

Air Quality and Dust Monitoring Monthly Report – January 2025

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 January 2025.
- 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

- Steel fixing works.
- Tunnel excavation works.
- Construction of B4101 Waste Lane overbridge.
- Moving traffic.

Carol Green Rail Underbridge

- Noise barrier installation (anchors and plates).
- Robust kerb first pour on 6th January 2025.
- General finishing works.
- Public Right of Way (M191) – wall steel fixing.
- Public Right of Way (M191) – roof slab steel fixing.
- Piling work for rigid inclusion.

Sublot 2B3

Balsall Common Viaduct

- Excavation works.
- Moving machines.
- Moving traffic.

Park Lane

- M215 overbridge works.
- Material stockpile and reload.
- Construction of a new culvert alignment.

Sublot 5S

Coleshill Heath Road

- Landscape fill.
- Fill of dig & replace with stabilisation.
- Import of 6F5 aggregate from Rail Stone Solutions (RSS) to Roadhead.
- Material reloading.
- Laying of 6FS material.
- Reload of stockpile / embankment to piling platform.
- Earthworks team construction piling platform.
- Joint venture between Bachy Soletache and Balfour Beatty Ground Engineering (SB3) Mobilisation.
- SB3 piling south abutment and wingwalls.
- 2nd pour rebar install.
- Pier shaft shuttering 1st pour.
- Victor Buyck mobilisation.
- Segment deliveries.
- 64450 tonne crane turning segments.
- Ongoing site wide material transport and haul road maintenance.

Coleshill Heath Road Underbridge

- BROK breaking piles.
- Re-do top platform.
- Excavation of remaining pile caps.
- SB3 Piling – permanent piles (1500mm diameter).
- Ongoing site wide material transport and haul road maintenance.

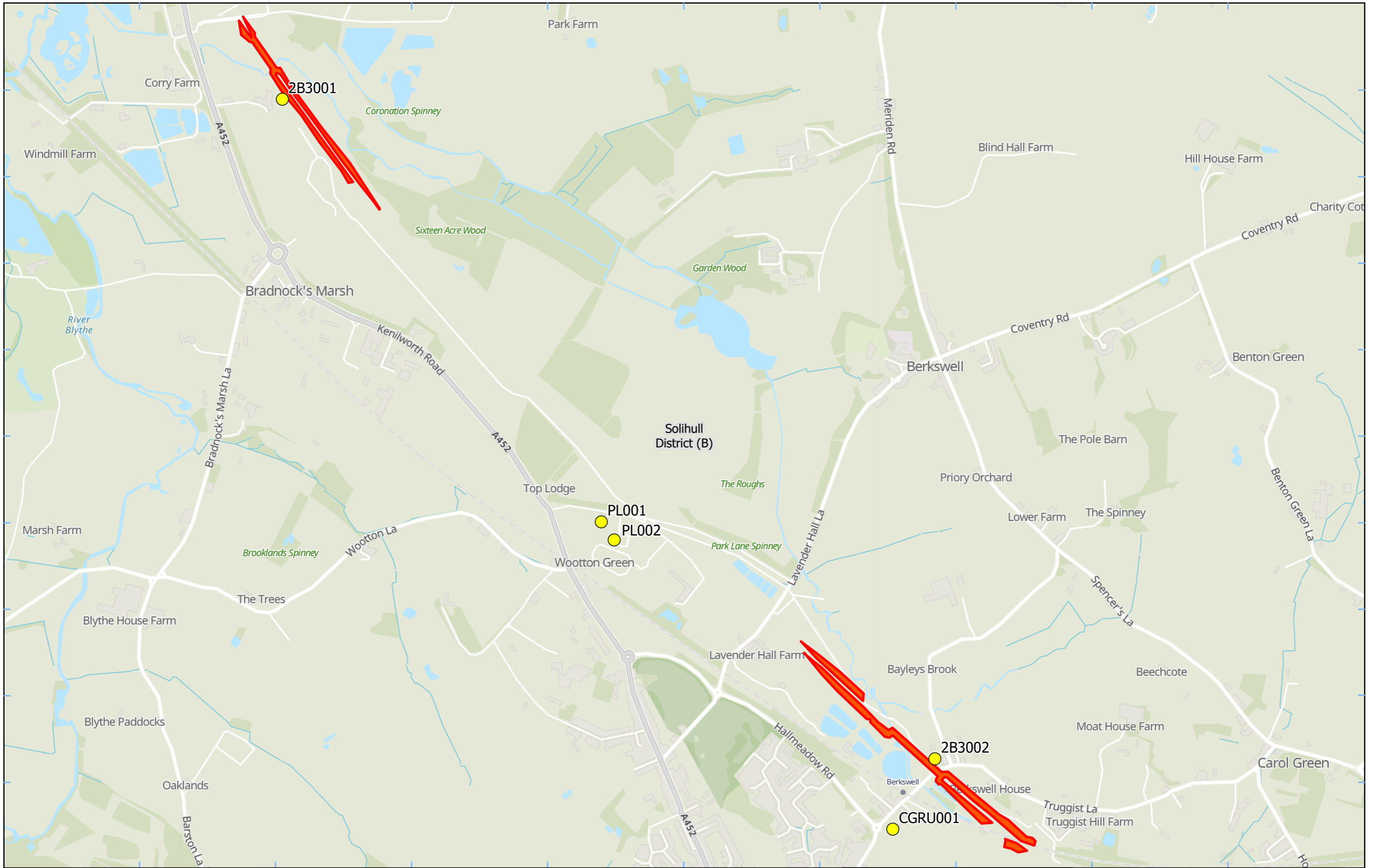
1.1.5 Ten (10) dust monitors are installed around these worksites, where works are underway. These sites returned a low to medium dust risk rating.

