

Air Quality and Dust Monitoring Monthly Report – November 2024

Solihull Metropolitan Borough Council



Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

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A report prepared by EWCs and MWCCs on behalf of HS2 Ltd.

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Monthly Summary

- 1.1.1 This Summary Report is published in fulfilment of commitments detailed in the High Speed Rail (London-West Midlands) Environmental Minimum Requirements, Annex 1: Code of Construction Practice, for the nominated undertaker to present the results of air quality and dust monitoring undertaken in Solihull Metropolitan Borough Council (SMBC) during November 2024.
- 1.1.2 Figures 1 to Figure 3 in Appendix A present the current worksites together with the dust monitoring locations.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report monthly available from www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2, which highlights: the applicable standards and guidance, as well as the air quality and dust monitoring methodologies to be implemented by nominated undertakers throughout construction.
- 1.1.4 The current worksites, as presented in Appendix A, Figure 1 to Figure 3, include:

Sublot 2B2

Waste Lane Overbridge Satellite

- Bridge works.
- Diversion works.
- Moving traffic.

Carol Green Rail Underbridge

- Diversion works.
- Bridge works.
- Moving traffic.

Sublot 2B3

Balsall Common Viaduct

- Rebar installation.
- Formwork installation.
- Backfilling of the pile caps.

Park Lane

- Material stockpile and reload.
- M215 Overbridge works.
- Dig/replace Culvert works.
- A429 technical backfill.

Sublot 5S

Coleshill Heath Road

- Import of 6FS.
- Haul road maintenance.
- Landscape fill.
- Installation of Shape Accelerometer Arrays (SAAs) for Lower Embankment Fill (LEF) platform.
- Diversion of haul road.
- Filter drain + manhole installation.
- Stockpile management and material transfers ongoing.

