

Air Quality and Dust Monitoring Monthly Report – December 2024

North Warwickshire 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 North Warwickshire Borough Council (NWBC) during December 2024.
- 1.1.2 Figures 1 and Figure 2 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 Figure 1 and Figure 2, include:

Sublot 6BS

Gilson Embankment

- Stockpile management.
- Haul road maintenance.
- Water management.
- Pilling and cropping works.
- Construction of temporary Gilson Drive.
- Plant used: 2 x Dozer, 3 x Excavator, 2 x Articulated Dump Trucks (ADTs), 1 x Tractor and Bowser, 1 x Rig, 2 x Hydrema, 1 x 19 tonne roller.

Attleboro Lane Overbridge

- Capping layer, kerbs and gullies installation (Attleboro Lane North Ramp).
- Excavation and installing new utility cables and pipes.
- Reinstating road and footpaths.
- Plant used: 1 x Excavator, 1 x Dozer, 1 x ADT.

Sublot 7

Faraday Avenue Embankment and Underbridge

- Logistics activities.
- Assembling of equipment.
- Occasional delivery lorries.
- Plant used: 1 x Self-Propelled Modular Transporter (SPMT), 1 x Telehandler.

Marston Box

- Steel fixing.
- Shutter installation.
- Parapet installation.
- Concrete pours for Marston Box Structure.
- Site closed for Christmas holidays on 20th December 2024 – Maintenance crew attended site throughout Christmas period to ensure security and to ensure that pumps are still operational.
- Plant used: 1 x Scissor Lift, 1 x Crawler Crane.

Sublot 6NC

- No works occurred in December 2024.

Sublot 5N

Chattle Hill Box Structure

- Installation of rebars for undertrack crossing (UTX) wing wall and Deck Robust Kerb.
- Installation of formwork for UTX Deck Robust Kerb and concrete.
- Plant used: 90 tonne crawler crane, tower lights, telehandler and submersible pump.

1.1.5 Seven (7) 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 each dust monitor presented in Figure 3. 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 (December 2024).

1.1.9 Data capture was below 90% for multiple monitors due to:

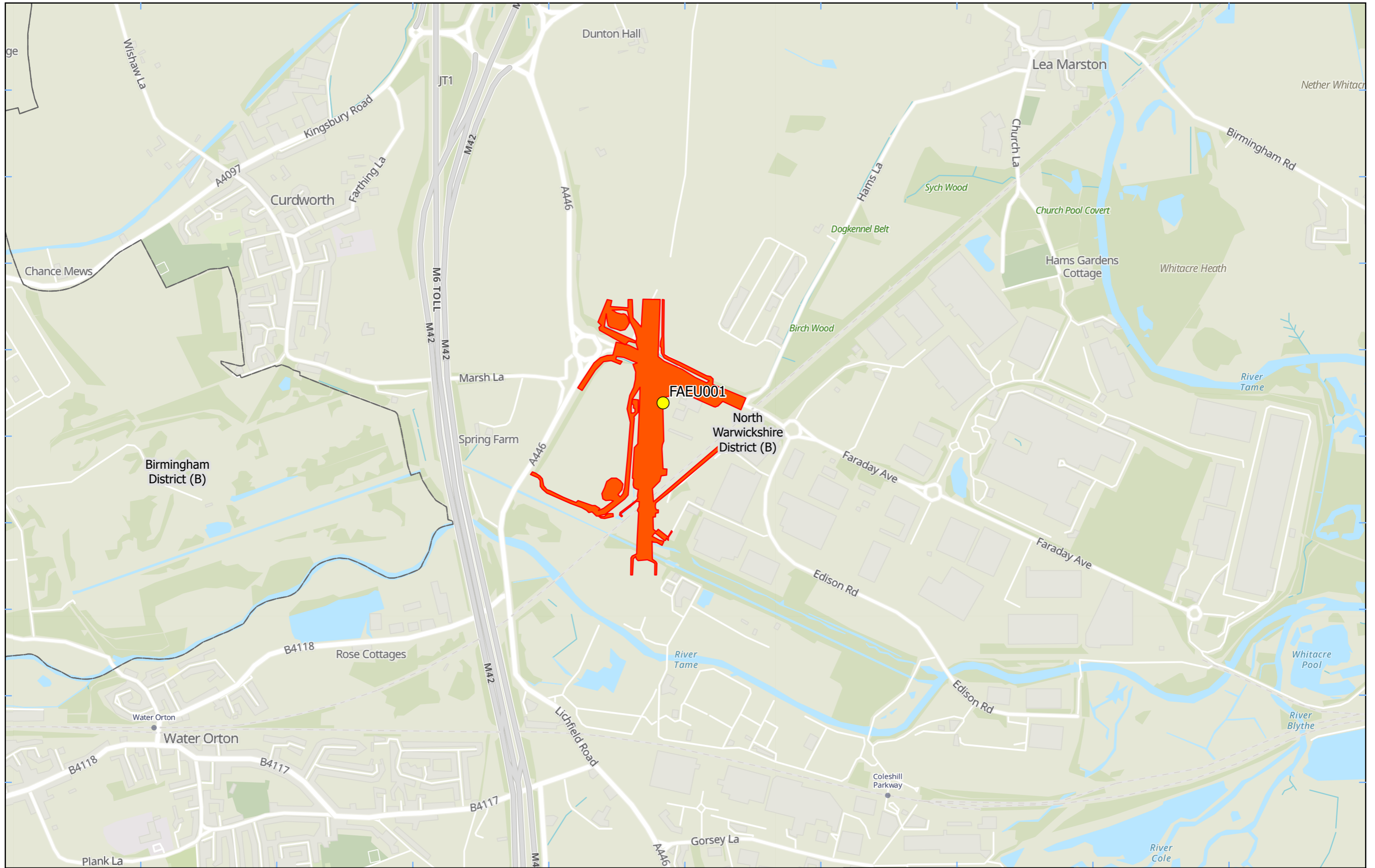
- Monitor AFE001 – A battery refresh was done on 13th December 2024. A field calibration is scheduled for 24th January 2025.
- Monitor CHBS001 – A battery refresh was done on 6th December 2024. A field calibration and another battery refresh are scheduled for 20th January 2025.

