

Mt Arthur Coal Community Consultative Committee

Planned meeting date:

17 May 2023

Information provided:

1 January to 31 March 2023

Environmental Management

FY23 Rehabilitation Update

Bulk shaping in the Outer Pit Dump (OPD) area was ongoing throughout the reporting period. Other rehabilitation will be conducted in the Saddlers North dump area and the Drayton void area.

Revegetation program in the Macdonald's void area has been completed. The scope included:

- Stem thinning of denser existing woodland
- Intense spot weed treatment targeting African olive, African boxthorn,
- Slashing and ripping of planting beds.
- Tube stock diversification (focussing on canopy species)
- Diversification by seeding (focusing on ground cover)

Other rehabilitation maintenance during the reporting included:

- African box thorn treatment over VD1
- Spot weed treatment of priority weeds in the Saddlers South area
- Broadleaf weed treatment on pasture in the Drayton Void and VD4 areas

Land Management

Weed treatment outside of the rehabilitation continues to focus on African olive, African Boxthorn and St Johns Wort treatment along boundary areas.

Feral pig trapping has commenced in this period yielding 32 pigs trapped.

Environmental Performance

Air Quality Monitoring (Period 1 January 2023 to 31 March 2023)

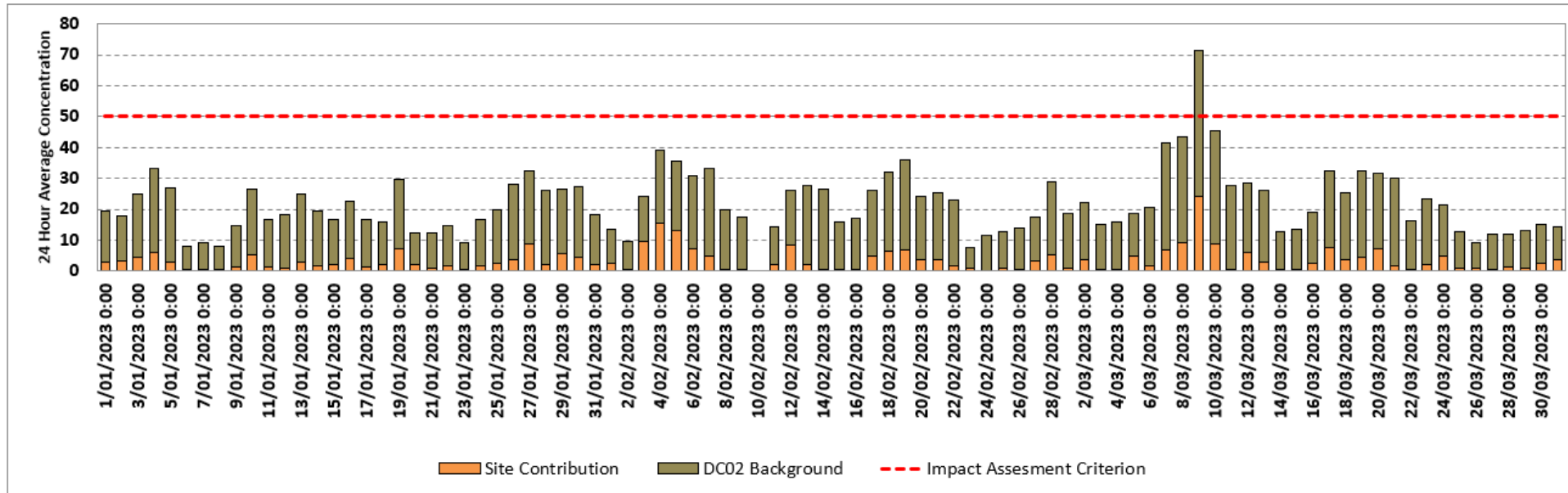
- This paper (for the reporting period of 1 January 2023 to 31 March 2023) covers the performance of all six statutory PM10 monitoring sites using TEOMs, and the two dust deposition gauges.
- Eight days within the reporting period experienced elevated absolute PM10 TEOM monitoring results. However, MAC contribution PM10 levels were below the PM10 threshold levels. All exceedances recorded were notified to the Department of Planning and Environment as per Project Approval.
 - 18 January 2023 at Sheppard Avenue – DC02;
 - 16 February 2023 at Roxburgh Rd – DC05;
 - 17 February 2023 at Roxburgh Rd – DC05;
 - 8 March 2023 at Sheppard Avenue – DC02;
 - 9 March 2023 at Antiene – DC07;
 - 17 March 2023 at Roxburgh Rd – DC05;
 - 20 March 2023 at Roxburgh Rd – DC05;
 - 20 March 2023 at Wellbrook – DC09.
- Table 1 below provides an equipment performance summary.
- 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.
- New loggers and wind speed sensors have been installed at all dust monitoring locations to improve dust data capturing and TARP alerts accuracy.

Table 1. Equipment Performance Summary

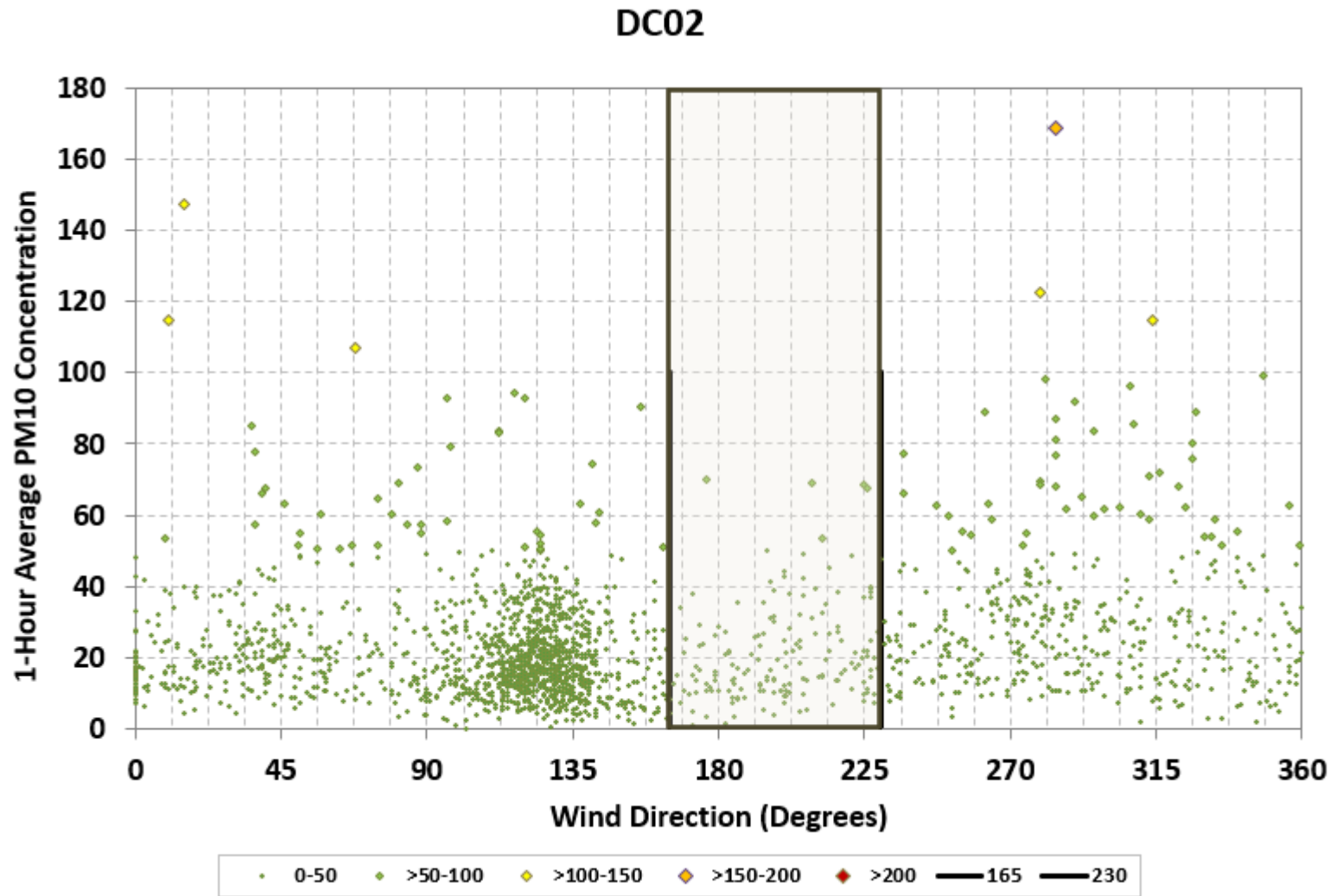
Site	Date/s	Reason
DC02	10/02/2023	During the period listed <75% data captured due to power or equipment connectivity issues.
DC05	19/02/2023 to 20/02/2023 and 07/03/2023 to 08/03/2023	During the period listed <75% data captured due to power or equipment connectivity issues.
DC06	17/02/2023	During the period listed <75% data captured due to power or equipment connectivity issues.
DC07	12/01/2023 and 02/02/2023	During the period listed <75% data captured due to power or equipment connectivity issues.

