

Air Quality and Dust Monitoring Monthly Report – February 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 February 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

- Gilson Road Realignment, temporary Gilson Road diversion and embankment / cutting dig and replace works.
- Installing new sewer and 4 x manholes. Excavating with use of vac-ex for 2 days. All other digging carried out with excavator.
- M42 Coleshill North structures: formwork, reinforcement, and concrete for piers (1 x crawler crane, 1 x excavator, 1 x telehandler).

Gilson Drive

- Gilson Road realignment and temporary Gilson Drive Road diversions.
- Formwork, rebar, and concreting activities.
- M42 Coleshill South structures - excavation of cofferdams (3 x excavators), formwork, reinforcement, and concrete for pilecaps (1 x crawler crane, 1 x telehandler).

Attleboro Lane Overbridge

- Installing 45m of electric duct in verge, road and footpath. Use of vac-ex and excavator to dig. Reinstated using excavator, road saw and pedestrian roller.
- Minor de-vegetation work completed.
- Embankment fill for Bromford Maintenance Access Track (MAT).
- Precast beam installation on Attleboro Lane Overbridge (ALOB).
- Excavation and base slab (Reinforced concrete) works on Water Orton Cutting (WOC) (platform D&E).

- Excavation and base slab (Reinforced concrete) works on WOC (platform G&H).

Sublot 7

Faraday Avenue Embankment and Underbridge

- Embankment and technical backfill construction and back of wall drainage.
- Faraday Road diversion, laying of tarmac, drainage tie-in and footpath construction. Balfour Beatty Multi Utilities (BBMU) utilities connections.
- Road sweeper in use across site.

Marston Box

- Overhead Catenary System (OCS) mobilising and works begin 15/02/2024.
- Excavating piles and completing pile cropping. Second phase excavation for further cropping.

Sublot 6NC

Attleboro Lane Overbridge

- Installing 45m of electric duct in verge, road, and footpath. Use of vac-ex and excavator to dig. Reinstated using excavator, road saw and pedestrian roller.
- Minor de-vegetation work completed.
- Embankment fill for Bromford Maintenance Access Track (MAT).
- Precast beam installation on Attleboro Lane Overbridge (ALOB).
- Excavation and base slab (Reinforced concrete) works on WOC (platform D&E).
- Excavation and base slab (Reinforced concrete) works on WOC (platform G&H).

Sublot 5N

Chattle Hill Box Structure

- Install steel pour concrete for Undertrack Crossing (UTX) north wall.
- Pour concrete for UTX South pile cap.
- Install Steel and Pour concrete AOE Chattle Hill wall.
- Removing of props and walers from Cofferdam 2.

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 2, 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 (February 2024).
- 1.1.9 Data capture was below 90% for the AFE001 monitor due to a lack of solar charge. Battery refreshes were done over the course of the month to mitigate this problem.
- 1.1.10 Table 1 provides a summary of the complaint information relating to dust or air quality received during the reporting period, together with the findings of any related investigations.

Table 1: Summary of complaints received during February 2024

Complaint Reference No.	Worksite Reference	Description of complaint	Results of investigation
HS2-24-45170-C	N/A	Resident raised dissatisfaction that their car was getting continuously dirty due to dust from site activities.	Details of the dust mitigations implemented on site were provided to the resident along with confirmation that, at this time, there is no provision for car cleaning in the area. Furthermore, the resident was invited to provide additional evidence should they find there is an ongoing dust issues so the matter can be further examined as necessary.

