

Air Quality and Dust Monitoring Monthly Report – May 2023

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

Fosse Way Compound site (Sublot 2A2)

- Operational haul road
- Borehole monitoring and testing
- AECOM monitor maintenance,
- Pile cropping,
- Operational haul road,
- Stockpile management,
- Removal of redundant GRP tank,
- Borehole monitoring

East Lodge Stoneleigh Park site

Cubbington:

- Haul road construction,
- Concrete works (backwall of temporary bridge and other minor works),
- Installation of signage,
- Utility works,
- Fencing,
- Stockpile maintenance,
- Lime stabilisation,
- Construction of earthworks embankments and drainage blanket

Valley Fields:

- 'Severn Trent - move stockpiles and commence trenching works for water main diversion,
- Complete River Leam install of temporary bridge,
- Hunningham Road embankment construction and haul road diversion,
- Trial holes to rising main sewer at Hunningham Road and start sewer diversion trenching works and extend laydown areas,
- Move stockpiles for STW diversion works,
- Temporary drainage remedials and V ditch construction,
- Bulk earthworks to River Leam embankment area,
- Set up piling equipment at Hunningham Road OB

Burton Green Tunnel (Sublot 2B2)

- Earthworks

Welsh Road Underbridge Satellite Compound (Sublot 2AS)

Welsh Road Farm:

- 'Welsh Rd UB installation of reinforcement to wing wall bases and concrete repairs,
- Placement of fill from conveyor belt (from SL1) to form Grand Union Canal (GUC) embankment,
- Remove conveyor belt from over the canal,
- Offchurch Cutting topsoiling and drainage blanket,
- Offchurch Cutting lime stabilisation works,
- Stone platforms and drainage and duction to Fosse Way Road head,
- Tarmac to Roadhead entrance,
- Formwork and concrete to wall test panel at Fosse Way Compound

A429 Kenilworth Road Overbridge (Sublot 2B1)

- There are no works in the sublot

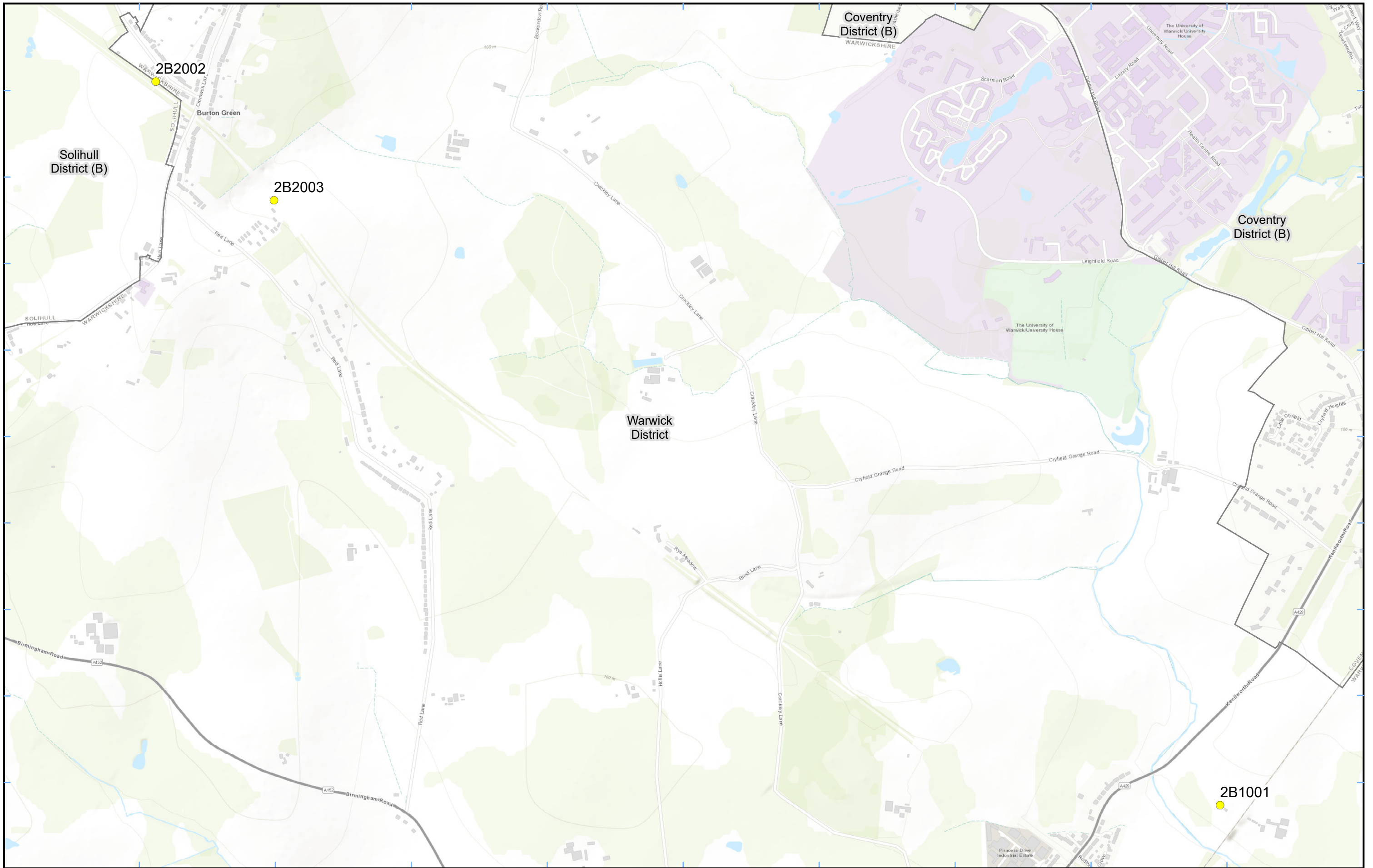
1.1.5 Nine (9) dust monitors are installed at worksites, where works are underway. These sites returned a low to medium dust risk rating.