Sheppard Avenue – DC02

Data capture – 98.89%

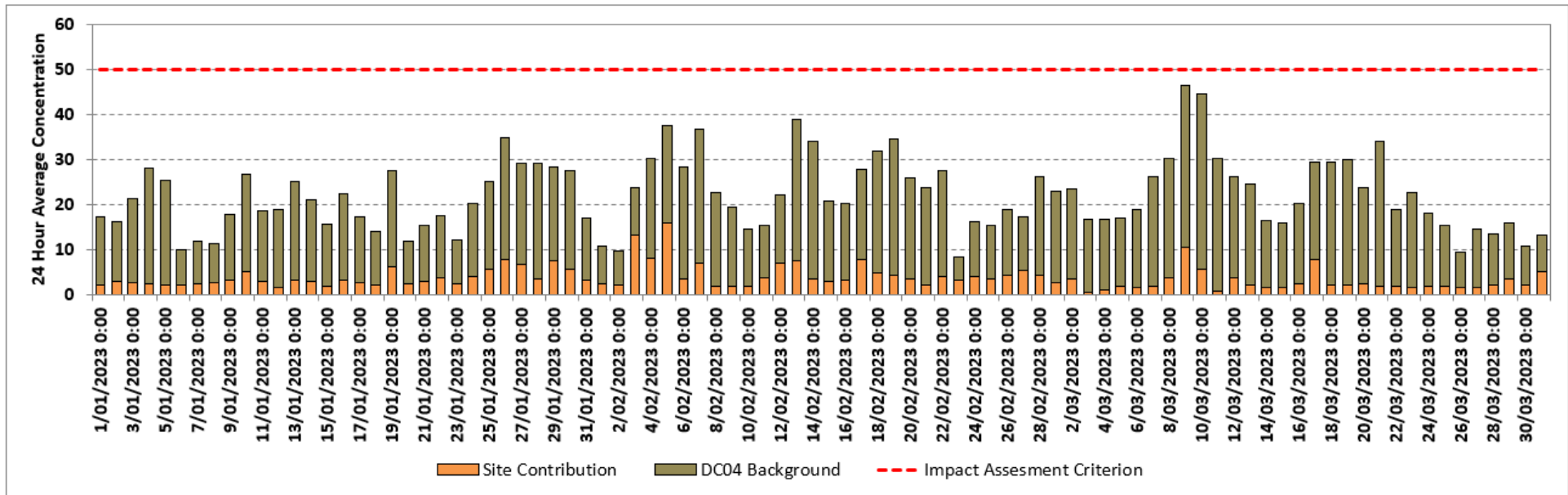


Sheppard Avenue – DC02

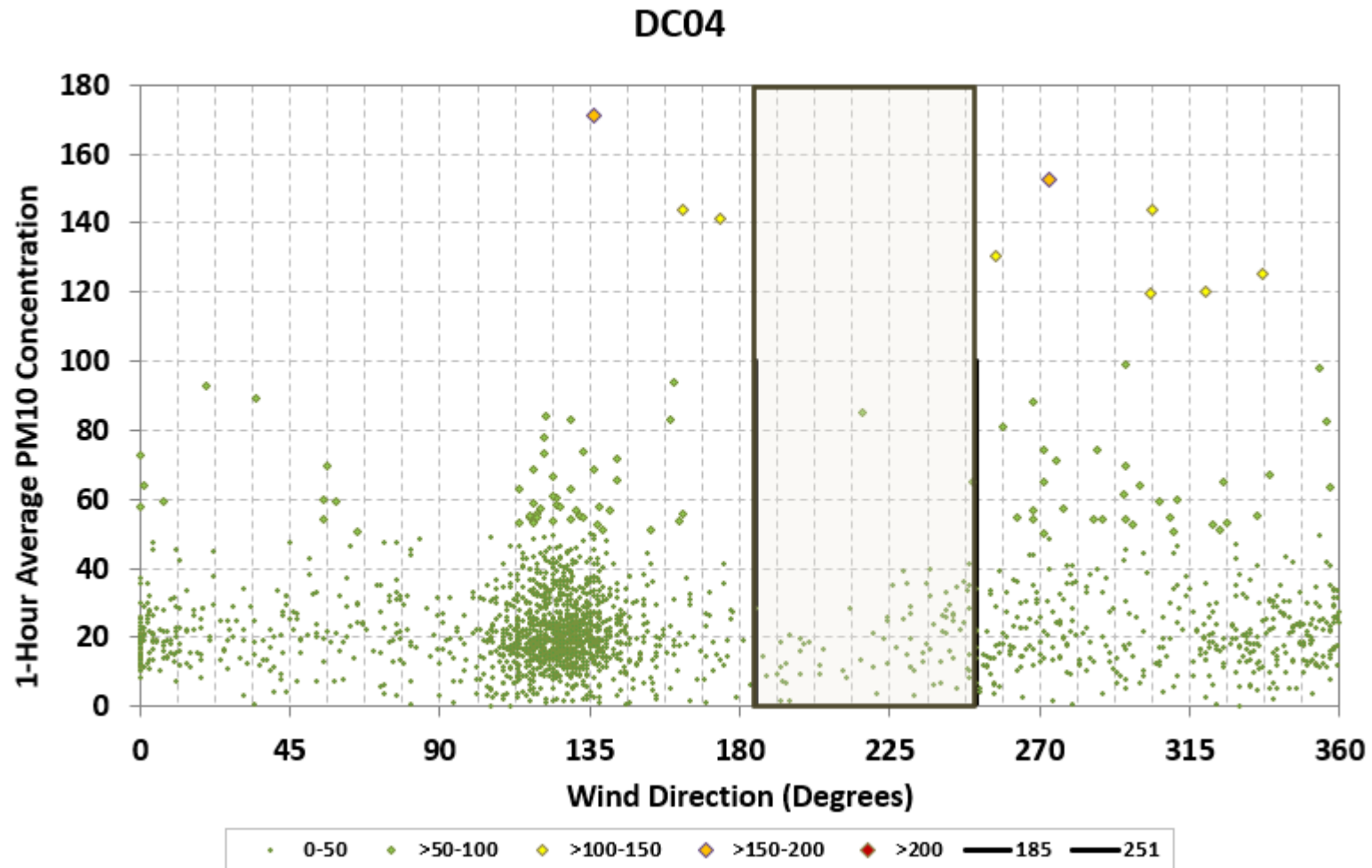


South Muswellbrook – DC04

Data capture – 100%

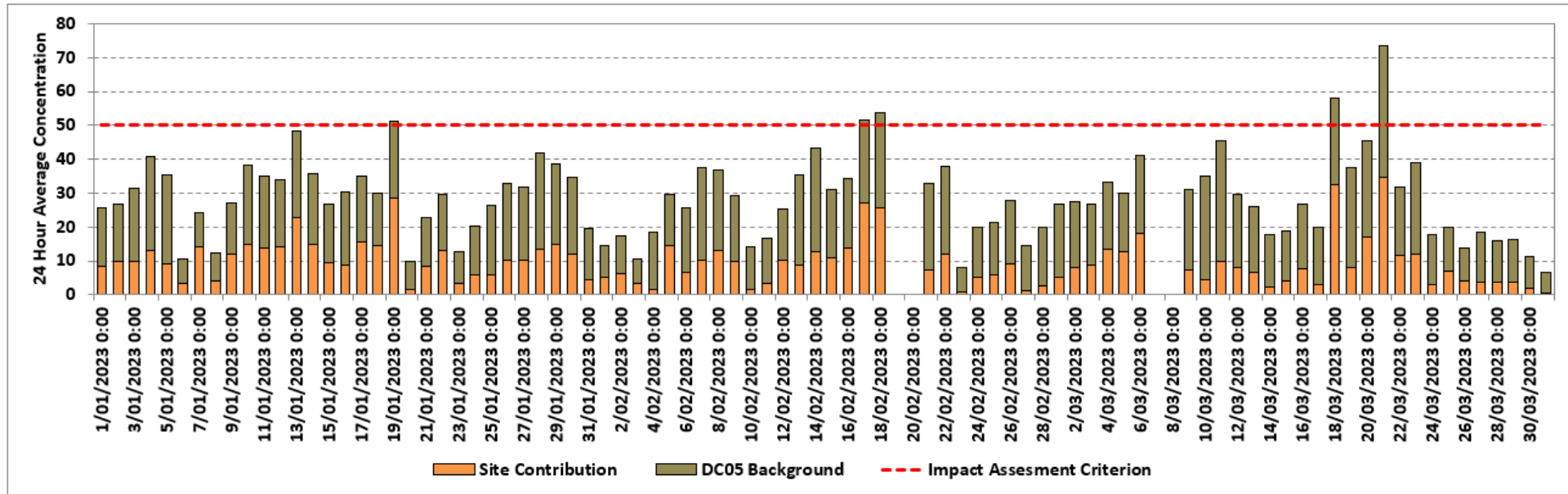


