

Air Quality and Dust Monitoring Monthly Report – February 2023

Warwick District Council



Department for Transport

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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 Warwick District (WDC) during February 2023.
- 1.1.2 Figures 1 - 3 in Appendix A indicate the current worksites together with the dust monitoring locations for February 2023.
- 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, Figures 1-3, include:

The East Lodge Stoneleigh Park site (Sublot 2A2)

Offchurch Cutting:

- 'Welsh Rd UB blinding to bases and reinforcement to base installation
- Placement of fill from conveyor belt (from SL1) to form GUC embankment
- Offchurch Cutting topsoiling and drainage blanket
- Offchurch cutting lime stabilisation works
- Tarmac to Welsh Road compound
- Construct Fosse Way plant crossing
- Drainage and ducting to Fosse Way Road head
- Reinforcement to wall test panel at Fosse Way Compound
- Severn Trent mobilise and construct compound at Hunningham Rd and River Leam
- Piling to River Leam temporary bridge
- Hunningham Road embankment construction
- Trial holes to rising main sewer at Hunningham Rd
- Move stockpiles for STW diversion works
- Temp drainage remedials and V ditch construction
- Bulk Earthworks to River Leam embankment area.

Stoneleigh Park:

- Operational haul road and plant crossing
- BH installation
- Piling platform maintenance
- Piling
- Haul road maintenance
- Drilling platforms

- Pond fencing
- Silt fencing.

Cubbington:

- Piling platform maintenance
- Tubular piling (complete mid-February)
- Haul road maintenance
- Drilling platforms
- Pond fencing
- Silt fencing.

Burton Green Tunnel (Sublot 2B2)

- Hydrofraise Excavation

Welsh Road Underbridge Satellite Compound (Sublot 2AS)

Offchurch Cutting (OC):

- Welsh Road UB blinding to bases and reinforcement to base installation.
- Placement of fill from conveyor belt (from SL1) to form GUC embankment.
- Offchurch Cutting topsoiling and drainage blanket.
- Offchurch cutting lime stabilisation works.
- Tarmac to Welsh Road compound.
- Construct Fosse Way plant crossing.
- Drainage and ducting to Fosse Way Road head.
- Reinforcement to wall test panel at Fosse Way Compound.

A429 Kenilworth Road Overbridge (Sublot 2B1)

- ADT and excavator movement
- Soil stripping,
- Stockpiling and
- Temporary drainage construction.

1.1.5 Eight (8) dust monitors are installed at the worksites, where works are underway. These sites returned a low to medium dust risk rating.

