

## Air Quality and Dust Monitoring Monthly Report – July 2023

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 during July 2023.
- 1.1.2 Figure 1 to Figure 2 in Appendix A indicate the current worksites together with the dust monitoring locations for July 2023.
- 1.1.3 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 mitigations.
- 1.1.4 The trigger level for PM<sub>10</sub> concentrations of 190 µg/m<sup>3</sup>, 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.
- 1.1.5 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](http://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.
- 1.1.6 The current worksites, as presented in Appendix A, Figures 1 to Figure 2, include:

## **Sublot 6BS**

### Gilson Drive

- Embankment Construction;
- Stockpiling; and
- Piling Platforms.

### Birmingham Road

- Bellmouth Extension Work; and
- Stockpiling.

## **Sublot 7**

### Marston Box

- Full motorway closure for parapets;

- Parapet installation;
- Construction of car park area for closure; and
- No stand downs during July.

Faraday Avenue Embankment and Underbridge:

- Faraday avenue – Embankment only, not diversion;
- Mass haul;
- Lime stabilisation;
- Trimming + Topsoil spreading; and
- All used 50% due to rain during the first 3 weeks of July.

Plant in use:

- 230T mobile crane (parapet works);
- 120T mobile crane (parapet works);
- 2 x cherry pickers (parapet works);
- 1 x grab wagon (parapet works);
- 1 x HIAB (parapet works);
- 1 x forklift (car par works);
- Mass haul – 8 trucks on rotation from 3/07 to 14/07;
- Lime stabilisation – from 03/07 to 14/07 – 1 spreader + 1 mixer + 2 rollers + 2 dozer + 1 grader + 1 30t exc + 1 20t exc; and
- Trimming + Topsoil spreading – 17/07 to 21/07 – 1 30t exc + 1 ADT 30 + 1 20t exc + 1 roller + 1 Dozer + 1 Grader.

**Subplot 6NC**

- Earthworks; and
- Lime stabilisation of the Marsh Lane Embankment.

- 1.1.7 Five (5) dust monitors are installed around worksites, where works are underway. These sites returned a medium dust risk rating.
- 1.1.8 Dust monitoring locations and results are presented in Appendix B, Table 2, together with line charts of monthly data from the dust monitors 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.
- 1.1.9 No (0) dust trigger alerts were recorded during the monitoring period (July 2023).
- 1.1.10 Data capture was below 90% for multiple monitors in July 2023. For monitor FAEU001 this was due to the data collected being unreliable prior to the 13th July 2023 when the monitor was replaced with a new one at the same location. Dust monitor MB001 was

decommissioned on 20th July 2023, as the dust monitor was located in an owl exclusion zone and works have been paused in this area.