South Muswellbrook – DC04

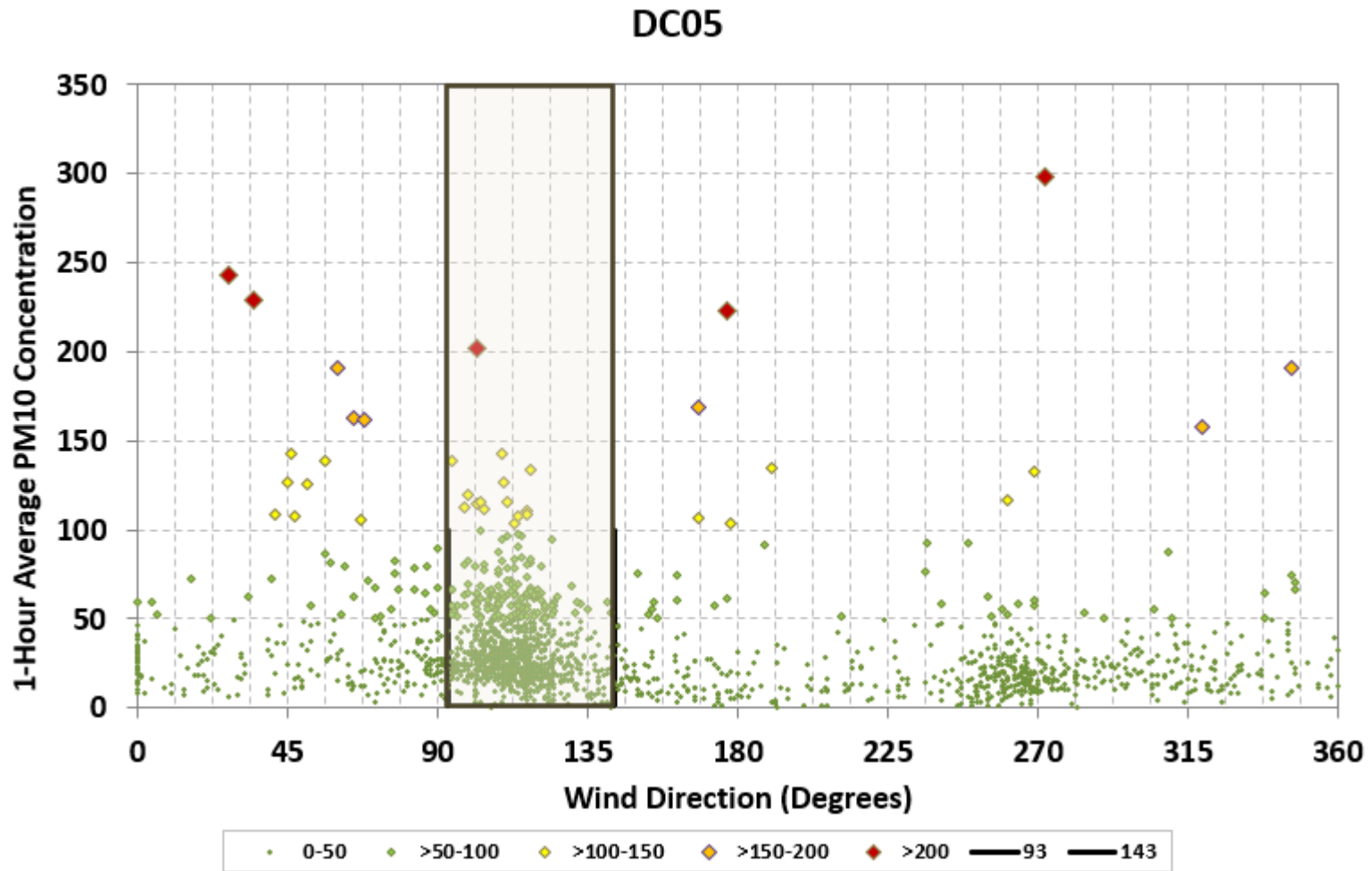


Roxburgh Road – DC05

Data capture – 95.56%

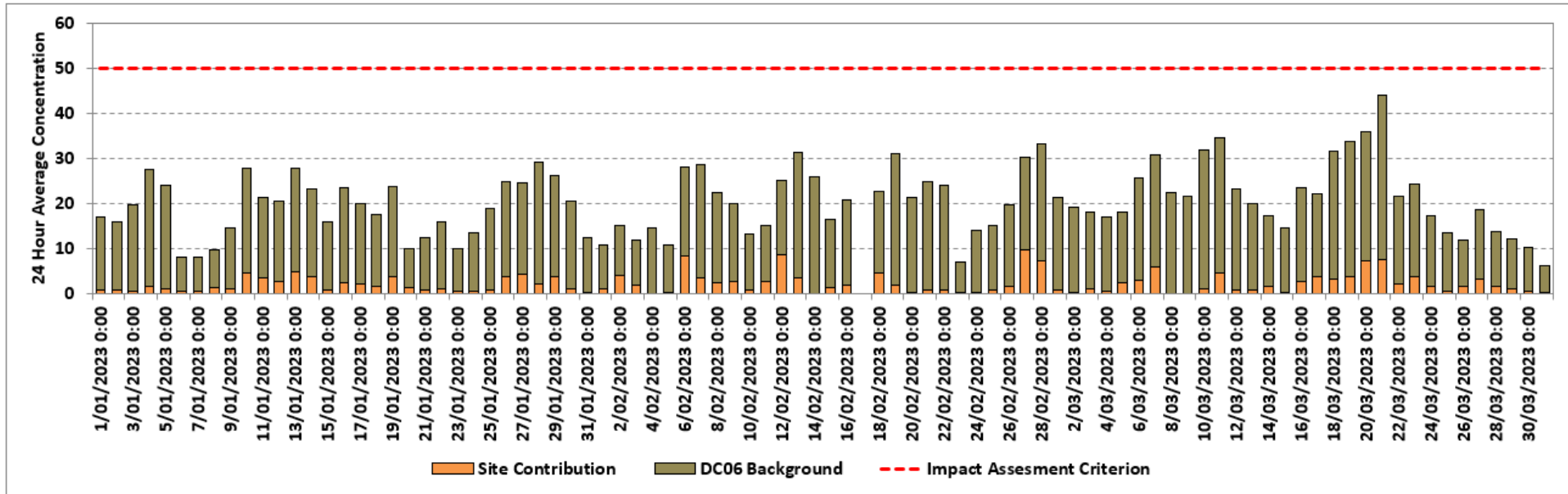


Roxburgh Road – DC05

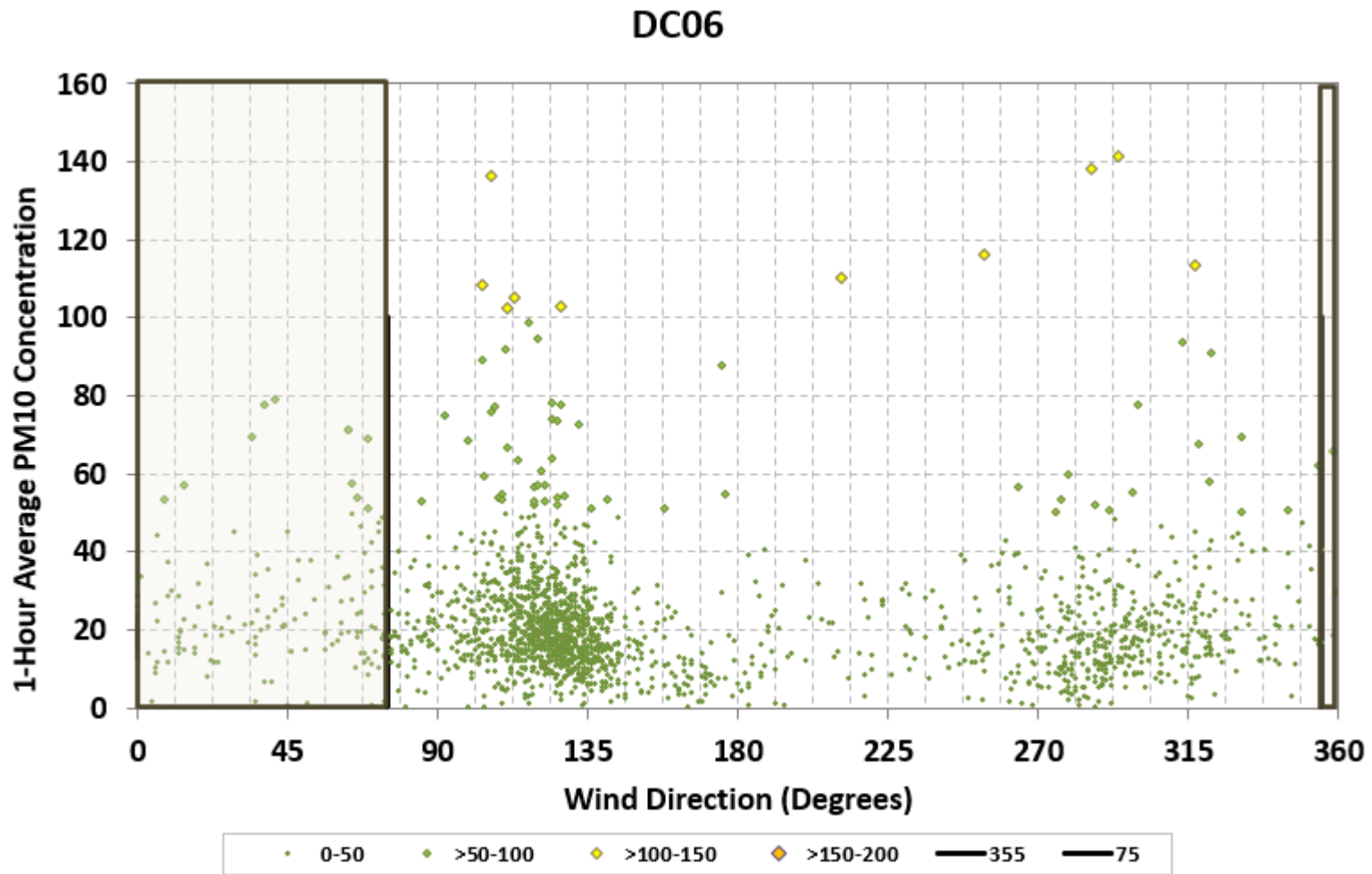