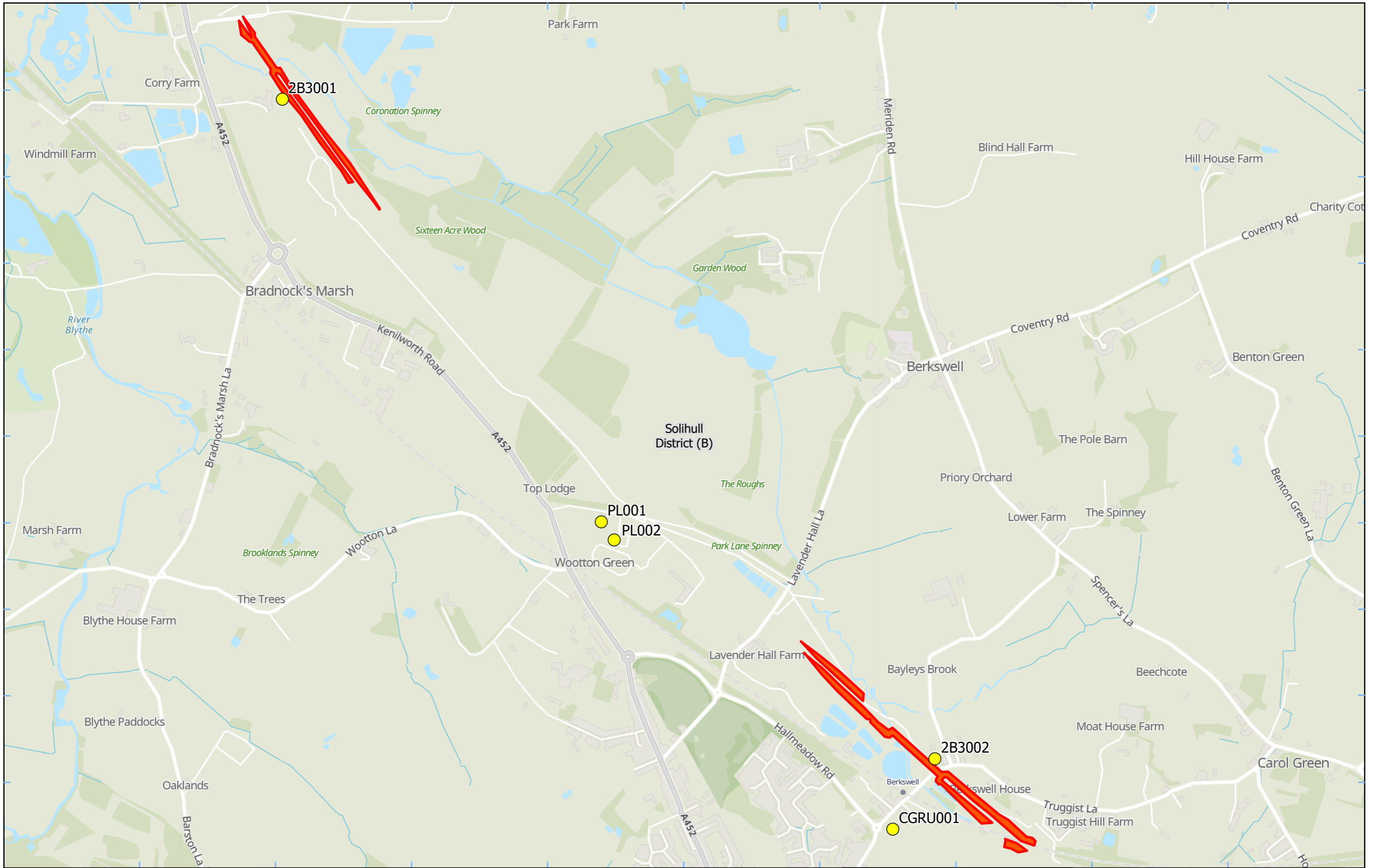
- 1.1.5 Ten (10) dust monitors are installed around these worksites, where works are underway. These sites returned a low to medium dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from the dust monitors presented in Figure 4. All continuous dust monitoring is undertaken using indicative monitors. Despite being Environment Agency (MCERTS) certified, indicative monitors carry a higher level of uncertainty than reference monitors, and therefore cannot be strictly compared with Air Quality Standards for human health and the environment. The purpose of the monitoring undertaken is to ensure the effectiveness of the on-site mitigation.
- 1.1.7 The trigger level for PM₁₀ concentrations of 190 µg/m³, over a 1-hour period, in accordance with the updated guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites – (October 2018)*' has been applied.
- 1.1.8 No (0) dust trigger alerts were recorded during the monitoring period (November 2024).
- 1.1.9 Data capture was below 90% for multiple monitors due to:
- Monitor 2B3001 - A battery refresh was done on 26th November 2024. After the battery refresh, the power supply issues were resolved.
 - Monitor 2B3002 - A battery refresh and full dust work up was done on 14th November 2024. After the battery refresh and full dust work up, the power supply issues were resolved.
 - Monitor BBE001 - A battery refresh was done on 3rd December 2024. After the battery refresh, the power supply issues were resolved.
 - Monitor BIS001 - A battery refresh was done on 3rd December 2024. After the battery refresh, the power supply issues were resolved.
 - Monitor CGRU001 - A battery refresh was done on 4th December 2024. After the battery refresh, the power supply issues were resolved.
 - Monitor DLE001 - A battery refresh was done on 14th November 2024. After the battery refresh, the power supply issues were resolved.

- Monitor DLE002 - A battery refresh was done on 21st November 2024. After the battery refresh, the power supply issues were resolved.
- Monitor PL002 - A monitor swap out and battery refresh were done on 26th November 2024. A field calibration is scheduled for 8th January 2025.
- Monitor CHRU001 – Monitor issues. A full dust work up was done on 19th November 2024, but this did not resolve the issue. A monitor swap out and field calibration is scheduled for 11th December 2024.

1.1.10 There were no (0) complaints received during this reporting period (November 2024).

Appendix A – Worksites and Monitoring Locations

Figures 1-3: Worksites and Monitoring Locations within SMBC



Legend

- Dust Monitor
- Worksite
- District Borough Unitary Boundaries

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Contains data from OS Zoomstack