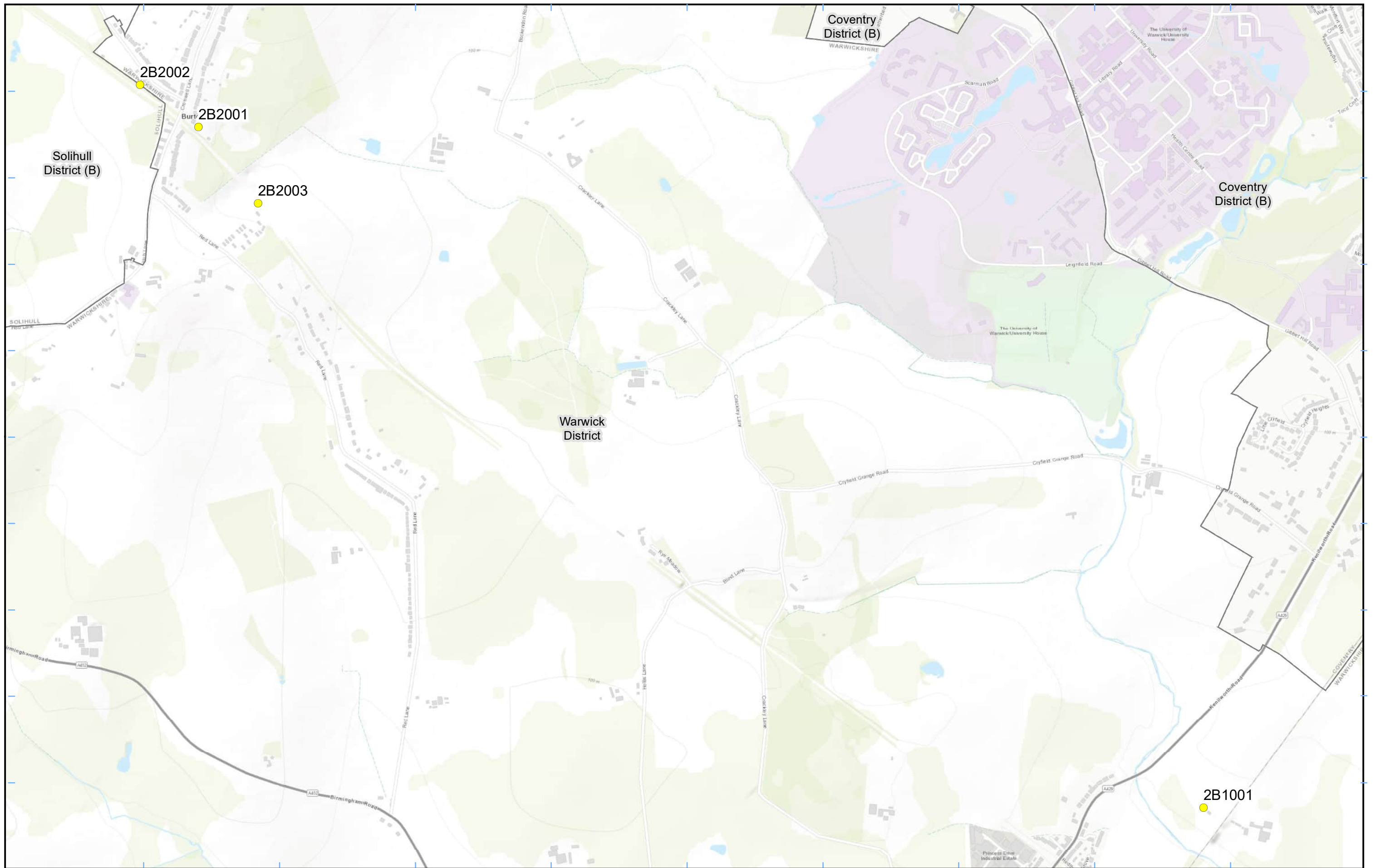
1.1.6 Dust monitoring location and results are presented in Appendix B, Table 1, together with line charts of monthly data from the dust monitors presented in Figure 4. All continuous dust monitoring is undertaken using indicative monitors. Despite being Environment Agency (MCERTS) certified, indicative 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 mitigations.

- 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 power supply issues and monitors being moved and calibrated.
- 1.1.10 No (0) complaints were received during the reporting period (February 2023).

Appendix A – Worksites and Monitoring Locations

Figures 1-3: Worksites and Monitoring Locations within the WDC



Legend
 Dust Monitor
 District Borough Unitary Boundaries

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Map Number
 Map Name
**Monitoring Locations
 In WDC (Sheet 1)**
 Warwick District Council

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Legend
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 District Borough Unitary Boundaries

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Map Number
 Map Name
**Monitoring Locations
 In WDC (Sheet 2)**
 Warwick District Council