Edderton Homestead - DC06

Data capture – 98.89%

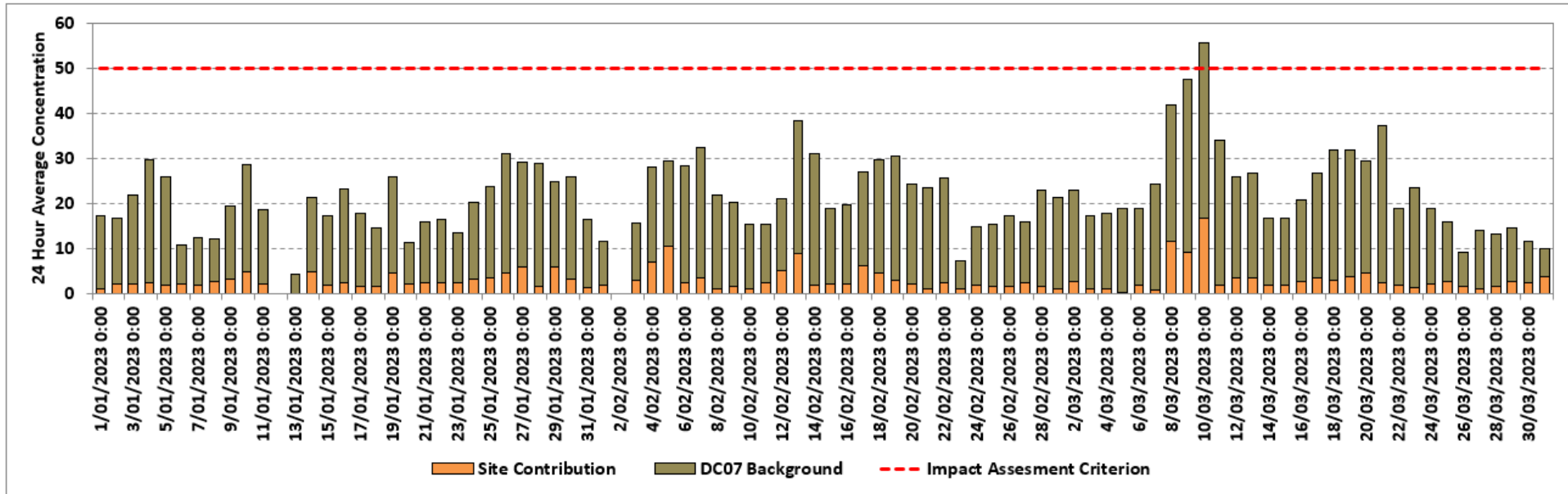


Edderton Homestead - DC06

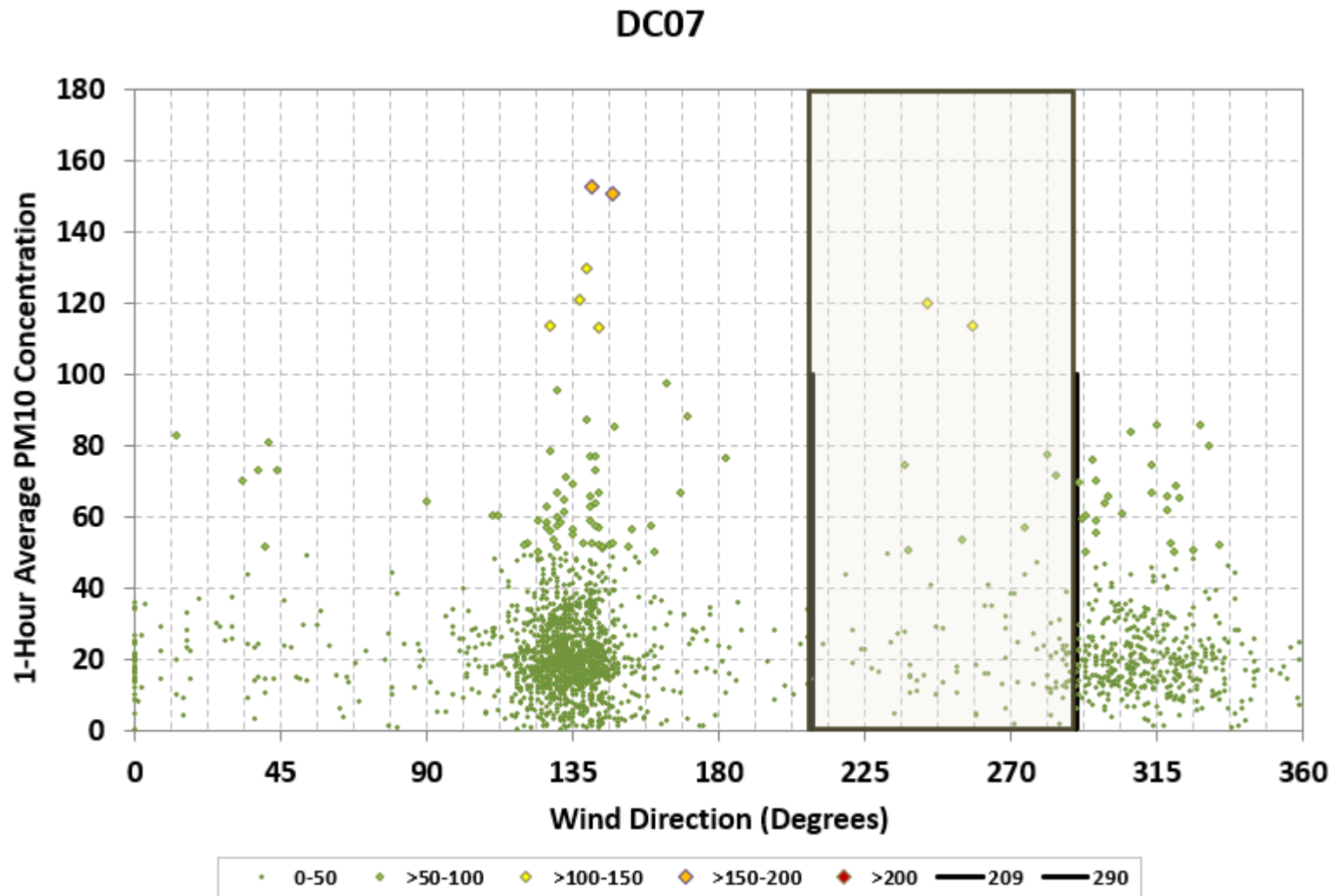


Antiene - DC07

Data capture – 97.78%

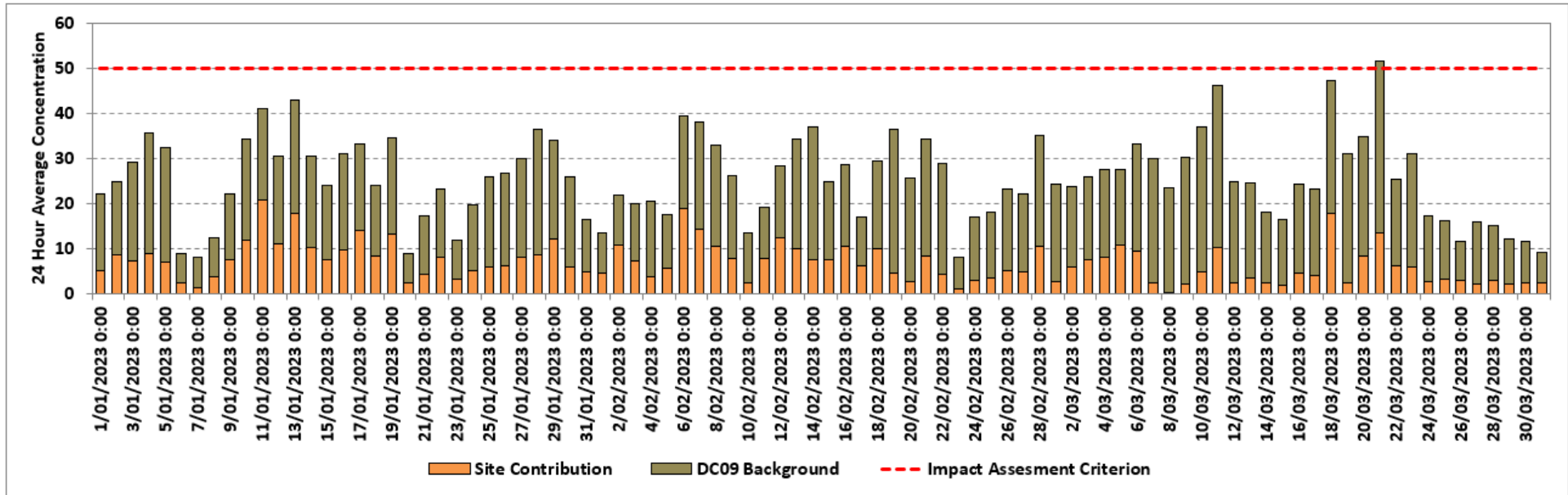


Antiene - DC07