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 Details of the trigger alert investigations and remediations are presented in Appendix B, Table 2.
- 1.1.9 Data capture was below 90% for multiple monitors due to:
- Monitor 2B3001 – A field calibration was done on 8th January 2025, and a battery refresh was done on 13th January 2025. After these site visits, the power supply issues were resolved.
 - Monitor 2B3002 – A monitor swap out and field calibration were done on 14th January 2025, and a battery refresh was done on 30th January 2025. After these site visits, the power supply issues were resolved.
 - Monitor BBE001 – A field calibration was done on 8th January 2025, and a battery refresh was done on 23rd January 2025. After these site visits, the power supply issues were resolved.
 - Monitor CGRU001 – A battery refresh and calibration were done on 14th January 2025. After this site visit, the power supply issues were resolved.
 - Monitor CHRU001 – A battery refresh was done on 14th January 2025. After this site visit, the power supply issues were resolved.
 - Monitor DLE001 – A battery refresh and field calibration were done on 9th January 2025. After this site visit, the power supply issues were resolved.
 - Monitor DLE002 – A battery refresh and field calibration were done on 14th January 2025. After this site visit, the power supply issues were resolved.
 - Monitor PL001 – A field calibration was done on 7th January 2025, and a battery refresh was done on 23rd January 2025. After these site visits, the power supply issues were resolved.
 - Monitor PL002 – A monitor swap out, field calibration and battery refresh were all done on 7th January 2025. After this site visit, the power supply issues were resolved.
 - Monitor BIS001 – A field calibration and battery refresh were all done on 13th January 2025. After this site visit, the monitor issues were resolved.
- 1.1.10 There were no (0) complaints received during this reporting period (January 2025).

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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Map Number