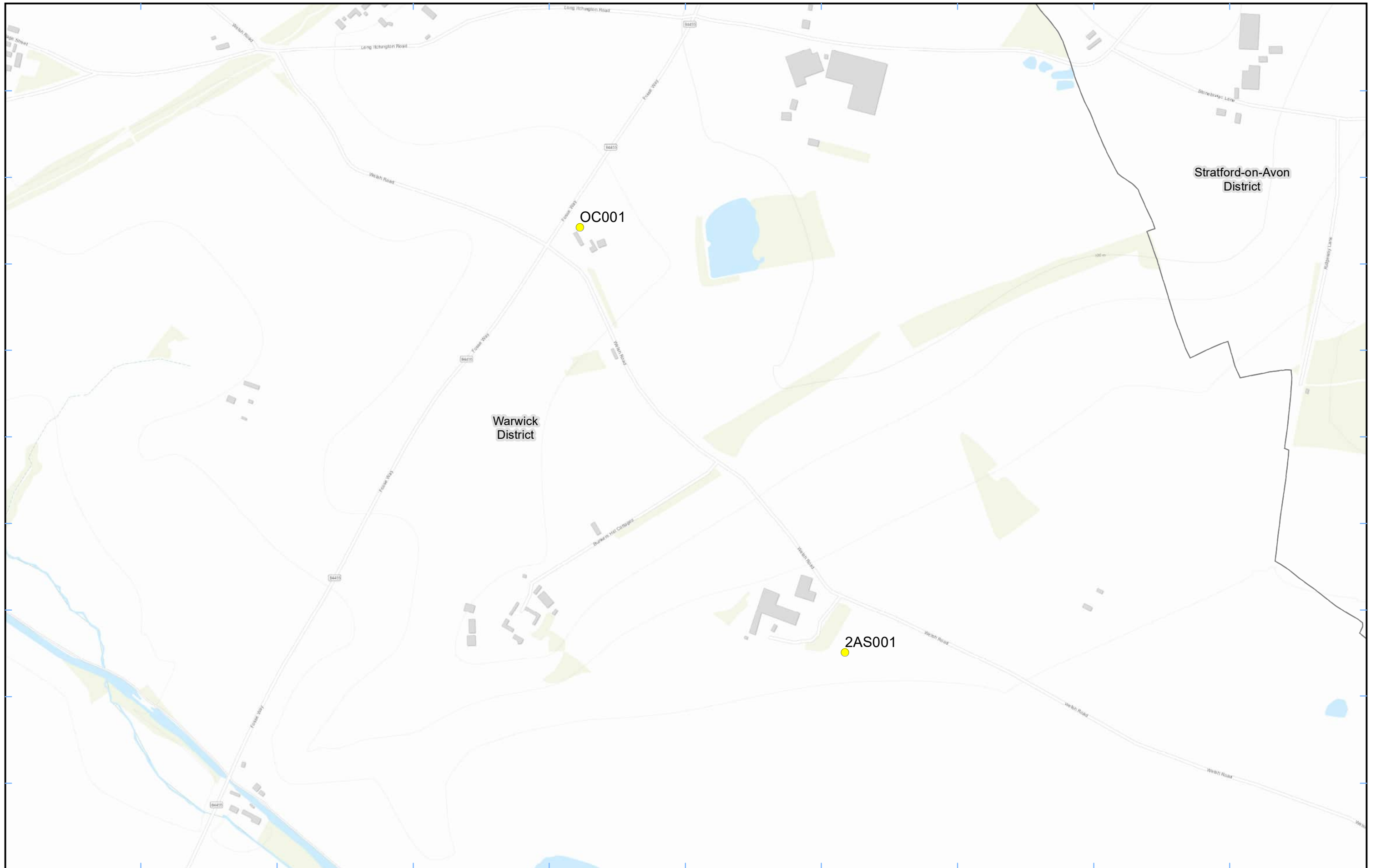
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Legend

- Dust Monitor
- District Borough Unitary Boundaries

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Map Number

Map Name

**Monitoring Locations
In WDC (Sheet 3)**

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Appendix B – Dust Monitoring Results