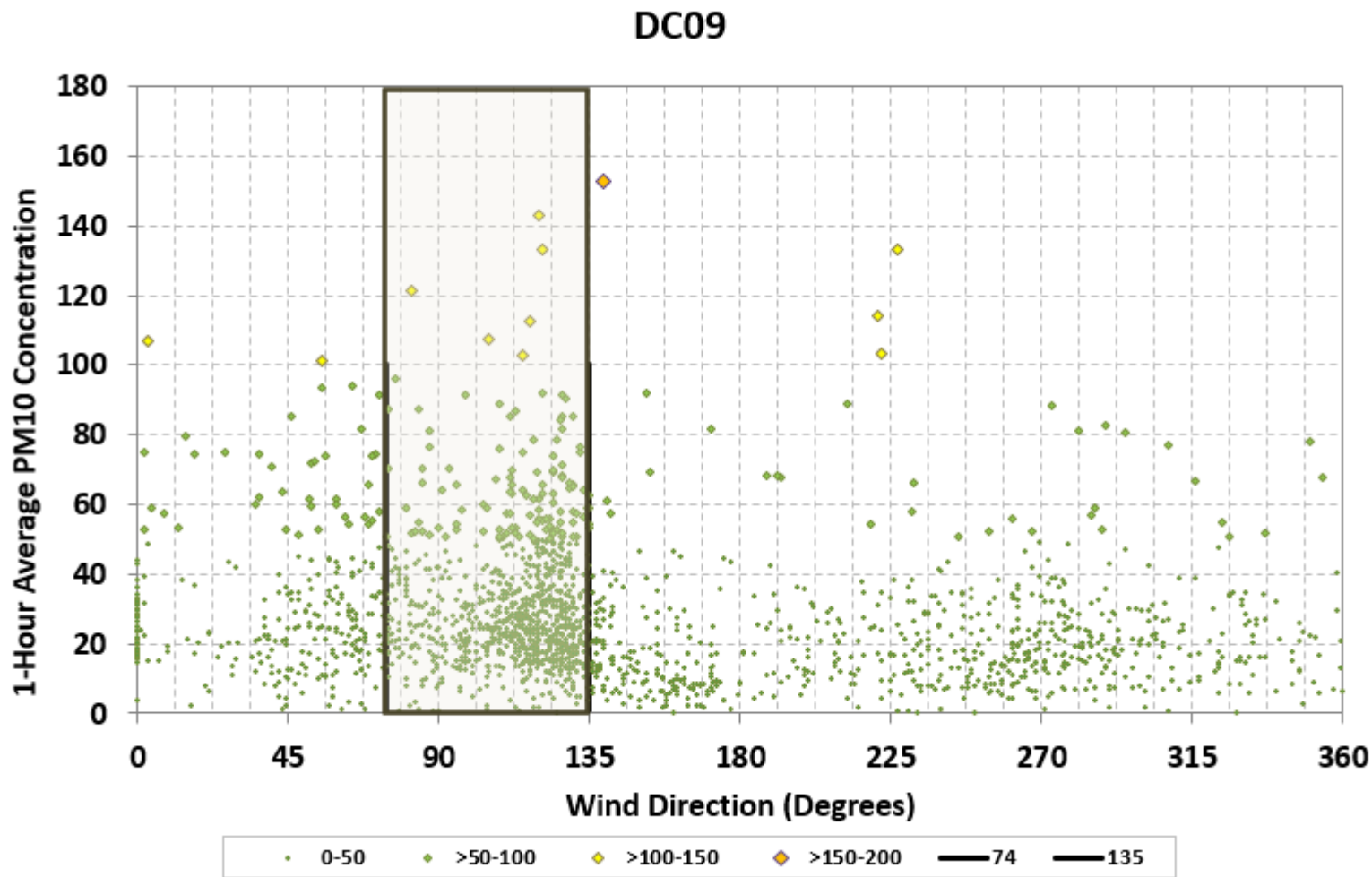


Wellbrook – DC09

Data capture – 100%

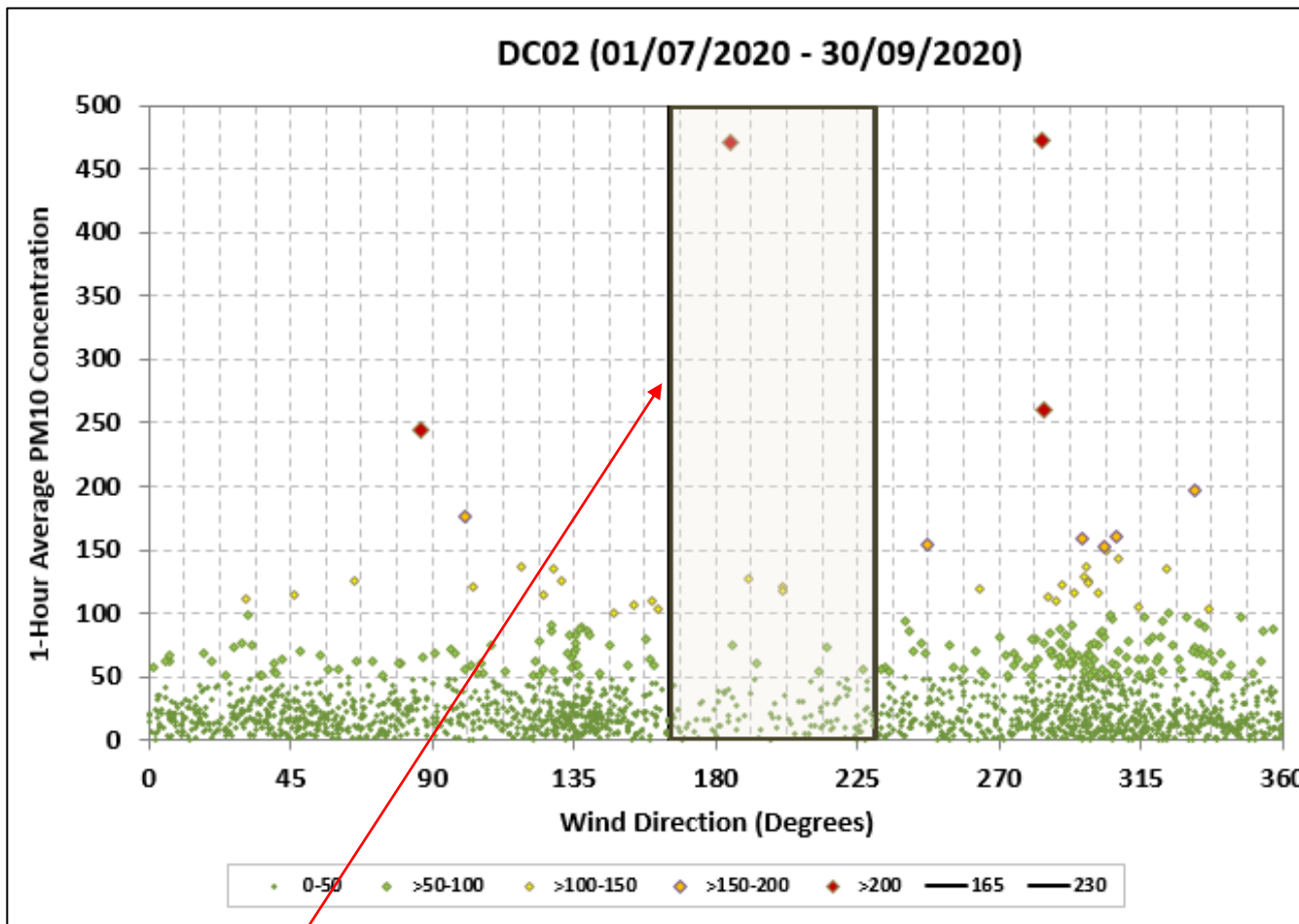


Wellbrook – DC09



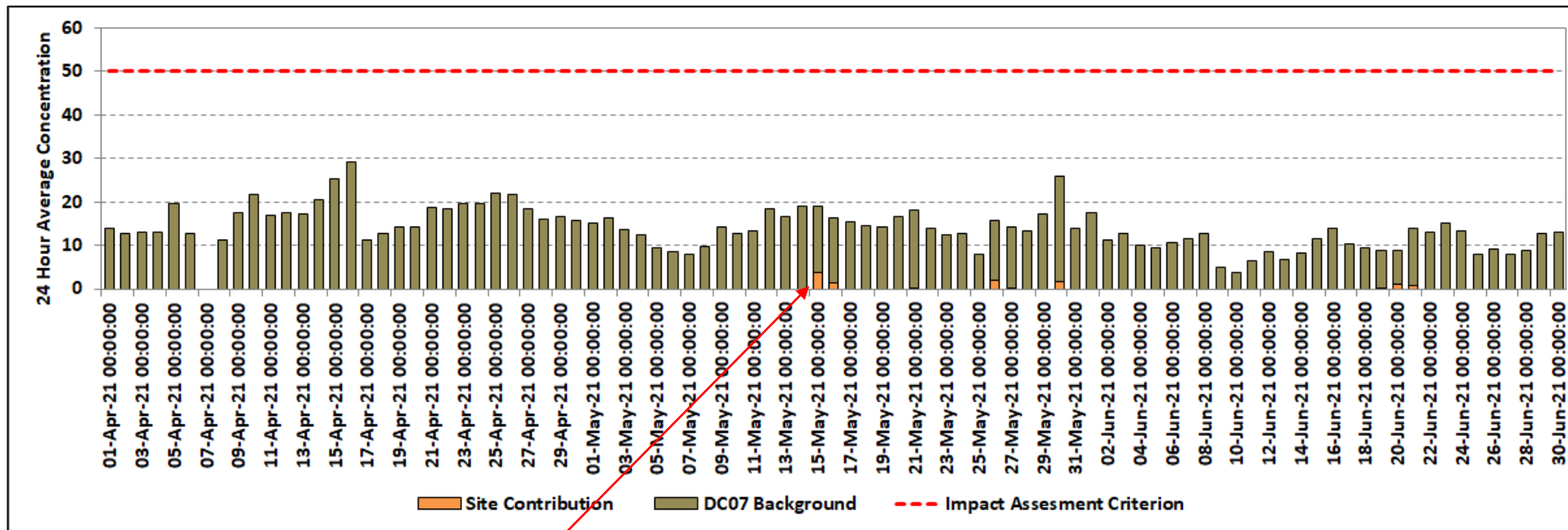
Air Quality Monitoring Interpretation Guidance