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

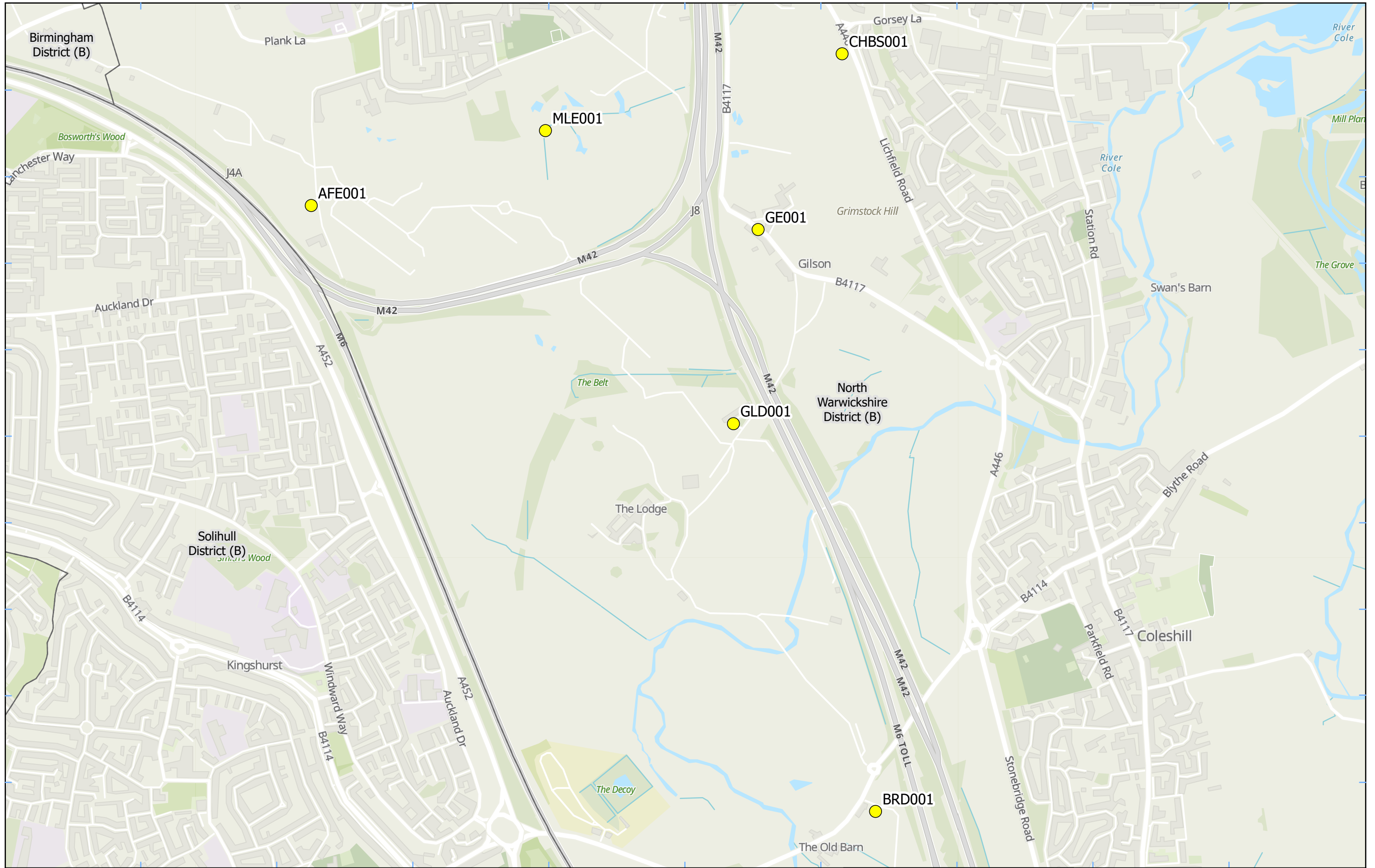
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Legend

- 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 2: 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	5.3	0.1	20.5	0	94.3
FAEU001	419164, 292273	Faraday Avenue Embankment and Underbridge, at Orchard Cottage	M	Yes	No	6.6	0.4	22.2	0	98.7
GLD001	418807, 289570	Gilson Drive	L	Yes	No	4.7	0.1	20.4	0	95.5
MLE001	418205, 290509	Vicarage Lane	L	Yes	No	6.5	0.1	45.1	0	99.9
AFE001	417455, 290269	Attleboro Farm, Attleboro Lane	L	Yes	No	5.5	0.1	24.5	0	54.9
GE001	418886, 290192	Lovegrove Cottage, Gilson Road	L	Yes	No	6.4	0.1	63.4	0	97.6
CHBS001	419155, 290755	6 Gorsey Way, Lichfield Road	L	Yes	No	6.1	0.1	27.4	0	100.0

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