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

Solihull Metropolitan Borough

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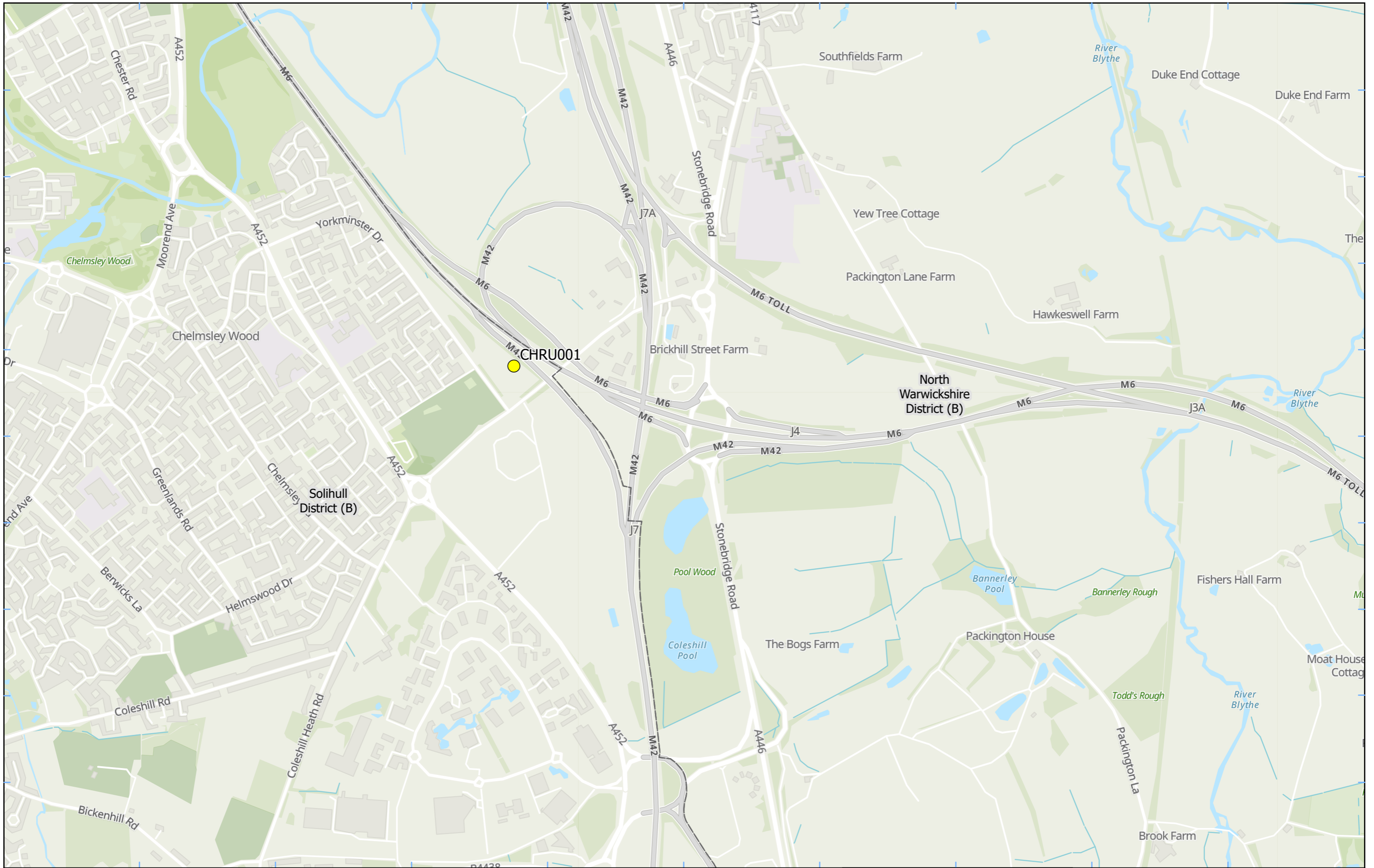
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Legend
 Dust Monitor
 District Borough Unitary Boundaries

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

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 District Borough Unitary Boundaries

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Map Number
 Map Name
**Monitoring Locations
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Date: 11/03/24

Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring Locations and Results

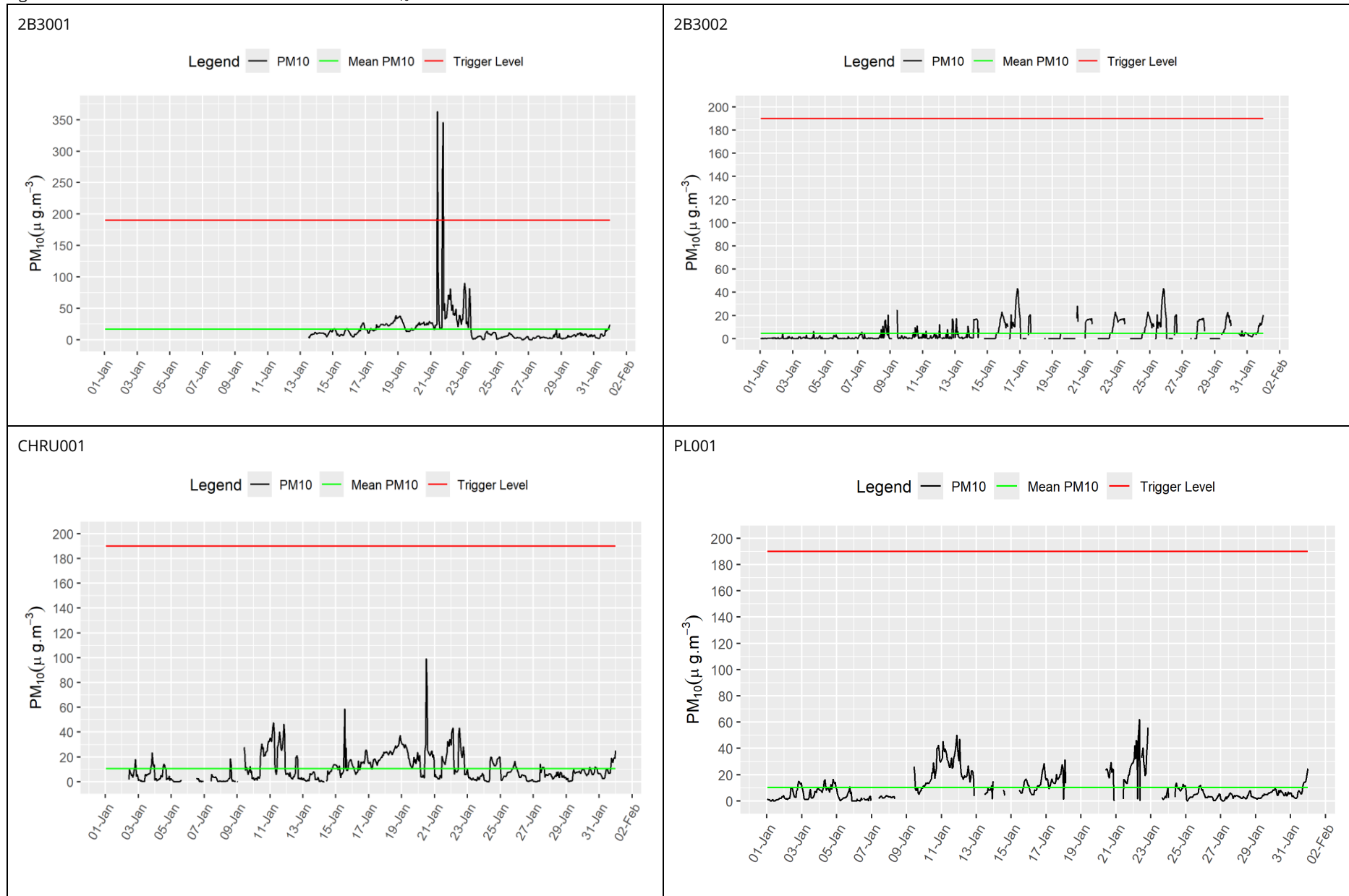
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number 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	17.1	0.1	363.1	3	59.8
2B3002	424659, 277691	Sublot 2B3, at Cherry Tree Cottage	M	Yes	No	4.5	0.0	43.2	0	90.3
CHRU001	419279, 286762	Bluebell Drive, Coleshill Heath Road Underbridge	L	Yes	No	10.6	0.0	99.0	0	90.1
PL001	423512, 278572	Park Lane	M	Yes	No	10.3	0.0	62.0	0	77.7
PL002	423483, 278497	Final Home, Park Lane	M	Yes	No	29.7	0.0	70.2	0	88.0
DLE001	420872, 282809	Diddington Lane	M	Yes	No	14.3	0.0	51.6	0	85.9
DLE002	421183, 281816	Hampton Hill Farmhouse	M	Yes	No	11.8	0.1	76.4	0	72.2
BIS001	420231, 283534	Hollywell Brook	M	Yes	No	13.4	0.0	54.5	0	91.9
CGRU001	424473, 277440	Annora House	M	Yes	No	2.5	0.0	43.2	0	94.4