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

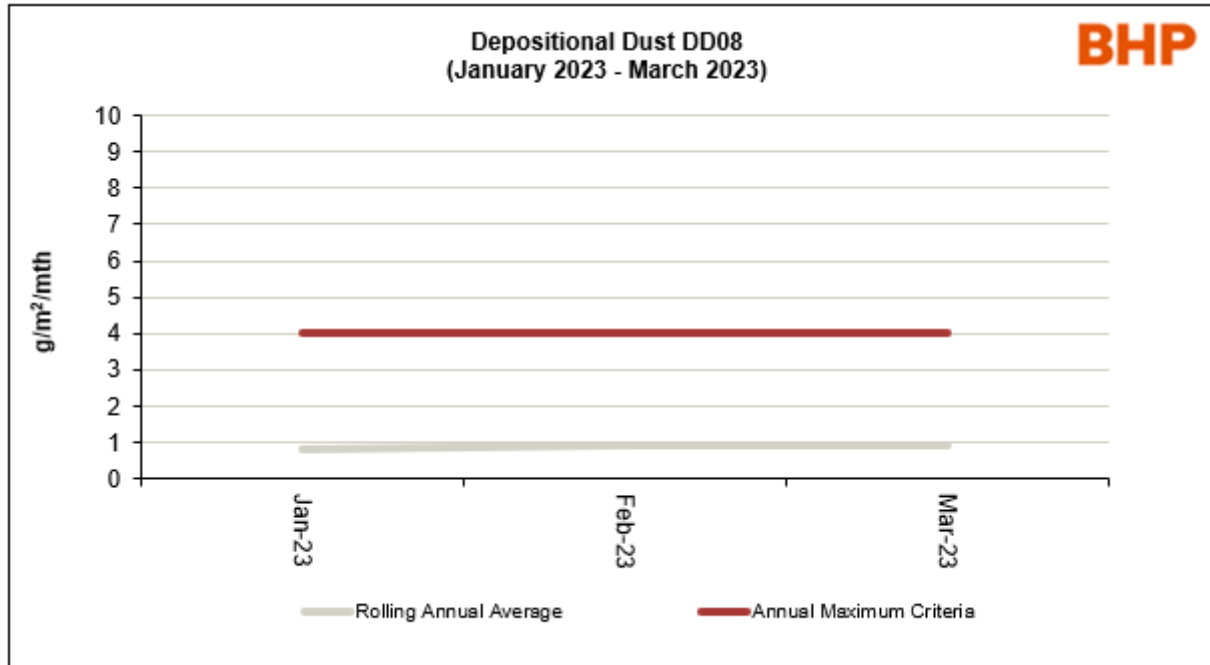


This graphic shows the cumulative Daily 24hr PM10 concentrations along with the incremental Mt Arthur Coal concentrations. This example shows that the cumulative 24hr concentration ('Background') of approximately 20 $\mu\text{g}/\text{m}^3$; the Mt Arthur incremental concentration ('Site Contribution')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

Deposited Dust

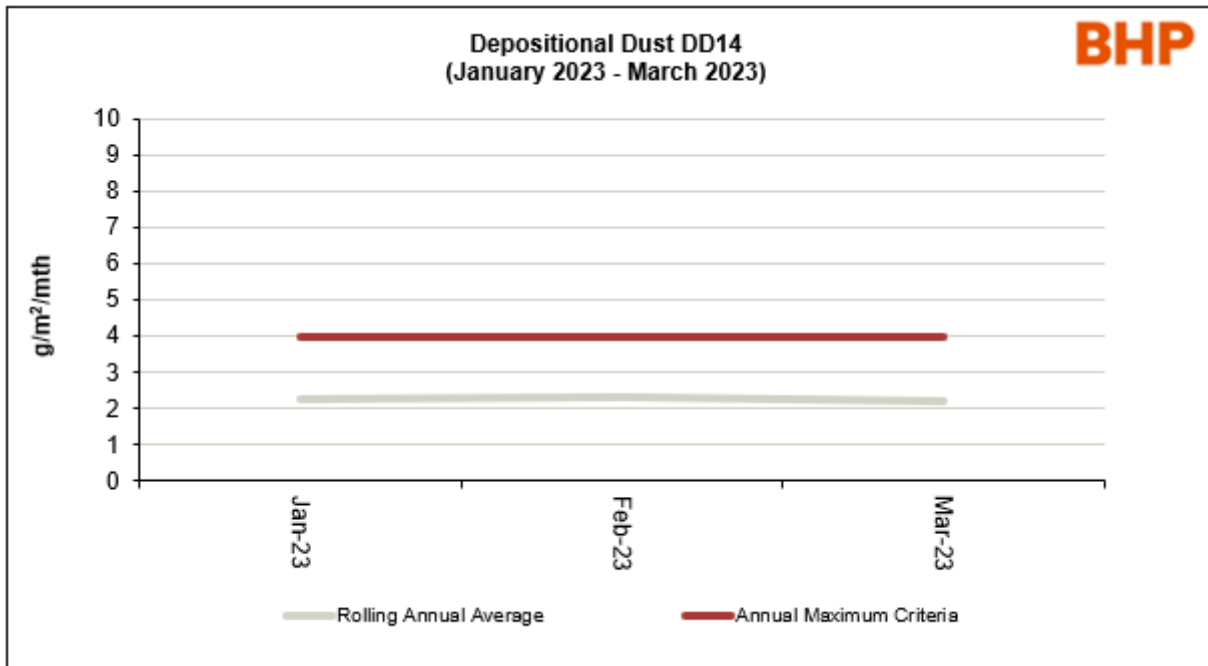
DD08

Data capture – 100%



DD14

Data capture – 100%



Water Monitoring (1 January 2023 to 31 March 2023)

Groundwater

December 2022 monitoring data was reviewed with results provided back to HVEC in February 2023. Three sites were identified as exceeding the level criteria, two sites were exceeding the pH criteria and one site was exceeding the EC criteria, further information provided below.

March 2023 monitoring data was reviewed with results provided back to HVEC in April 2023. Three sites were identified as exceeding the level criteria and two sites were exceeding the pH criteria, further information provided below.

Surface water

Surface water monitoring was conducted monthly during the three-month period. No exceedances of the criteria were detected.

Blast Monitoring (1 January 2023 to 31 March 2023)

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

Operational Noise Monitoring (1 January 2023 to 31 March 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 January 2023 to 31 March 2023)

Dust Level Exceedances

HVEC recorded exceedances of the impact assessment criteria on seven 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
18 January 2023	DC05	51.2	28.4	No complaints. Appropriate actions taken by OCEs.
16 February 2023	DC05	51.7	27	No complaints. Appropriate actions taken by OCEs. Slashing activities in nearby paddock likely contributed to exceedance.
17 February 2023	DC05	53.6	25.8	No complaints. Appropriate actions taken by OCEs. Slashing activities in nearby paddock likely contributed to exceedance.
8 March 2023	DC02	71.6	24.2	No complaints. Appropriate actions taken by OCEs.
9 March 2023	DC07	55.7	16.9	No complaints. Appropriate actions taken by OCEs. Bushfire smoke identified in area may have contributed to exceedance.
17 March 2023	DC05	58.2	32.6	No complaints. Appropriate actions taken by OCEs.
20 March 2023	DC05 DC09	73.5 51.5	34.8 13.6	No complaints. Appropriate actions taken by OCEs.

Groundwater Level and Quality Exceedances

After review of December 2022 monitoring data, exceedances of the level criteria were identified at three sites, two sites were exceeding the pH criteria and one site was exceeding the EC criteria. These exceedances were subsequently reported to DPE. HVEC's investigation determined that there was no environmental harm caused and the Water Management Plan (WMP) triggers needed to be revised. The WMP has since been revised (approved by DPE on 29 March 2023) with new trigger levels now in place.

After review of March 2023 monitoring data, exceedances of the level criteria were identified at three sites and two sites were exceeding the pH criteria. These exceedances were subsequently reported to DPE. HVEC's investigation determined that there was no environmental harm caused and the Water Management Plan (WMP) triggers needed to be revised. The WMP has since been revised (approved by DPE on 29 March 2023) with new trigger levels now in place.