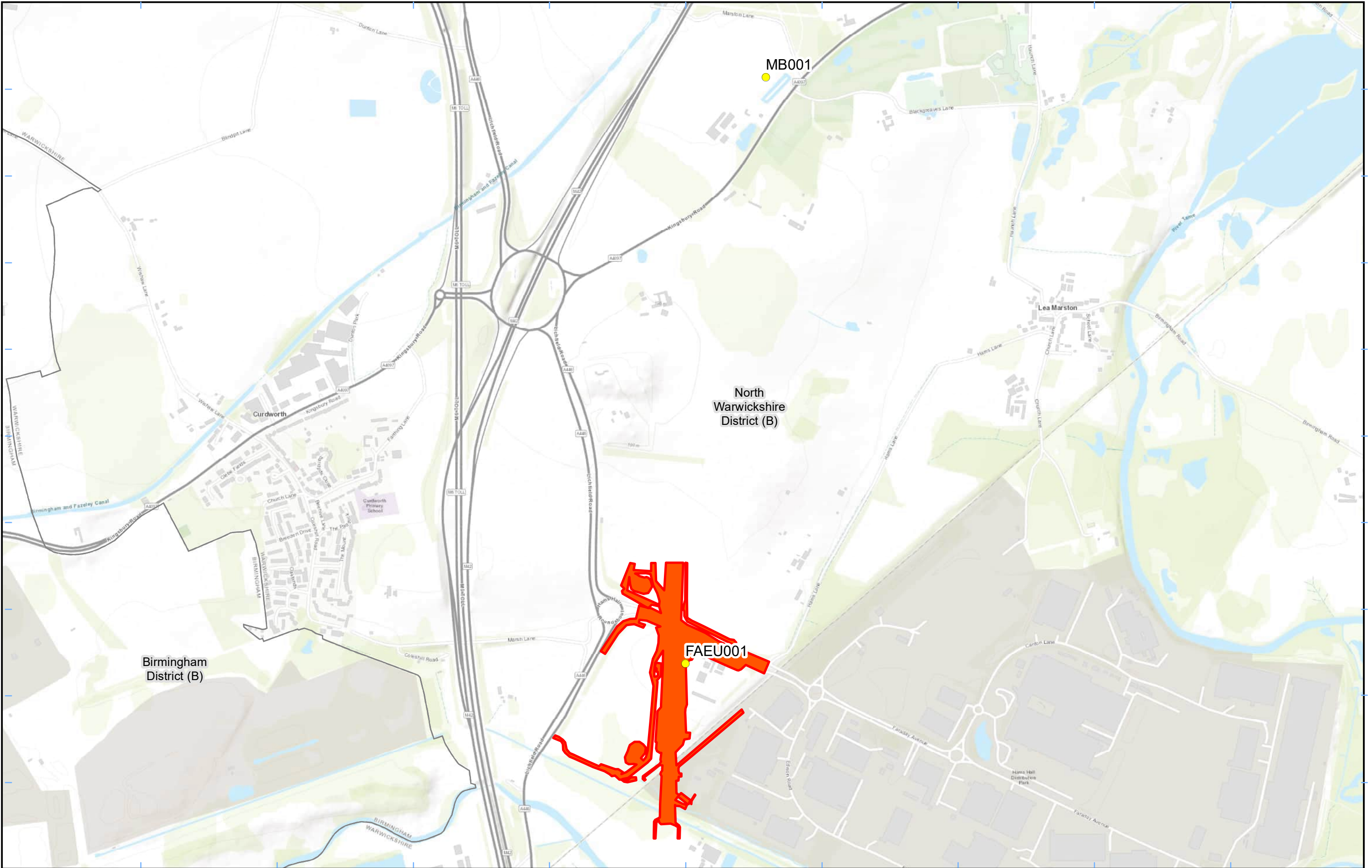
1.1.11 Table 1 provides a summary of the complaint information relating to dust or air quality received during the reporting period, together with the findings of any related investigations.

Table 1: Summary of complaints received during July 2023

<b>Complaint Reference No.</b>	<b>Worksite Reference</b>	<b>Description of complaint</b>	<b>Results of investigation</b>
HS2-23-44799-C	n/a	Increased amount of dust levels in the area.	Resident advised of all dust suppression/reduction measures in place. No exceedances to permitted levels.