Map Number

Map Name
**Worksite and Monitoring Locations
In SMBC (Sheet 1)**

Solihull Metropolitan Borough

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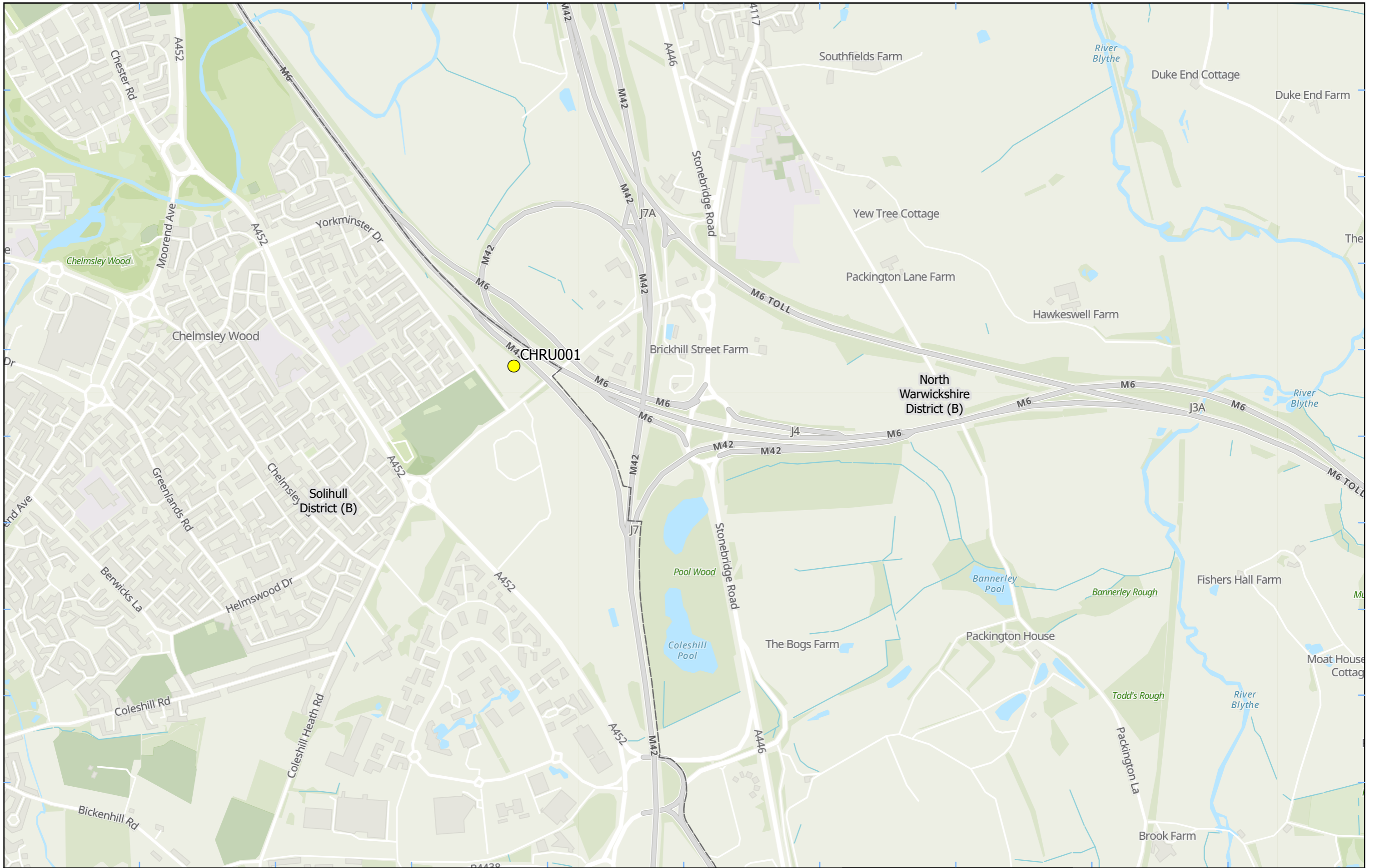
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Legend
 Dust Monitor
 District Borough Unitary Boundaries

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Map Number
 Map Name
**Monitoring Locations
 In SMBC (Sheet 2)**
 Solihull Metropolitan Borough