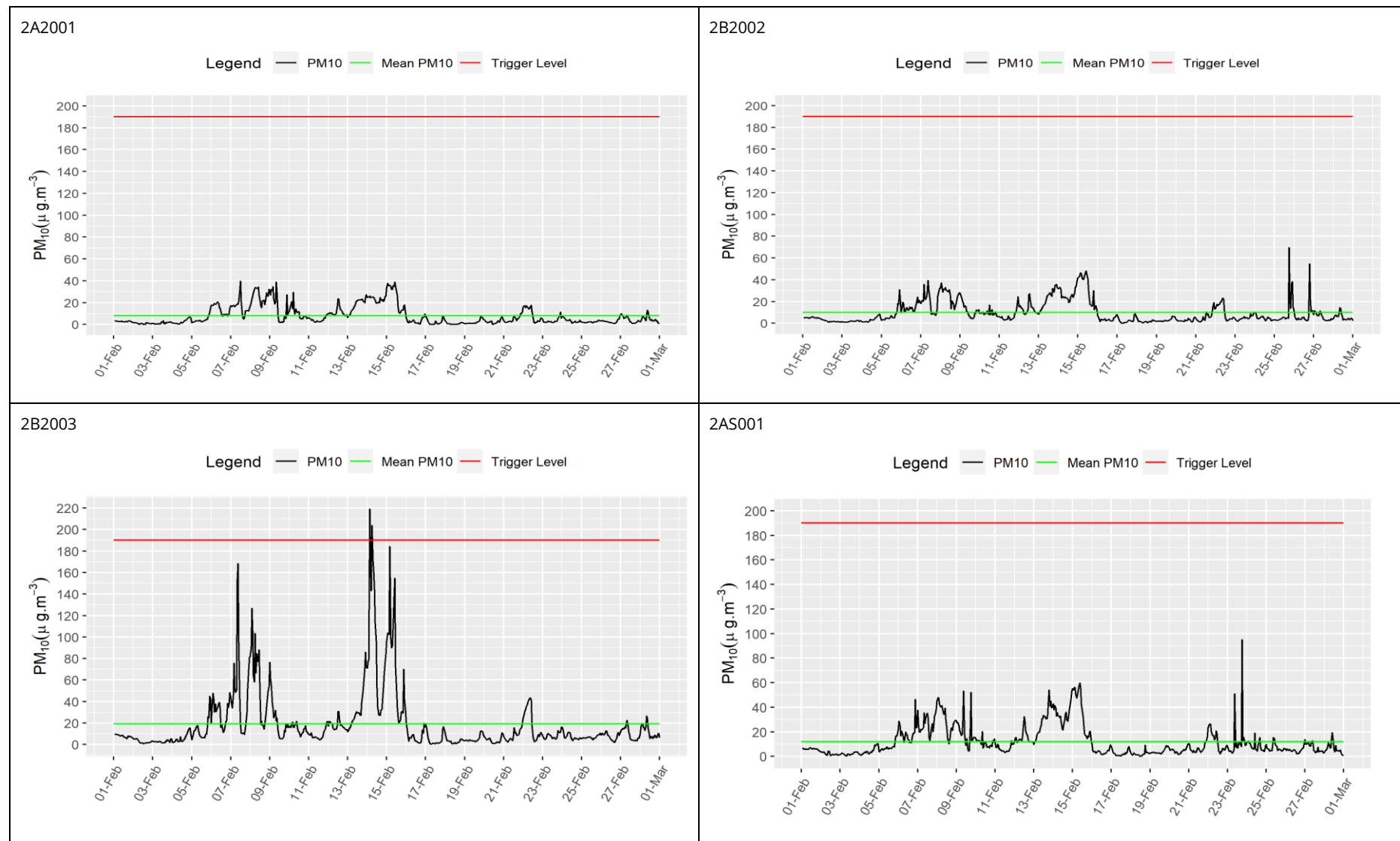
Table 1: Dust Monitoring Locations and February 2023 Results

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 (%)
2A2001	432798, 271434	East Lodge, Stoneleigh Park	M	Yes	No	8.0	0.1	39.5	0	99.1
2B2001	426960, 275882	Sublot 2B2, at nearest sensitive receptor on Cromwell Lane	M	Yes	No	9.8	0.1	49.5	0	100.0
2B2002	426772, 276017	Sublot 2B2, at nearest sensitive receptor on Hodgetts Lane	M	Yes	No	9.9	0.1	69.6	0	100.0
2B2003	427151, 275637	Sublot 2B2, at Broadwell Woods Caravan Park	M	Yes	No	19.4	0.4	219.1	2	100.0
2B1001	430183, 273698	Sublot 2B1, at Brookview Farm, Millburn Grange	M	Yes	No	10.1	0.1	49.4	0	93.2
2AS001	437574, 264500	Sublot 2AS, at Welsh Road Farm	M	Yes	No	12.0	0.3	95.0	0	99.9
OC001	437111, 265242	Springhill Cottages, Offchurch Cutting	M	Yes	No	11.9	0.2	58.0	0	100.0
CUB001	434124, 270273	Sublot 2A2, at Furzon Hill Cottages	M	Yes	No	0.9	0.1	35.5	0	75.3