Environmental Reporting (1 January 2023 to 31 March 2023)

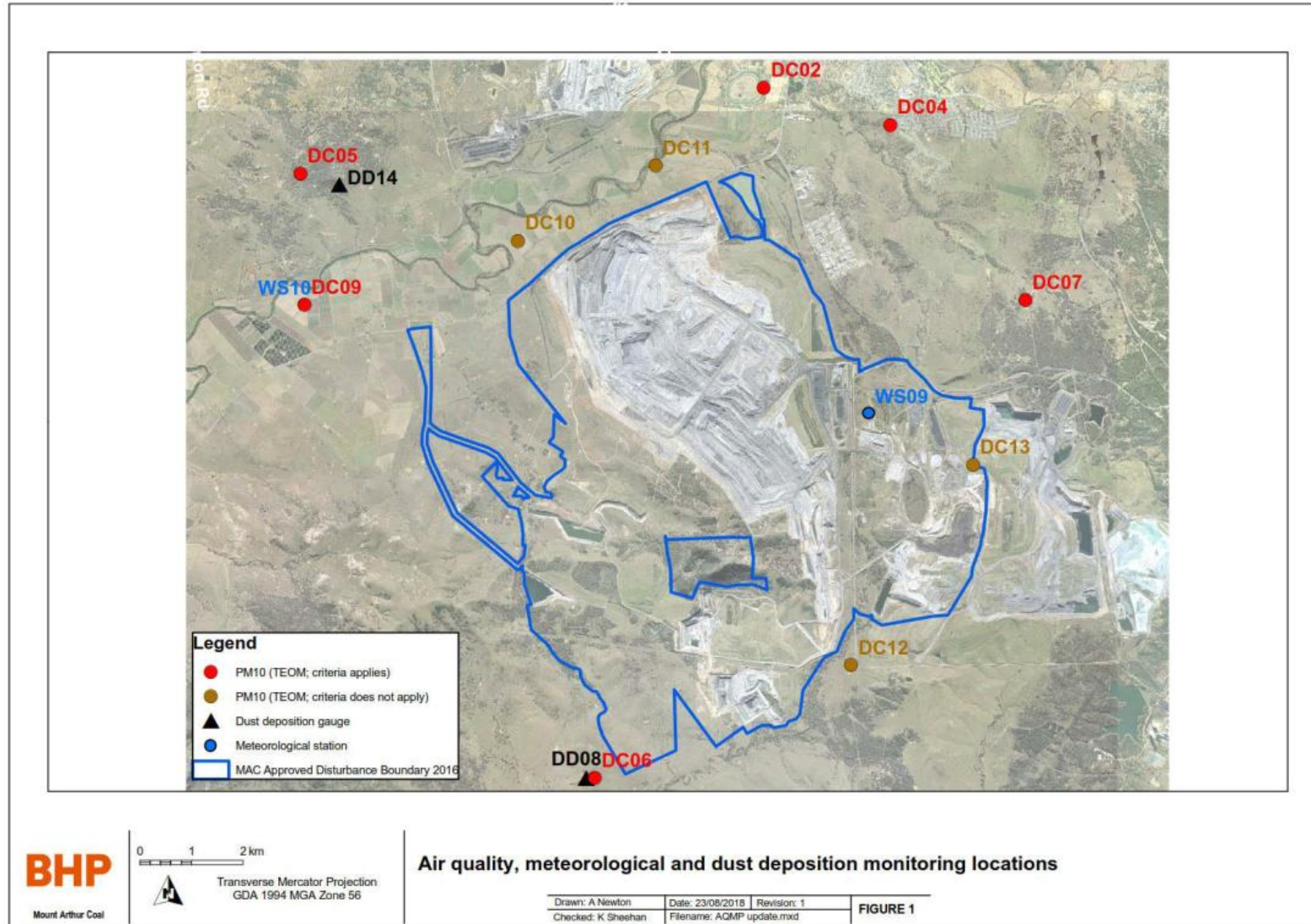
Monthly Reporting

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

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

Environmental Monitoring Plans (for reference)

Air Quality and Meteorological Monitoring Locations (Source: Air Quality Management Plan)

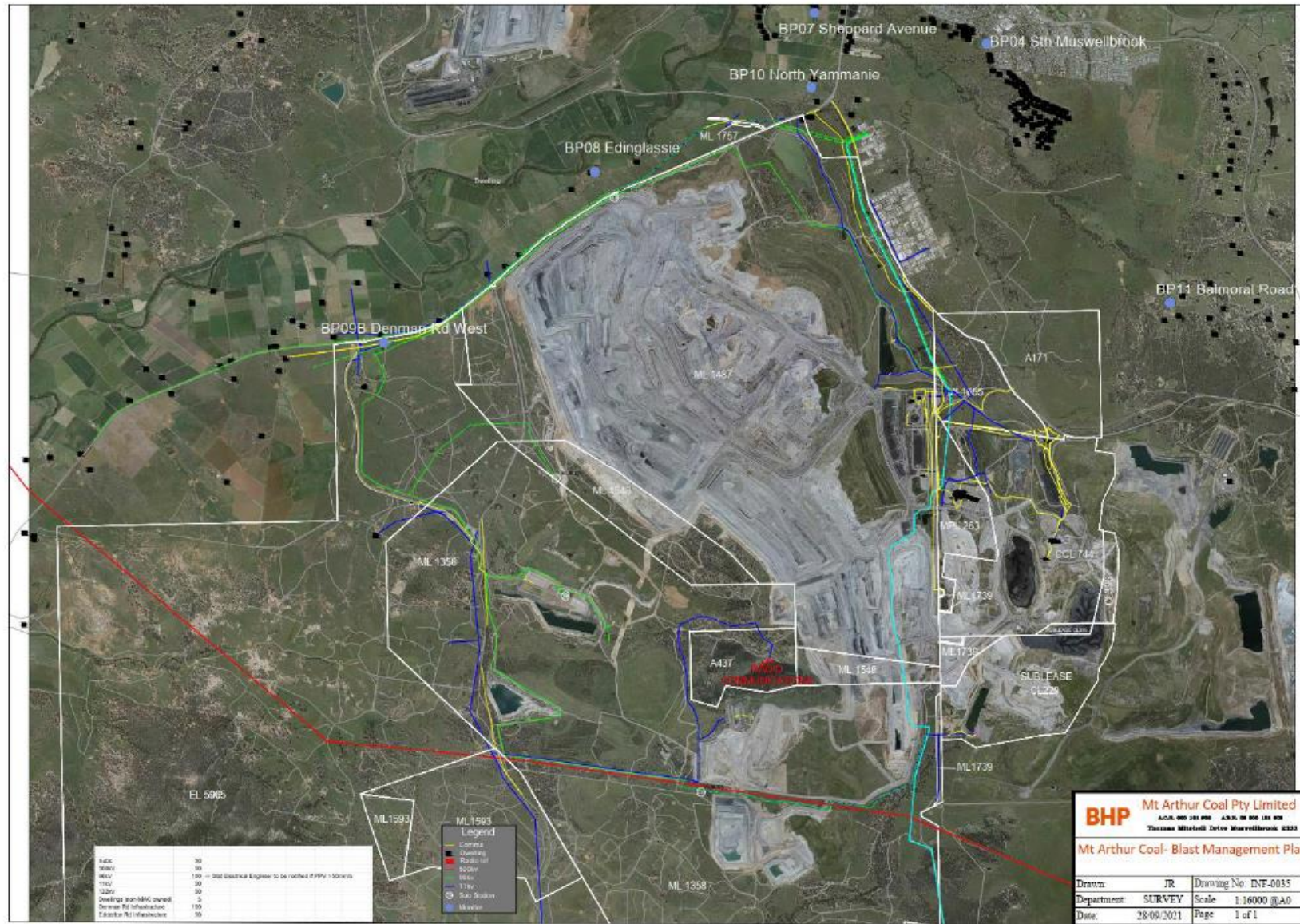


Site Water Monitoring Locations (Sourced and modified from: Site Water Management Plan)

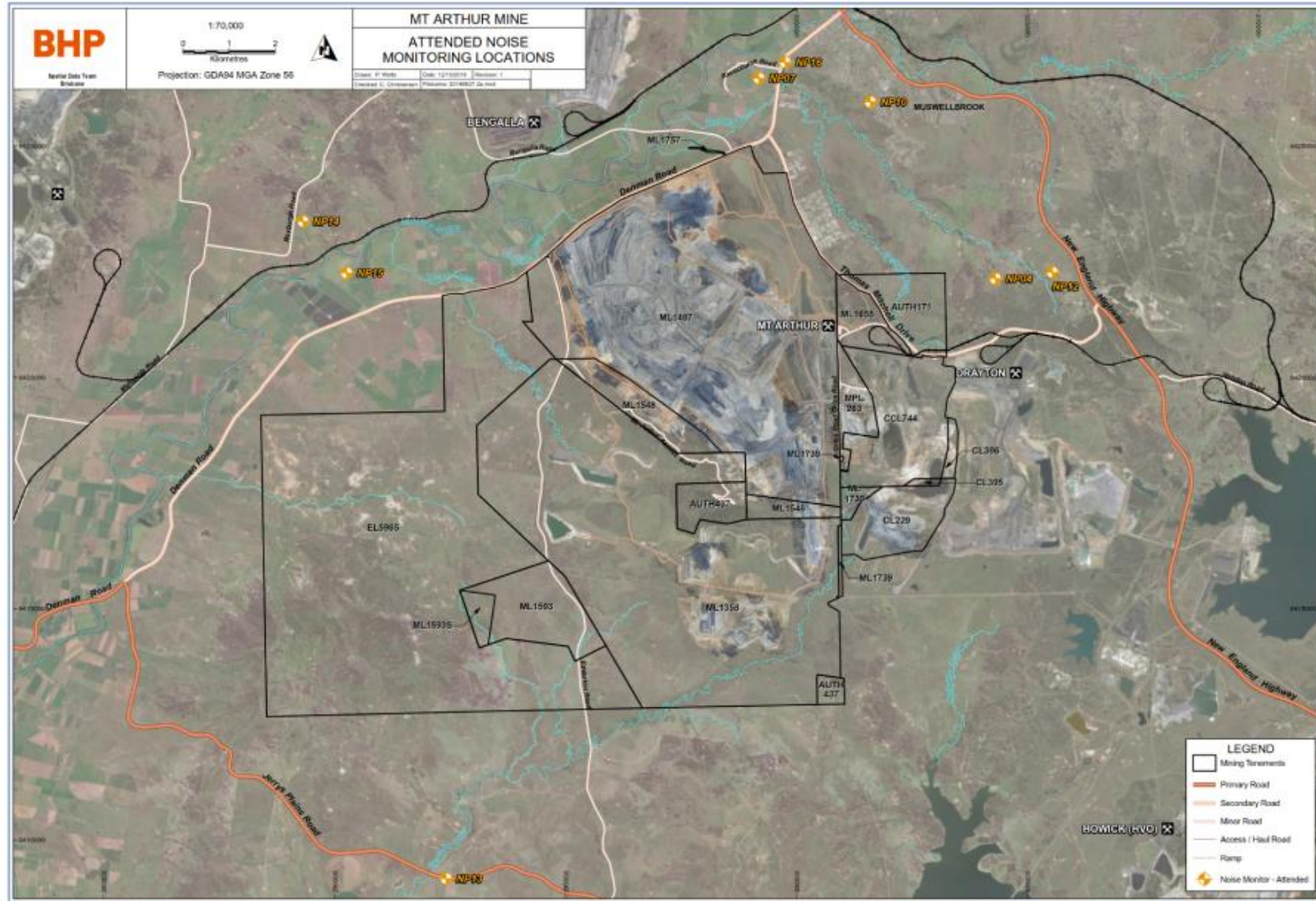
Surface Water and Ground Water Monitoring Locations:



Blast Monitoring Locations (Source: Blast Management Plan)



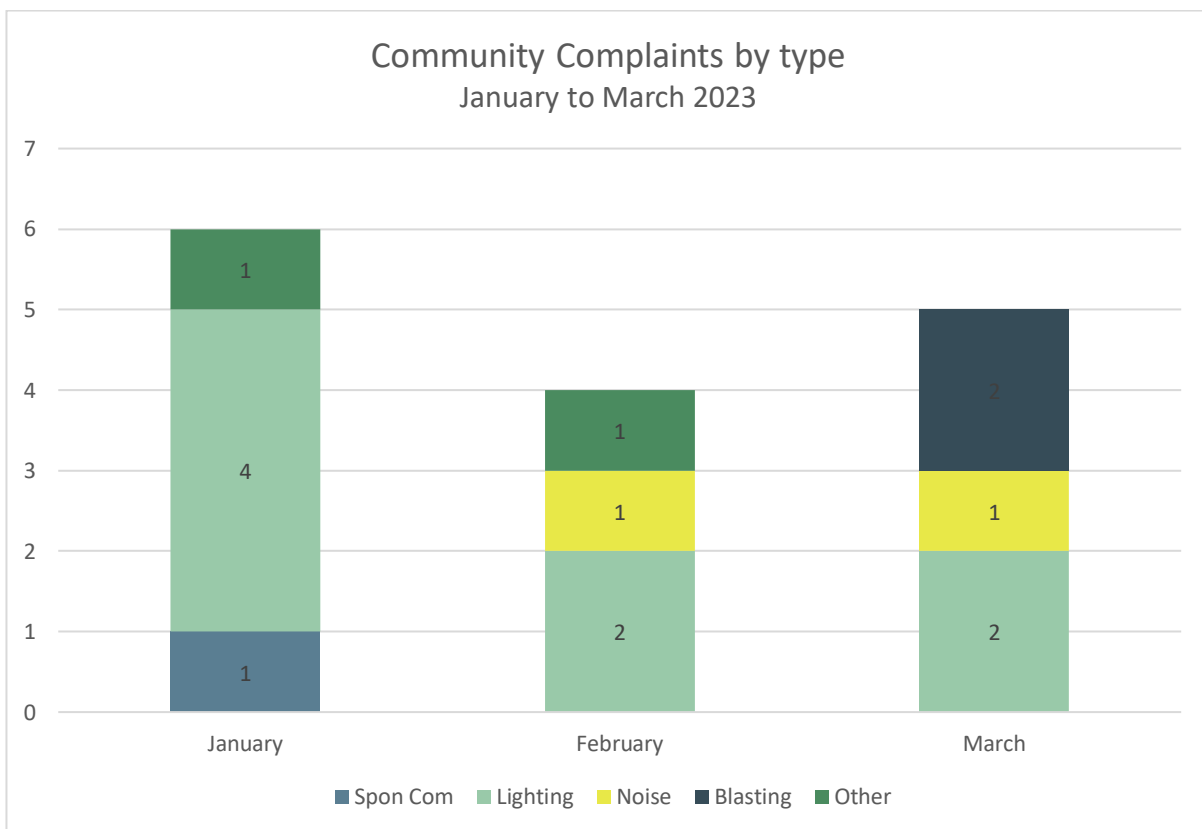
Operational Noise Monitoring (attended) Locations (Source: Noise Management Plan)



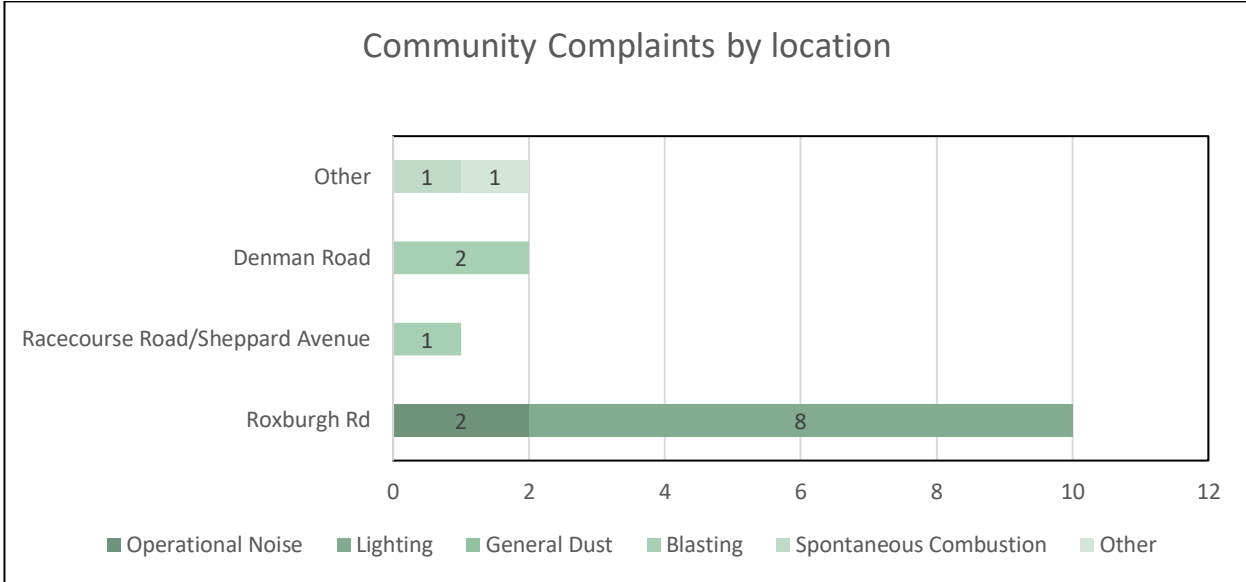
Community Complaints

The Community Complaints included in this report are for the period 1 January to 31 March 2023. Mt Arthur Coal received 15 complaints during this period, up from nine (9) in the previous period. Of the 15 complaints:

- Eight (8) were related to lighting;
- two (2) to blasting activity;
- two (2) to operational noise;
- one (1) to dust;
- one (1) to other;
- one (1) to spontaneous combustion; and
- one (1) to operational noise.



Of the 15 complaints received for the three-month reporting period, 10 came from residents at Roxburgh Road, two (2) from Denman Rd and one (1) from Race Course Road. Two (2) were unknow locations.



Community Complaints Summary: 1 January to 31 March

Date	Time	From	Issue	Lodgement type	Investigation and response to caller
6/01/2023	9.29pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
12/01/2023	10.11am	Anonymous	Spontaneous Combustion	Community Response Line	Regulator Investigation completed in response to the complaint.
14/01/2023	9.56pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
15/01/2023	10.01pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
16/01/2023	9.52pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
26/01/2023	10.19am	Anonymous	Other - debris	Community Response Line	Investigation completed to the caller's satisfaction.
4/02/2023	9.37pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
11/02/2023	9.12pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
24/02/2023	1.09AM	Roxburgh Rd, Muswellbrook	Operational Noise	Community Response Line	Nearest real-time monitor did not record any exceedances or distribute an alerts, Caller was advised of investigation and monitoring results.
27/02/2023	11.40am	Muswellbrook	Other	Community Response Line	BHP continues to engage with resident on this matter.

4/03/2023	9.11pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
7/03/2023	10.03am	Denman Rd, Muswellbrook	Blast vibration	Community Response Line	Investigation revealed weather conditions were suitable for blasting at the time. Results indicated ground vibration levels were within regulatory criteria. Caller was advised of investigation and monitoring results.
10/03/2023	2.58am	Roxburgh Rd, Muswellbrook	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.
10/03//2023	8.47pm	Roxburgh Rd, Muswellbrook	Lighting	Community Response Line	Lighting adjusted in response to the call.
13/03/2023	11.10am	Roxburgh Rd, Muswellbrook	Dust	Community Response Line	Investigation revealed weather conditions were suitable for blasting at the time. 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 monitoring results.

Actions from previous meeting/s

The actions from previous meetings are listed below.

Action 1 (Feb 2019): Chair to contact the DP&E (DPIE) to ascertain if a department representative could attend a future CCC meeting to speak about the cumulative impacts of dust. The DP&E were contacted	Chair to discuss with NSW Department of Planning	Ongoing
Action 2 (Nov 2019): Chair to arrange a department representative to discuss the lighting issue and associated community impacts particularly through the provision of defining offensive lighting.	Chair to discuss with NSW Department of Planning	Ongoing