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 The monitor at 2B2001 was relocated to 402 Cromwell Lane on 4th May 2023 from 301 Cromwell Lane due to changes in construction activities. The stakeholder at 402 Cromwell Lane withdrew their support following installation and consequently the monitor 2B2001 was removed by BBV on the 5th May 2023.
- 1.1.10 There were no (0) complaints received during this reporting period (May 2023).

Appendix A – Worksites and Monitoring Locations

Figures 1-3: Worksites and Monitoring Locations within WDC



Legend
 Dust
 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
 Dust
 District Borough Unitary Boundaries

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

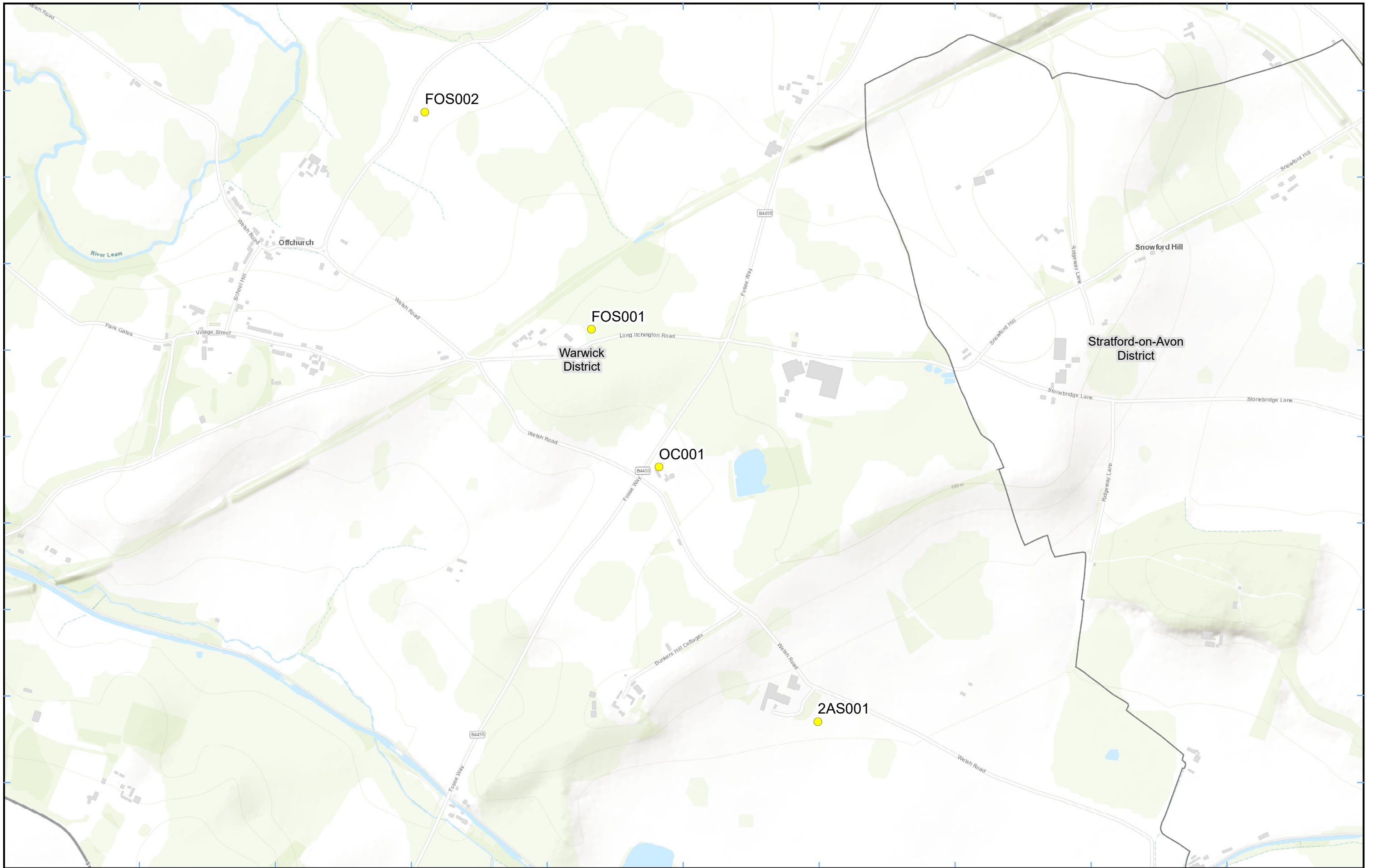
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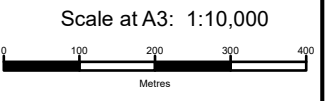
Map Number
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**Monitoring Locations
 In WDC (Sheet 3)**
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Appendix B – Dust Monitoring Results