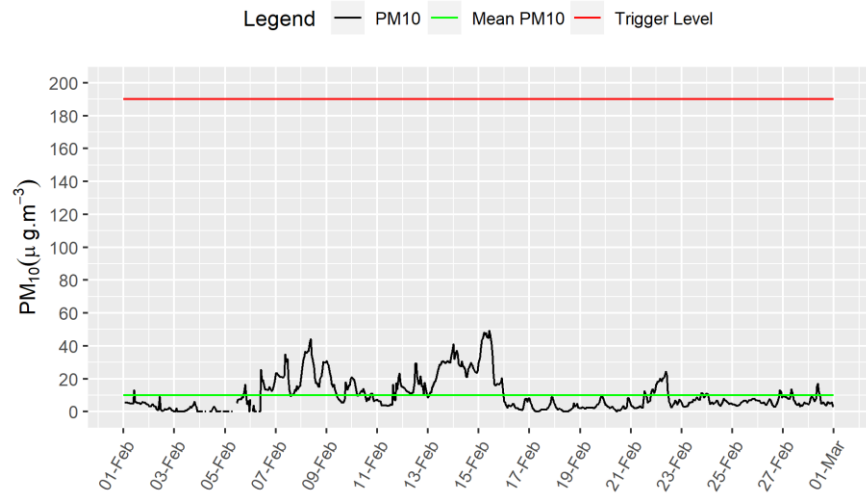
Table 2: Summary of exceedances during period (February 2023)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
2B2003	14/02/2023 02:00 - 02:59: 219.1 µg/m ³ 05:00 - 05:59: 203.9 µg/m ³	No works were ongoing during these hours. The station is situated next to a residential park with a forested path. Offsite sources, such as, residential log fire burning, may have enhanced PM10 concentrations between these hours. In addition to this, calm meteorological conditions may have reduced the dispersal of any elevated particulate emissions.	N/A

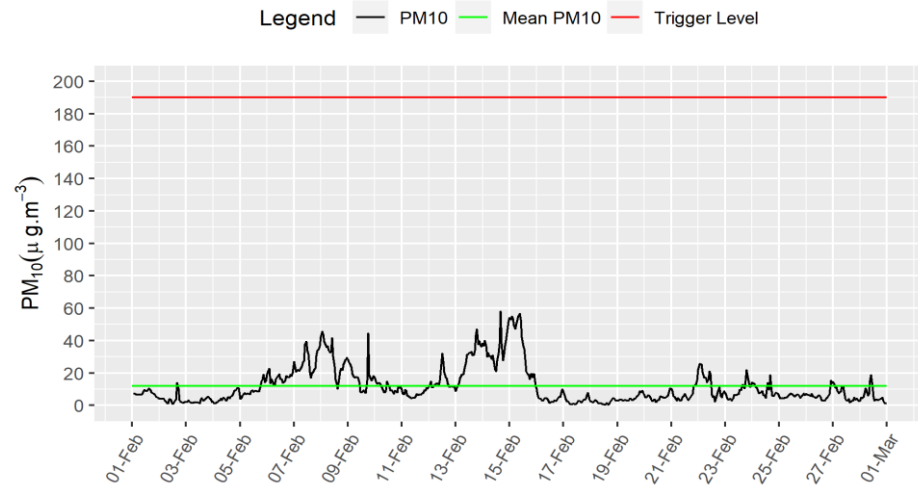
Figure 4: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors



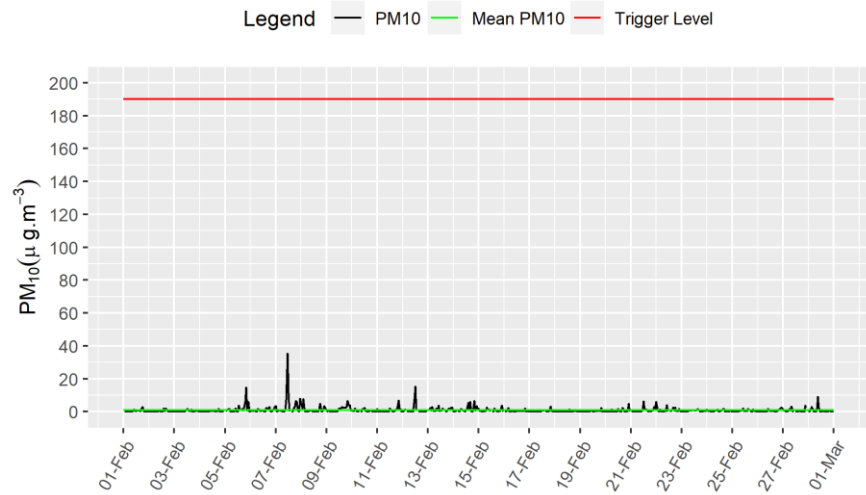
2B1001



OC001



CUB001



2B2001