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 Metres
 Date: 26/03/24



Legend

- Dust Monitor
- District Borough Unitary Boundaries

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Map Number

Map Name
**Monitoring Locations
In SMBC (Sheet 3)**

Solihull Metropolitan Borough

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Date: 11/03/24

Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring Locations and Results

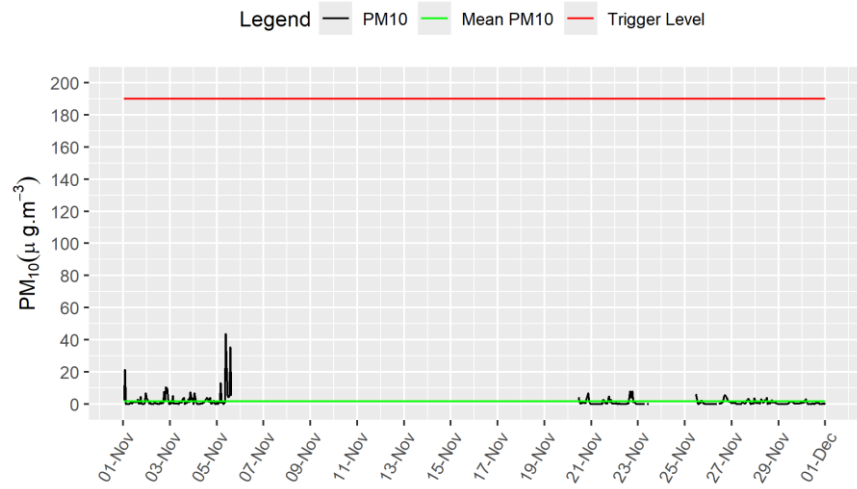
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1-hour periods exceeding trigger level of 190 µg/m ³	Data capture Month (%)
2B3001	422324, 279976	Sublot 2B3, at Marsh Farm	M	Yes	No	8.8	0.1	29.3	0	23.3
2B3002	424659, 277691	Sublot 2B3, at Cherry Tree Cottage	M	Yes	No	2.3	0.1	49.8	0	67.9
CHRU001	419279, 286762	Bluebell Drive, Coleshill Heath Road Underbridge	L	Yes	No	-	-	-	0	0.0
PL001	423512, 278572	Park Lane	M	Yes	No	9.1	0.1	30.6	0	100.0
PL002	423483, 278497	Final Home, Park Lane	M	Yes	No	1.7	0.1	43.9	0	43.9
DLE001	421183, 281816	Diddington Lane	M	Yes	No	7.7	0.4	113.6	0	63.2
DLE002	420872, 282809	Hampton Hill Farmhouse	M	Yes	No	7.9	0.1	45.7	0	60.3
BIS001	420231, 283534	Hollywell Brook	M	Yes	No	12.3	0.1	39.3	0	77.2
CGRU001	424473, 277440	Annora House	M	Yes	No	2.8	0.1	40.4	0	70.3

Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1-hour periods exceeding trigger level of 190 µg/m ³	Data capture Month (%)
BBE001	421654, 281311	Patrick Farmhouse	M	Yes	No	7.5	0.1	29.1	0	46.5

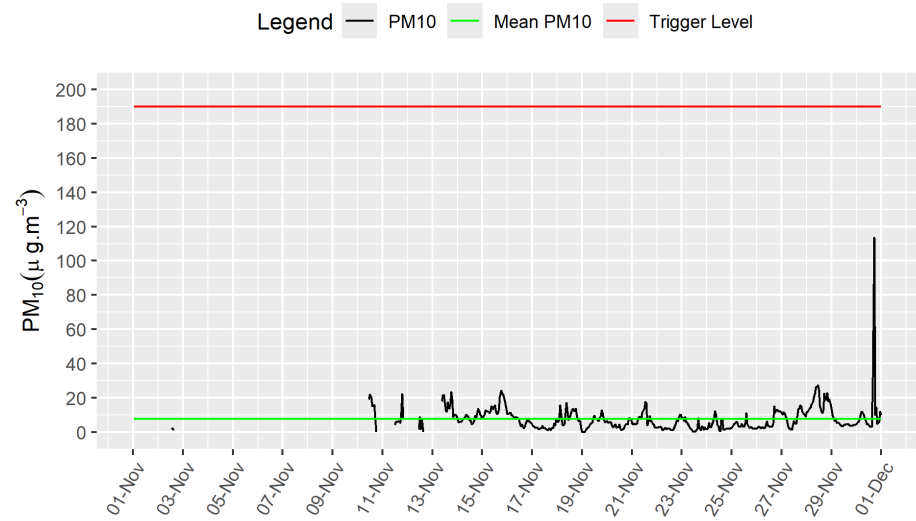
Figure 4: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors



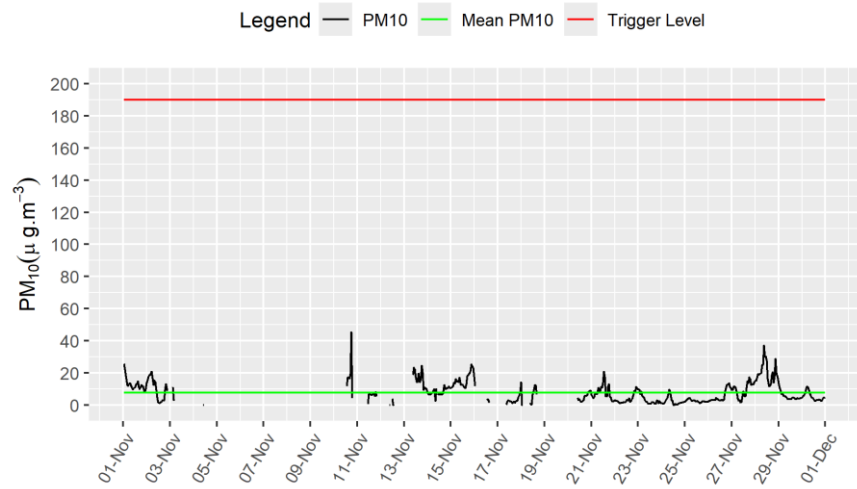
PL002



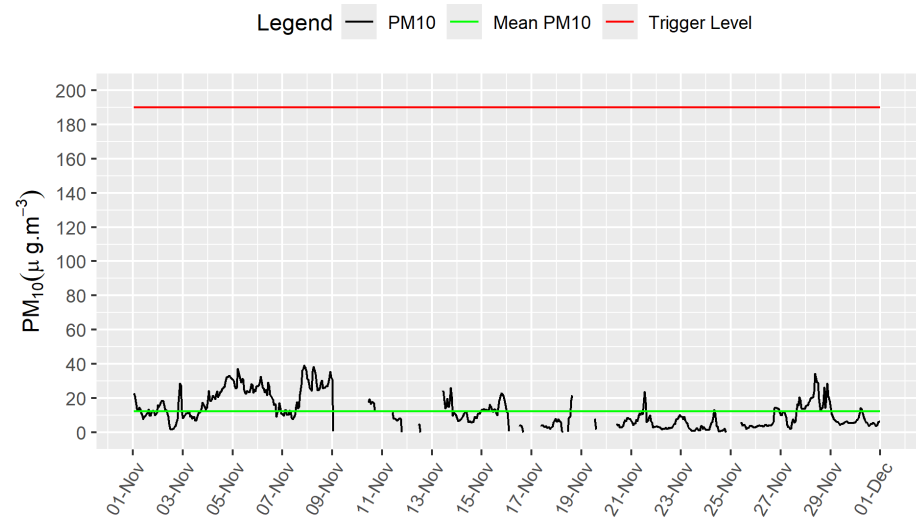
DLE001



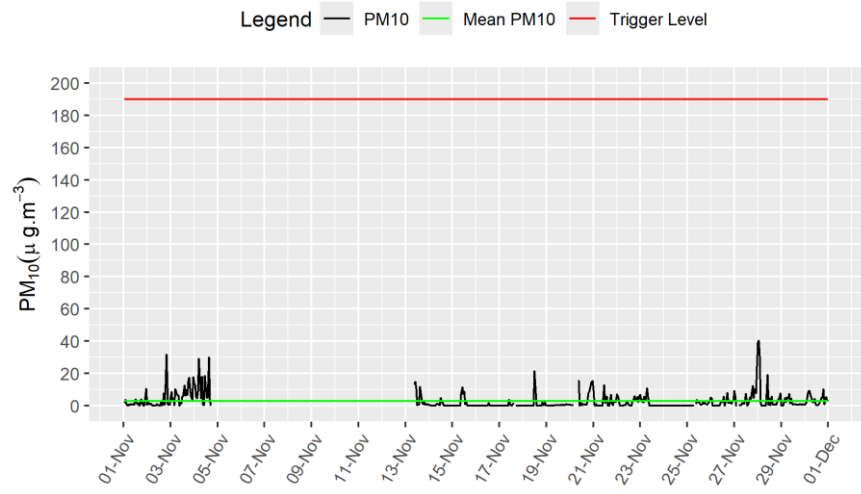
DLE002



BIS001



CGRU001



BBE001