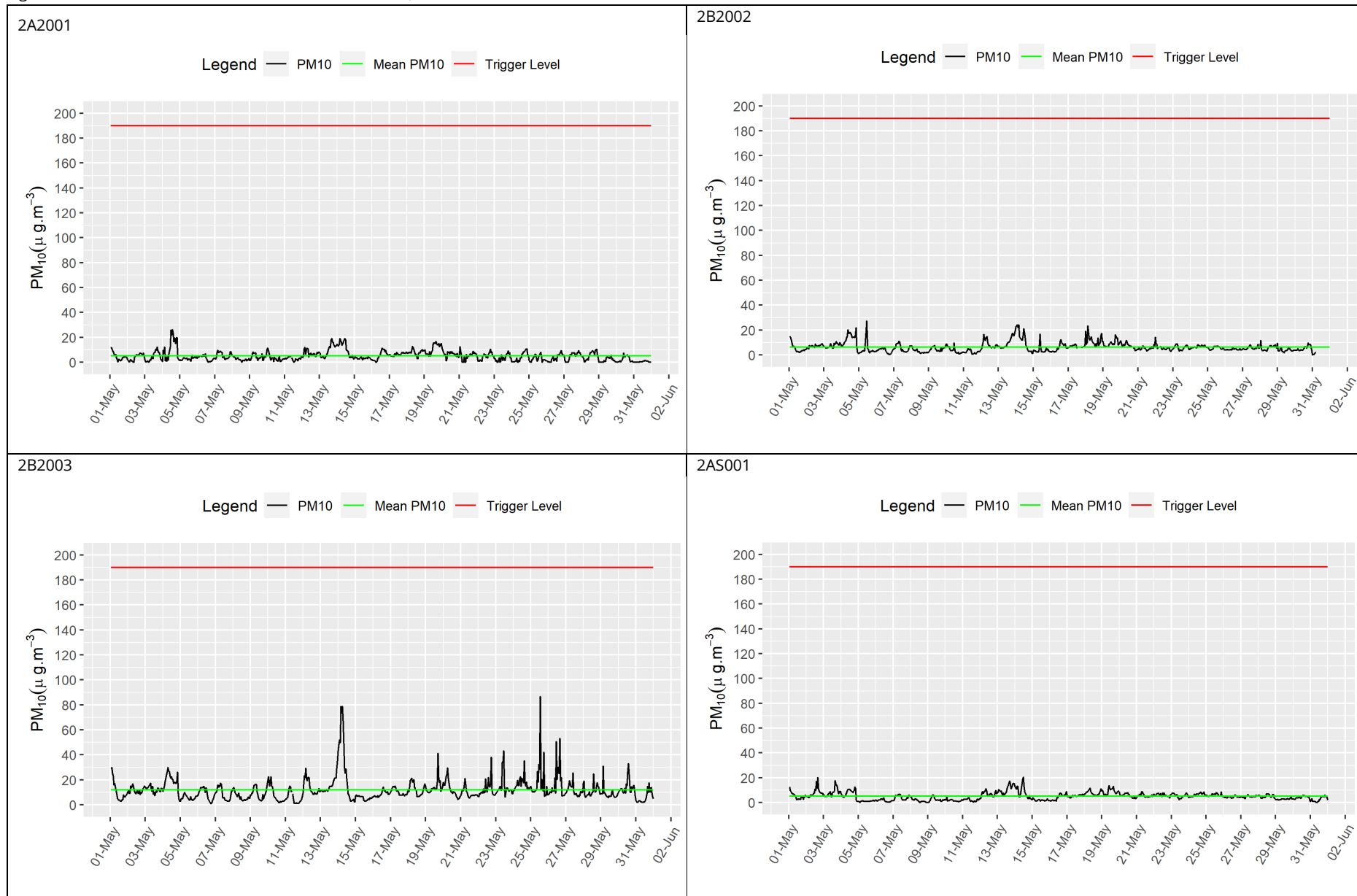
Table 1: Dust Monitoring Locations and May 2023 Results

