

## Air Quality and Dust Monitoring Monthly Report – September 2022

Cherwell 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.

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

Telephone: 08081 434 434

General email enquiries: [HS2enquiries@hs2.org.uk](mailto:HS2enquiries@hs2.org.uk)

Website: [www.gov.uk/hs2](http://www.gov.uk/hs2)

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

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# Monthly Summary

- 1.1.0 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 dust monitoring undertaken in the Cherwell District Council (CDC) during September 2022.
- 1.1.1 Figure 1 in Appendix A presents the current worksite together with the dust monitoring locations for September 2022.
- 1.1.2 This summary should be read in conjunction with the overview monitoring report 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.
- 1.1.3 The current phase of works commenced in September 2022. The current worksites as presented in Appendix A, Figure 1, include:

## **A4421 Overbridge worksite**

- Pond excavation,
- Ditch realignment,
- Excavation of railway embankment (A4421 South),
- Moving class 2 material to Calvert,
- Vegetation clearance,
- Internal and clean water drains,
- Excavation for abutment (A4421 North Permanent overbridge).

## **A421 Overbridge worksite**

- Deliveries of 6NS for the Piling platform,
- Piling platform,
- overbridge works and stump removal, subsoil strip,
- Excavation of Glaciofluvial deposits,
- limestone excavation,
- water pipe diversion,
- Grass cutting,
- Bund relocation,
- Temporary bridge,
- North embankment formation (A421 Temporary overbridge)
- Drainage installation
- OH Cable removed,
- Pre-pond drainage installed,

- Bioefficient tank installed, and
- Pond excavated.

- 1.1.4 One (1) dust monitor is installed at the worksite, where works are underway. These sites returned a medium dust risk rating.
- 1.1.5 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from the dust monitors presented in Figure 2. 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.
- 1.1.6 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.
- 1.1.7 For the monitor installed at the A421 North worksite, there was no data recorded during the September 2022 monitoring period. Low data capture percentage is due to a faulty solar controller. Monitor was removed on the 28<sup>th</sup> July 2022.
- 1.1.8 Details of the trigger alert investigations and remediations are presented in Appendix B, Table 2.
- 1.1.9 No (0) complaints were received during the reporting period (September 2022).

# Appendix A –Monitoring Locations


Figure 1: Worksite and monitoring locations within the CDC



- Legend**
- Dust Monitor
  - District Borough Unitary Boundaries

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Map Number	
Map Name	<b>Monitoring Locations In T2G, Cherwell DC (Sheet 1)</b>
	<b>Cherwell District Council</b>




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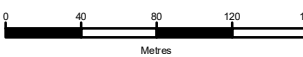
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**Scale at A3: 1:4,000**



Metres

**Date: 25/10/22**

## Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and September 2022 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>	1-hour data capture (%)
Newton Purcell - Finmere	462904, 231144	Site boundary adjacent property on A4421	M	Yes	Yes	7.7	1.0	593.0	2	99.9

Table 2: Summary of exceedances during period (September 2022)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
Newton Purcell - Finmere	24/09/2022: 21:00 – 21:59; 497 µg/m <sup>3</sup> 22:00 – 22:59; 593 µg/m <sup>3</sup>	EKFB are not currently working during night at Newton Purcell.	N/A

Figure 2: Continuous dust 1-hour mean indicative PM<sub>10</sub> concentration for Newton Purcell-Finmere for September 2022

