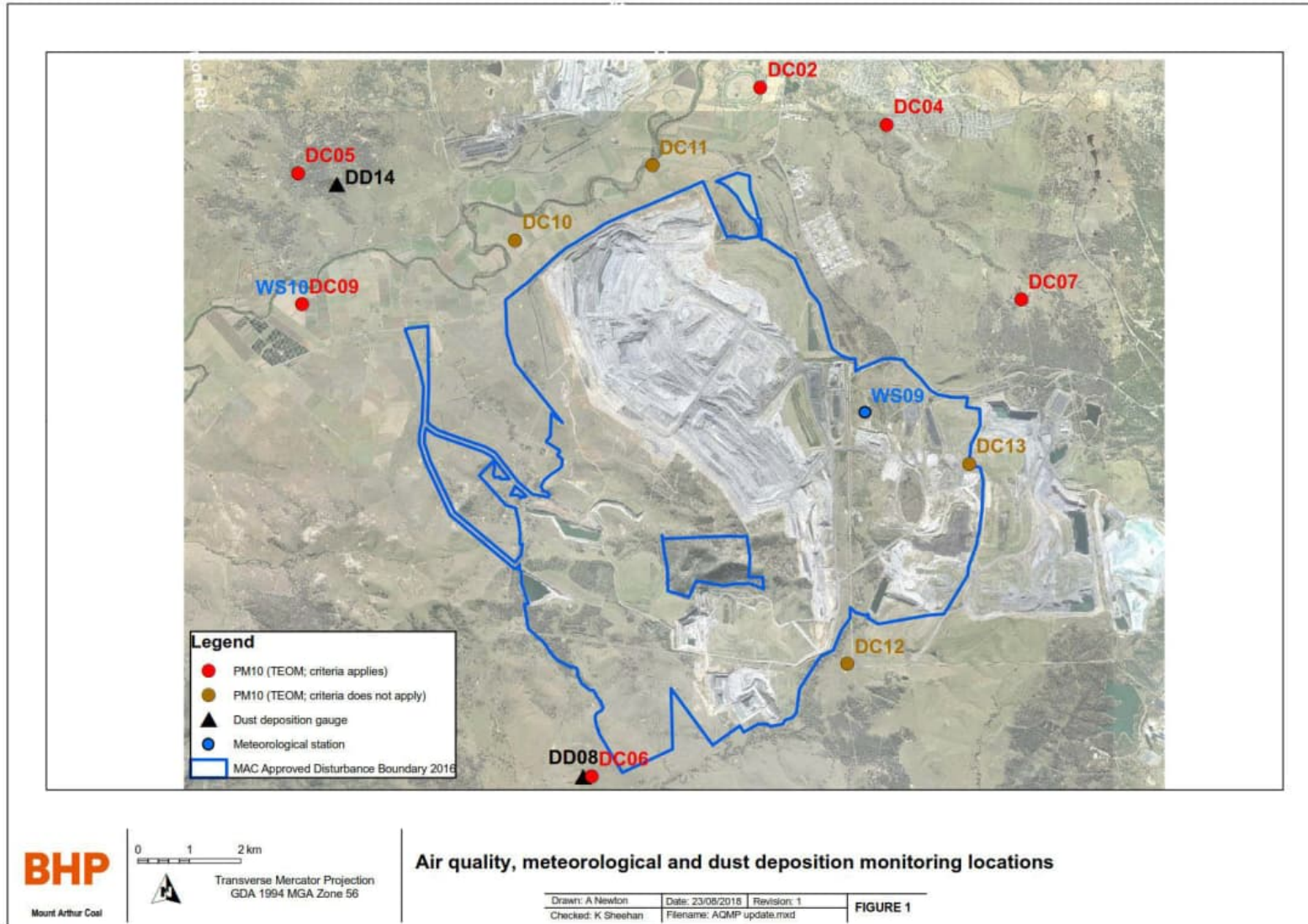
Monthly Reporting

Historical information and reporting is available to view on the BHP website using the following link:

<https://www.bhp.com/sustainability/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 and Ground Water Monitoring Locations:

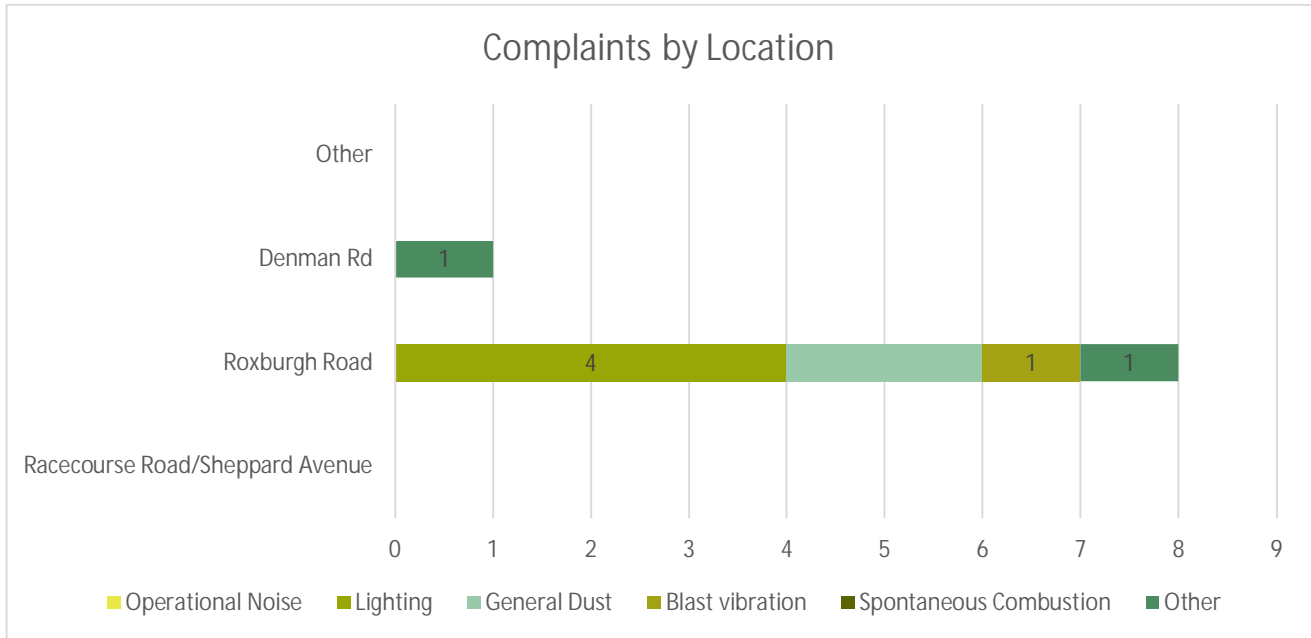


Blast Monitoring Locations (Source: Blast Management Plan)

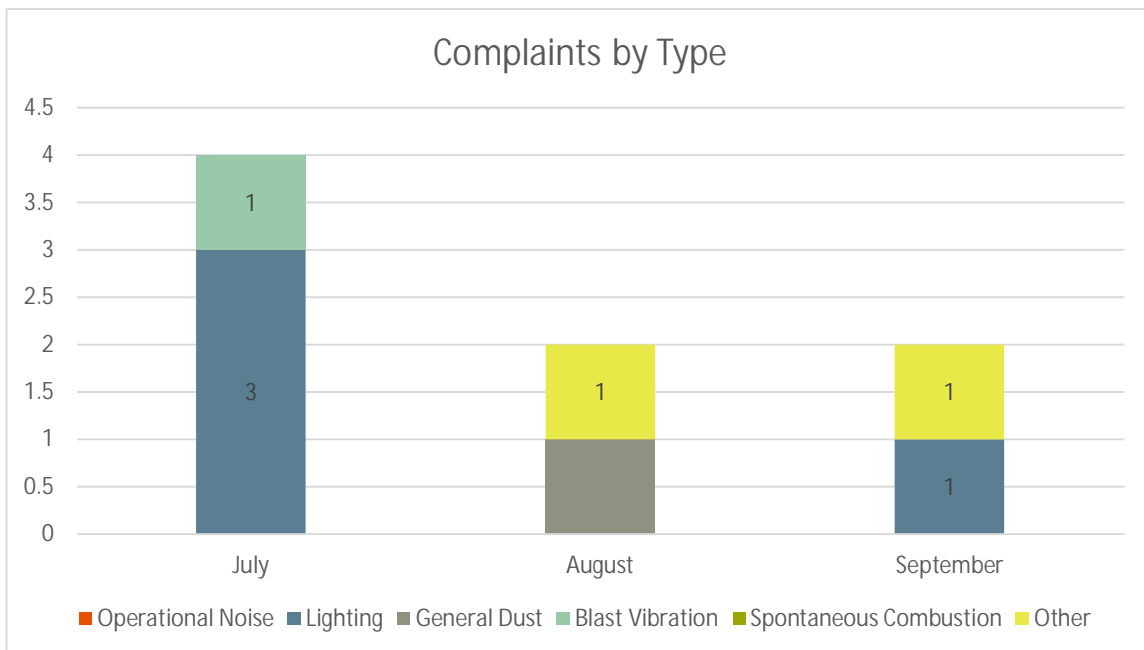


Community Complaints

The Community Complaints included in this report are for the period 1 July to 30 September 2023. Mt Arthur Coal received eight (8) complaints during this period. Seven (7) were in Roxburgh Rd area and one (1) was in the Denman Rd area.



Of the 8 complaints, four (4) were for lighting, two (2) for other, (1) for dust and one (1) for blast vibration.



Community Complaints Summary: 1 July to 30 September 2023

Date	Time	From	Issue	Lodgement type	Investigation and response to caller
16/07/2023	6.05pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
18/07/2023	1.08pm	Roxburgh Rd, 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.
20/07/2023	7.37pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
25/07/2023	6.31pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
4/08/2023	12.23pm	Roxburgh Rd, Muswellbrook	Other	Community Response Line	Caller given response to complaint regarding a missed notification.
13/08/2023	5.36pm	Roxburgh Rd, Muswellbrook	Dust	Community Response Line	Lighting adjusted in response to the call.
10/09/2023	5.36pm	Denman Rd, Muswellbrook	Other	Community Response Line	Investigation revealed the system was down for maintenance.
27/09/2023	11.02pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.

ACTIONS from last meeting

Action 1: WP to liaise with CK and JN regarding formalising the recruitment process and advertising for new Community and Stakeholder members to join the MAC CCC.

Action 2: Muswellbrook Council to confirm MAC CCC representatives.

Action 3: WP to circulate the DPE CCC Guidelines Terms of Reference Template for member comment. The MAC CCC Terms of Reference to be placed on the 8 November 2023 Meeting Agenda, for further discussion and confirmation.

Action 4: MAC to provide the CCC with links to the Visualisation Tools when available on the 2030 Website.