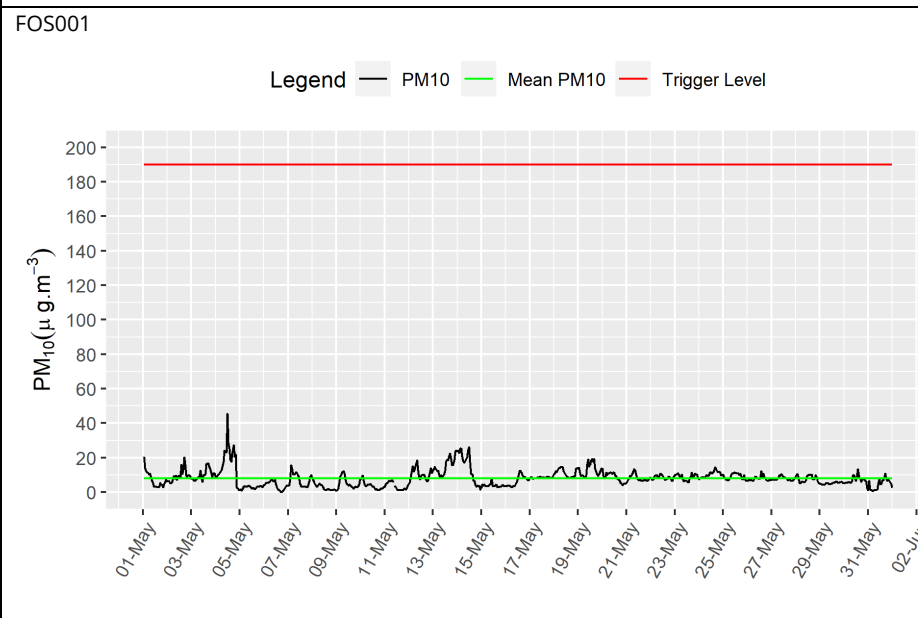
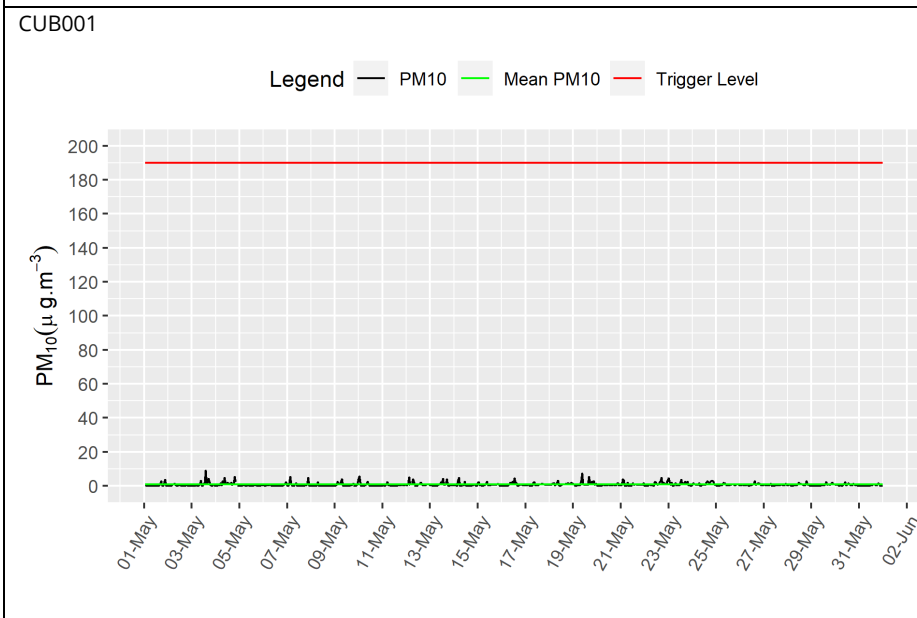
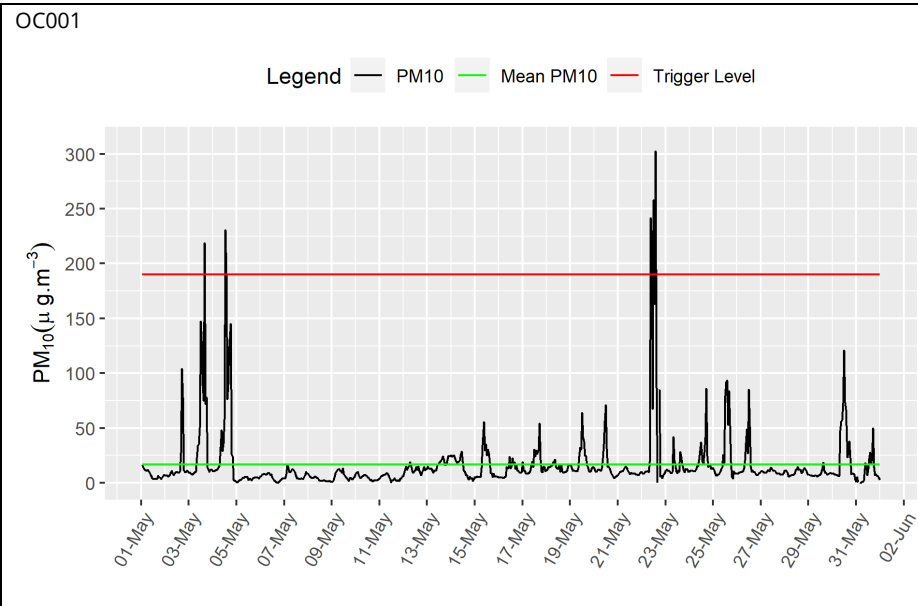
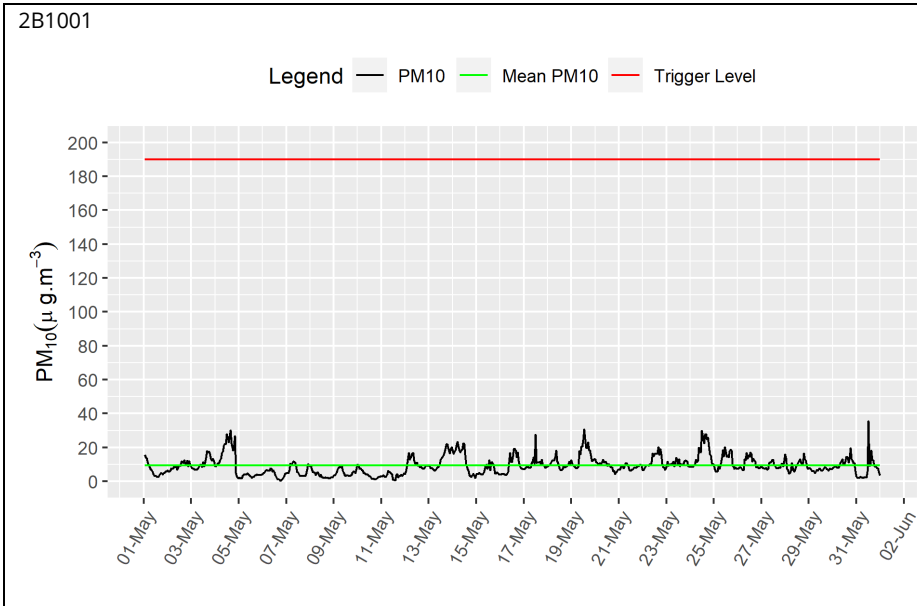
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1-hour periods exceeding trigger level of 190 µg/m ³	Data capture (%)
2A2001	432798, 271434	East Lodge, Stoneleigh Park	M	Yes	No	5.1	0.1	26.2	0	98.4
2B2002	426772, 276017	Sublot 2B2, at nearest sensitive receptor on Hodgetts Lane	M	Yes	No	6.3	0.1	27.3	0	97.6
2B2003	427151, 275637	Sublot 2B2, at Broadwell Woods Caravan Park	M	Yes	No	12.0	0.9	86.7	0	100.0
2B1001	430183, 273698	Sublot 2B1, at Brookview Farm, Millburn Grange	M	Yes	No	9.3	0.4	35.5	0	100.0
2AS001	437574, 264500	Sublot 2AS, at Welsh Road Farm	M	Yes	No	5.1	0.1	20.5	0	99.9
OC001	437111, 265242	Springhill Cottages, Offchurch Cutting	M	Yes	No	16.8	0.1	302.6	6	99.6
CUB001	434124, 270273	Sublot 2A2, at Furzon Hill Cottages	M	Yes	No	0.8	0.1	9.2	0	92.1
FOS001	436914, 265643	Fosse Way Compound, on Long Itchington Road	L	Yes	No	8.1	0.1	45.5	0	100.0
FOS002	436429, 266276	Valley Fields, Fosse Way Main	L	Yes	No	1.5	0.1	24.7	0	90.9

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

Monitoring Site ID	Period of trigger alert & Concentration recorded ($\mu\text{g m}^{-3}$)	Investigation	Outcomes / Resolution / Remedial measures implemented
OC001	03/05/23 15:00–15:59; 218.9 $\mu\text{g/m}^3$ 04/05/23 12:00 – 12:59; 230.7 $\mu\text{g/m}^3$ 22/05/23 08:00 – 08:59; 241.5 $\mu\text{g/m}^3$ 09:00 – 09:59; 219.6 $\mu\text{g/m}^3$ 11:00 – 11:59; 257.8 $\mu\text{g/m}^3$ 13:00 – 13:59; 302.6 $\mu\text{g/m}^3$	At the times of these alerts, excavations were ongoing in the area and ADTS were moving earth along the haul road. ADT movements are attributed to the 6 alerts due to the proximity of the monitor to the haul road. The subplot reviewed their working practice at this location, and ensured the haul road was suitably damped down. The nearest receptor to this monitor is approximately 50m to the south-east, and it is considered that due to the distance it is unlikely any significant effect was experienced at the receptor.	N/A

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





FOS002