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	10.2	0.0	53.2	0	60.9

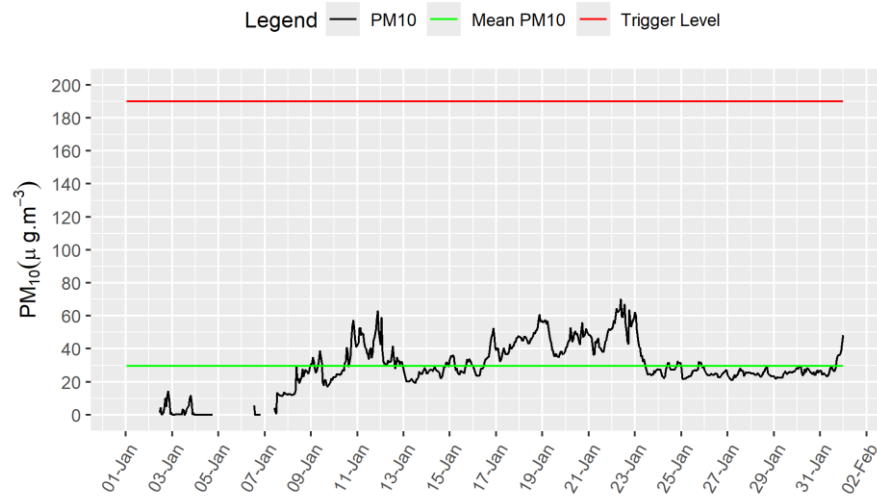
Table 2: Summary of exceedances during period (January 2025)

Monitoring site ID	Period exceeding trigger level	Investigation	Outcomes / Resolution / Remedial measures implemented
2B3001	21/01/2025 09:01 - 10:00; 363.1 µg/m ³ 16:01 - 17:00; 272.6 µg/m ³ 17:01 - 18:00; 345.9 µg/m ³	No relevant site activities were happening near the monitor at the time of the exceedances, and these exceedances are not considered to be associated with current HS2 construction works.	N/A

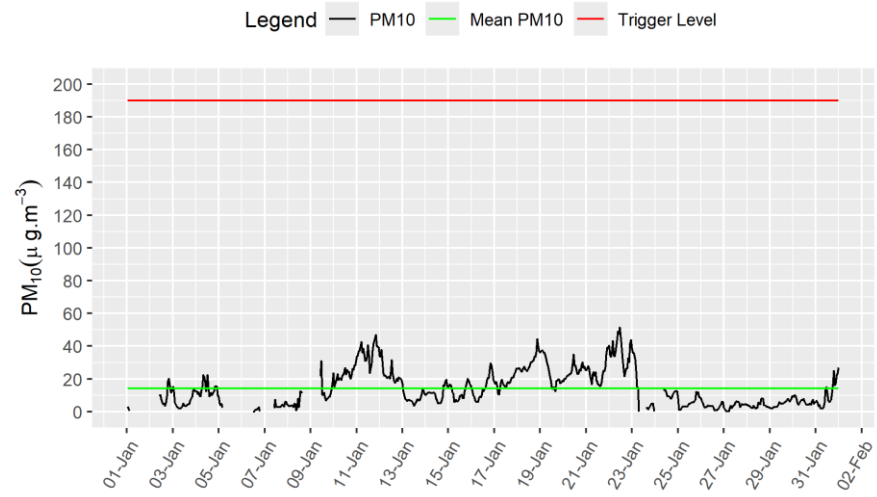
Figure 4: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors



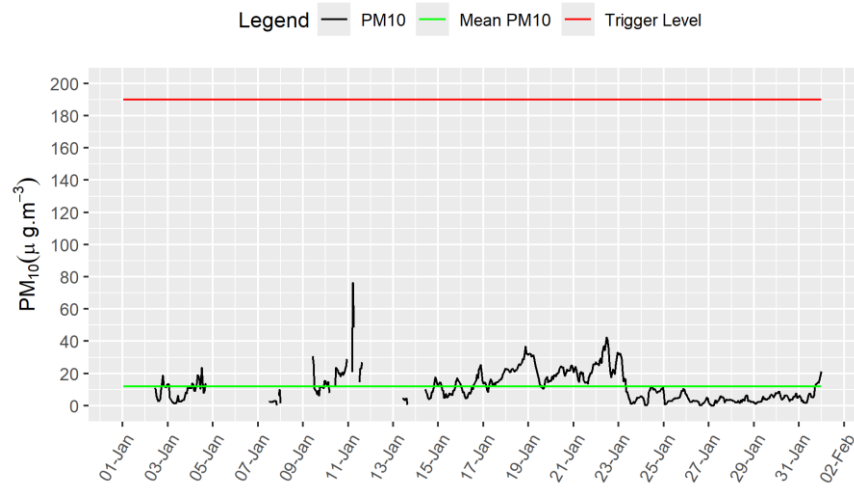
PL002



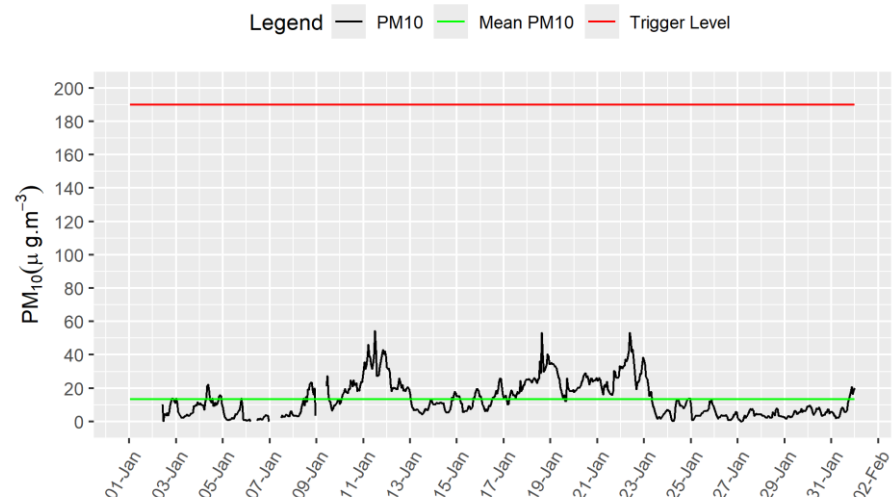
DLE001



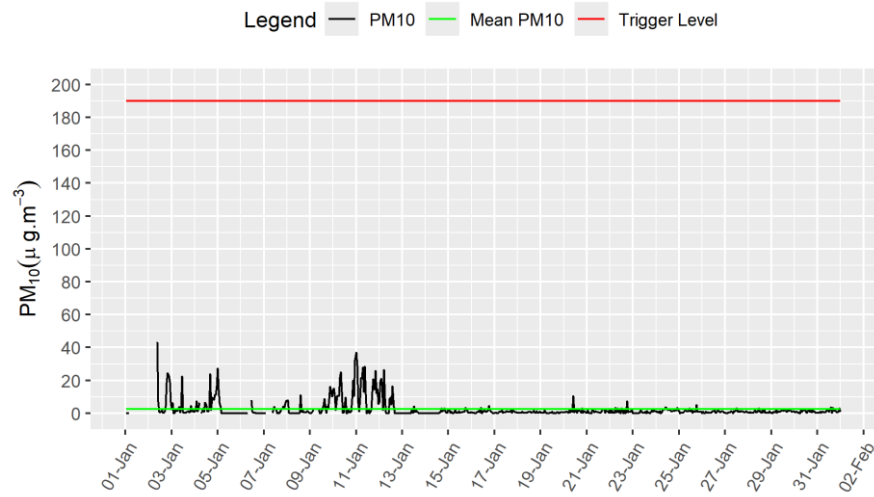
DLE002



BIS001



CGRU001



BBE001

