

Air Quality and Dust Monitoring Monthly Report – April 2025

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.

High Speed Two (HS2) Limited,
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared by EWCs and MWCCs on behalf of HS2 Ltd.

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2025, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2 **OGL** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



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 April 2025.
- 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

- No works occurred in April 2025.

Attleboro Lane Overbridge

- Piling works.
- Steel fixing.
- Concrete pours.

Sublot 7

Faraday Avenue Embankment and Underbridge

- No works occurred in April 2025.

Marston Box

- General maintenance carried out by gangers (repairs to concrete and clearing equipment from site).
- No plant on site since March 2025.

Sublot 6NC

- Dig and replace activities (stockpile management and materials haulage).
- Water Orton Culvert installation (excavation and installing pre-cast segments).

Sublot 5N

Chattle Hill Box Structure

- Structures Team – Boxes structure construction: Steel fixation, installing and striking formwork, and concrete pours.
- Earthworks – Dig and Replace.
- Earthworks – Rigid inclusions.
- Earthworks – Technical backfill.
- Earthworks – HSR embankment works.

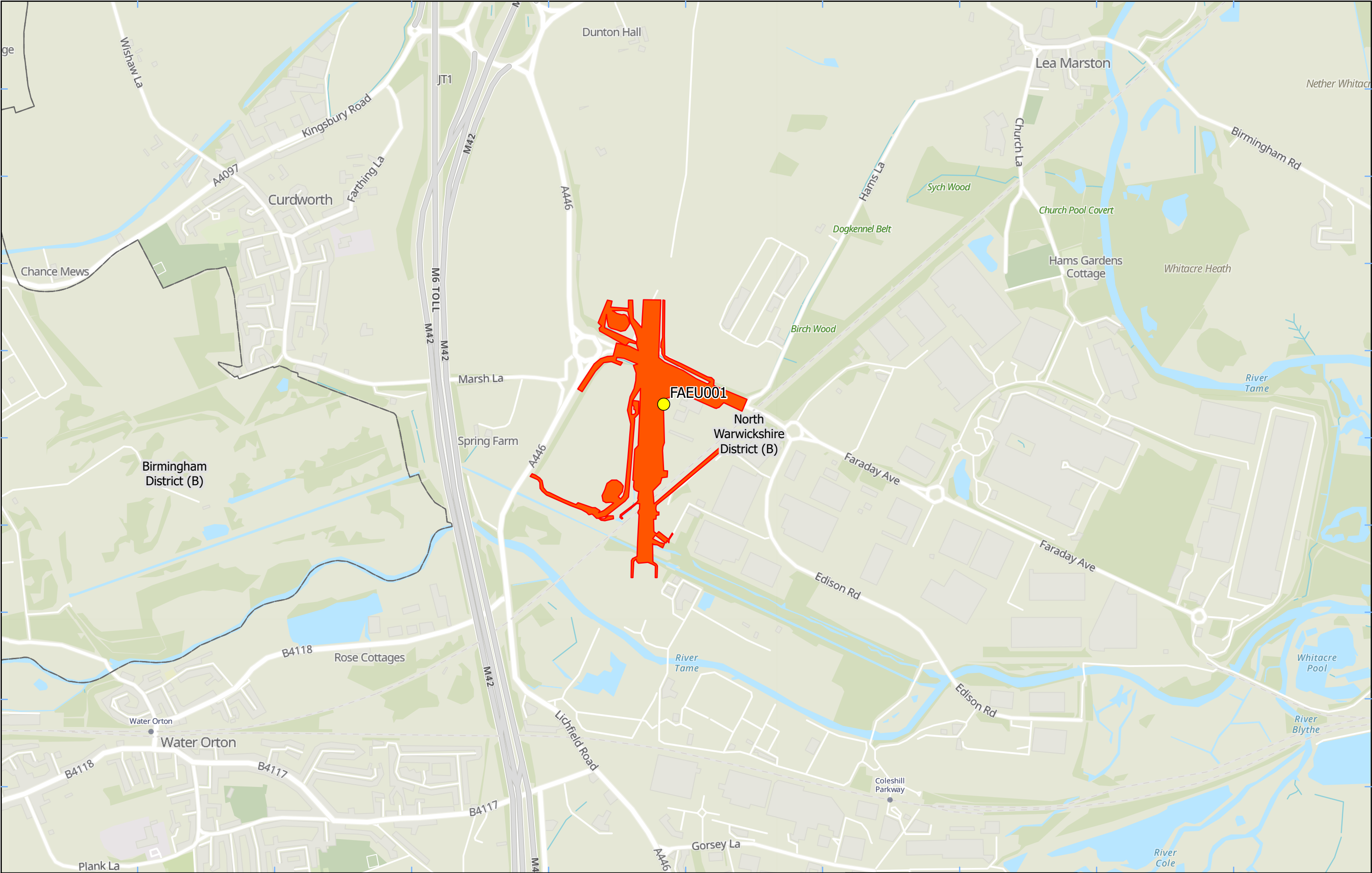
- 1.1.5 Seven (7) dust monitors are installed around these worksites, where works are underway. These sites returned a low to medium dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 2, together with line charts of monthly data from each dust monitor presented 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 Details of the trigger alert investigations and remediations are presented in Appendix B, Table 3.
- 1.1.9 Data capture was below 90% for multiple monitors due to:
- Monitor GLD001 – A field calibration was done on 9th April 2025, and a fault investigation site visit was done on 30th April 2025. A site visit is to be scheduled to resolve the monitor and power issues.
 - Monitor FAEU001 - A laboratory calibration swap out is scheduled for 23rd May 2025.
- 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 April 2025

Complaint Reference No.	Worksite Reference	Description of complaint	Results of investigation
HS2-25-46270-C	N/A	Red dust on property.	All dust monitors were checked no exceedances were breached. Extra mitigation is now in place near residential areas during drier weather e.g. Damping down, artificial windbreaks, suspension of earthmoving activities during high winds use of water cannons. Resident has been updated. The Met Office has reported an influx of Saharan dust affecting air quality in the UK, resulting in a noticeable haze. This may pose potential respiratory issues for sensitive individuals, particularly those with pre-existing health conditions such as asthma or allergies. Additionally, the Saharan dust is leaving a reddish layer across the landscape, commonly seen on vehicles, buildings, and city street fixtures.
HS2-25-46282-C	N/A	Dust on vehicle.	Dust monitors are installed in high-impact areas where major construction occurs. All monitors were checked no exceedances were breached. Extra mitigation is now in place near residential areas Dust suppression techniques such as damping down work areas and haul roads Continuous monitoring of wind speed, wind direction, and dust levels, Use of natural or artificial windbreaks Suspension of earthmoving activities during high winds Deployment of water cannons at boundaries when required. Resident has been updated.
HS2-25-46285-C	N/A	Dust on vehicle.	Dust monitors are installed in high-impact areas where major construction occurs. All monitors were checked no exceedances were breached. Extra mitigation is now in place near residential areas Dust suppression techniques such as damping down work areas and haul roads Continuous monitoring of wind speed, wind direction, and dust levels, Use of natural or artificial windbreaks Suspension of earthmoving activities during high winds Deployment of water cannons at boundaries when required. Resident has been updated.
HS2-25-46291-C	N/A	Dust on windows and vehicle.	Dust experienced unlikely to be from HS2 site as some considerable distance from site. Resident has been updated.

Appendix A – Worksites and Monitoring Locations

Figures 1 and 2: Worksites and Monitoring Locations within NWBC



Legend

- Dust Monitor
- Worksite
- District Borough Unitary Boundaries

Service Layer Credits: GB Topographic: Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

Map Number

Map Name

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

North Warwickshire Borough

Registered in England. Registration number 06791686.
Registered office: 2 Snowhill, Queensway,
Birmingham B4 6GA.

© Crown copyright and database rights 2024.
Ordnance Survey Licence Number 100049190.

Doc Number:

Scale at A3: 1:11,000

Metres

Date: 19/12/24

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	419279, 288315	New Cottage, Birmingham Road, Coleshill	L	Yes	No	15.2	1.2	84.4	0	100.0
FAEU001	419166, 292265	Faraday Avenue Embankment and Underbridge, at Orchard Cottage	L	Yes	No	18.1	1.6	69.6	0	79.9
GLD001	418724, 289497	Gilson Drive	L	Yes	No	14.5	2.3	36.8	0	36.3
MLE001	418205, 290509	Vicarage Lane	L	Yes	Yes	8.2	0.3	33.3	0	99.9
AFE001	417533, 290153	Attleboro Farm, Attleboro Lane	L	Yes	No	22.2	1.2	230.5	5	100.0
GE001	418977, 290134	Lovegrove Cottage, Gilson Road	M	Yes	No	15.3	0.6	90.6	0	100.0
CHBS001	419157, 290750	6 Gorsey Way, Lichfield Road	L	Yes	No	13.6	1.6	45.3	0	100.0

Table 3: Summary of exceedances during period (April 2025)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
AFE001	07/04/2025: 11:01 - 12:00; 212.7 $\mu\text{g m}^{-3}$ 13:01 - 14:00; 230.5 $\mu\text{g m}^{-3}$ 08/04/2025: 13:01 - 14:00; 204.3 $\mu\text{g m}^{-3}$	Caused by the tipping of material and the use of a grader on the haul roads.	Following the alerts, the site conducted an inspection to ensure that stockpiles and haul roads were to be kept dampened, and to review the level of dust suppression during these activities.
	29/04/2025: 13:01 - 14:00; 193.9 $\mu\text{g m}^{-3}$ 30/04/2025: 11:01 - 12:00; 222.9 $\mu\text{g m}^{-3}$	Caused by the pickup and deliveries of aggregate and the use of haul roads.	Following the alerts, the site conducted an inspection to ensure that stockpiles and haul roads were to be kept dampened, and to review the level of dust suppression during these activities.

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