# Appendix A – Worksites and Monitoring Locations

Figure 1 to Figure 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



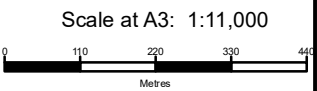
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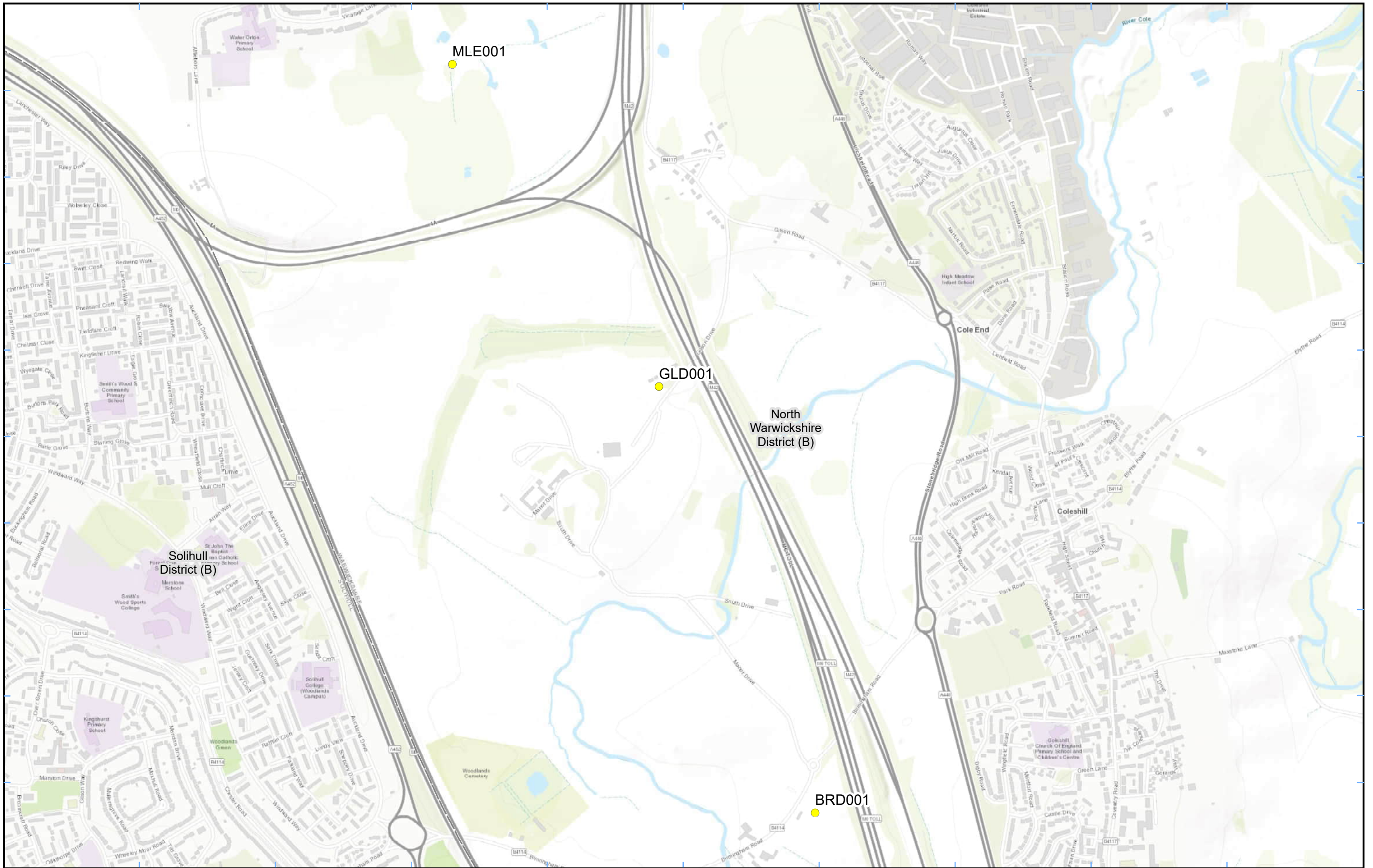
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**Legend**  
 Dust Monitor  
 District Borough Unitary Boundaries

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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 July 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 <sub>10</sub> concentration (µg/m <sup>3</sup> )	Minimum 1-hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Maximum 1-hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Number of 1- hour periods exceeding trigger level of 190 µg/m <sup>3</sup>	Data capture (%)
BRD001	419262, 288328	New Cottage, Birmingham Road, Coleshill	M	Yes	N	1.9	0.0	29.3	0.0	98.7
FAEU001	419164, 292273	Faraday Avenue Embankment and Underbridge, at Orchard Cottage	M	Yes	N	5.5	0.8	29.4	0.0	59.4
MB001	419421, 294150	Elford House, Marston Box	M	Yes	N	n/a	n/a	n/a	n/a	n/a
GLD001	418807, 289570	Gilson Drive	M	Yes	N	0.9	0.0	30.5	0.0	99.7
MLE001	418205, 290509	Vicarage Lane	M	Yes	Y	5.3	0.3	19.7	0.0	100.0

Figure 3: Construction dust 1-hour mean indicative PM<sub>10</sub> concentration for dust monitors