- Monitor FAEU001 - A battery refresh was done on 5th December 2024. A field calibration is scheduled for 23rd January 2025.
- Monitor GE002 - A battery refresh was done on 6th December 2024, and a lab calibration swap out was done on 19th December 2024. A monitor swap out, another battery refresh and a field calibration are all scheduled for 20th January 2025.
- Monitor GLD001 – A full calibration and battery refresh were done on 12th December 2024 and a monitor swap out was done on 9th January 2025, and a field calibration is scheduled for 22nd January 2025. After the monitor swap out on 9th January 2025, the power supply issues were resolved.
- Monitor BRD001 – A full calibration was done on 5th December 2024, a battery refresh was done on 17th December 2024 and a monitor swap out was done on 10th January 2025. A field calibration is scheduled for 22nd January 2025. After the monitor swap out on 10th January 2025, the monitor issues were resolved.
- Monitor MLE001 – A full calibration was scheduled for 9th January 2025, but this had to be rescheduled due to the location of the monitor being inaccessible due to flooding, and a field calibration is scheduled for 24th January 2025.

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

Appendix A – Worksites and Monitoring Locations

Figures 1 and 2: Worksites and Monitoring Locations within NWBC



Legend


- Dust Monitor
- District Borough Unitary Boundaries
- Worksite

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Map Number

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


North Warwickshire Borough



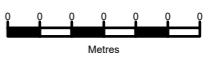
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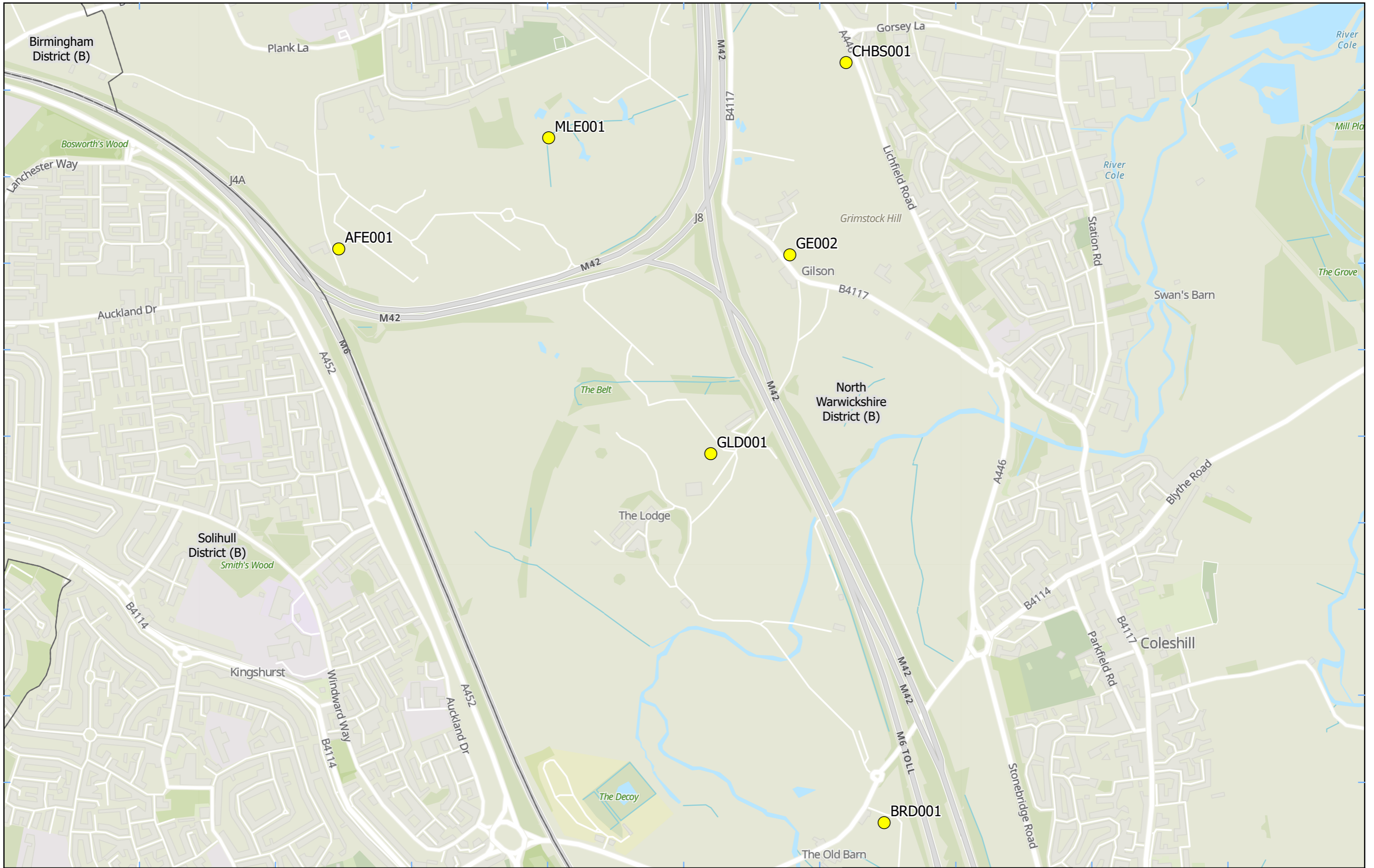
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Metres

Date: 19/12/24

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Legend

- Dust Monitor
- District Borough Unitary Boundaries

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Map Number

Map Name
**Monitoring Locations
In NWBC (Sheet 2)**

North Warwickshire Borough

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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 (%)
BRD001	419262, 288328	New Cottage, Birmingham Road, Coleshill	L	Yes	No	4.2	0.1	22.1	0	72.0
FAEU001	419164, 292273	Faraday Avenue Embankment and Underbridge, at Orchard Cottage	L	Yes	No	3.0	0.1	21.4	0	65.2
GLD001	418807, 289570	Gilson Drive	L	Yes	No	3.3	0.1	25.5	0	59.3
MLE001	418205, 290509	Vicarage Lane	L	Yes	No	-	-	-	0	-
AFE001	417455, 290269	Attleboro Farm, Attleboro Lane	L	Yes	No	5.0	0.1	25.5	0	38.3
GE001	418886, 290192	Lovegrove Cottage, Gilson Road	M	Yes	No	3.9	0.1	22.7	0	58.7
CHBS001	419155, 290755	6 Gorsey Way, Lichfield Road	L	Yes	No	4.1	0.1	28.2	0	62.6

Figure 3: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors



