June 2024



# Air Quality and Dust Monitoring Monthly Report - June 2024

Cherwell District Council



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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### **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 dust monitoring undertaken in the Cherwell District Council (CDC) during June 2024.
- 1.1.2 Figure 1 in Appendix A presents the current worksites together with the dust monitoring locations for June 2024.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report available from <a href="www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2">www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2</a>, 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 Appendix A, Figure 1, include:

#### A4421 Overbridge

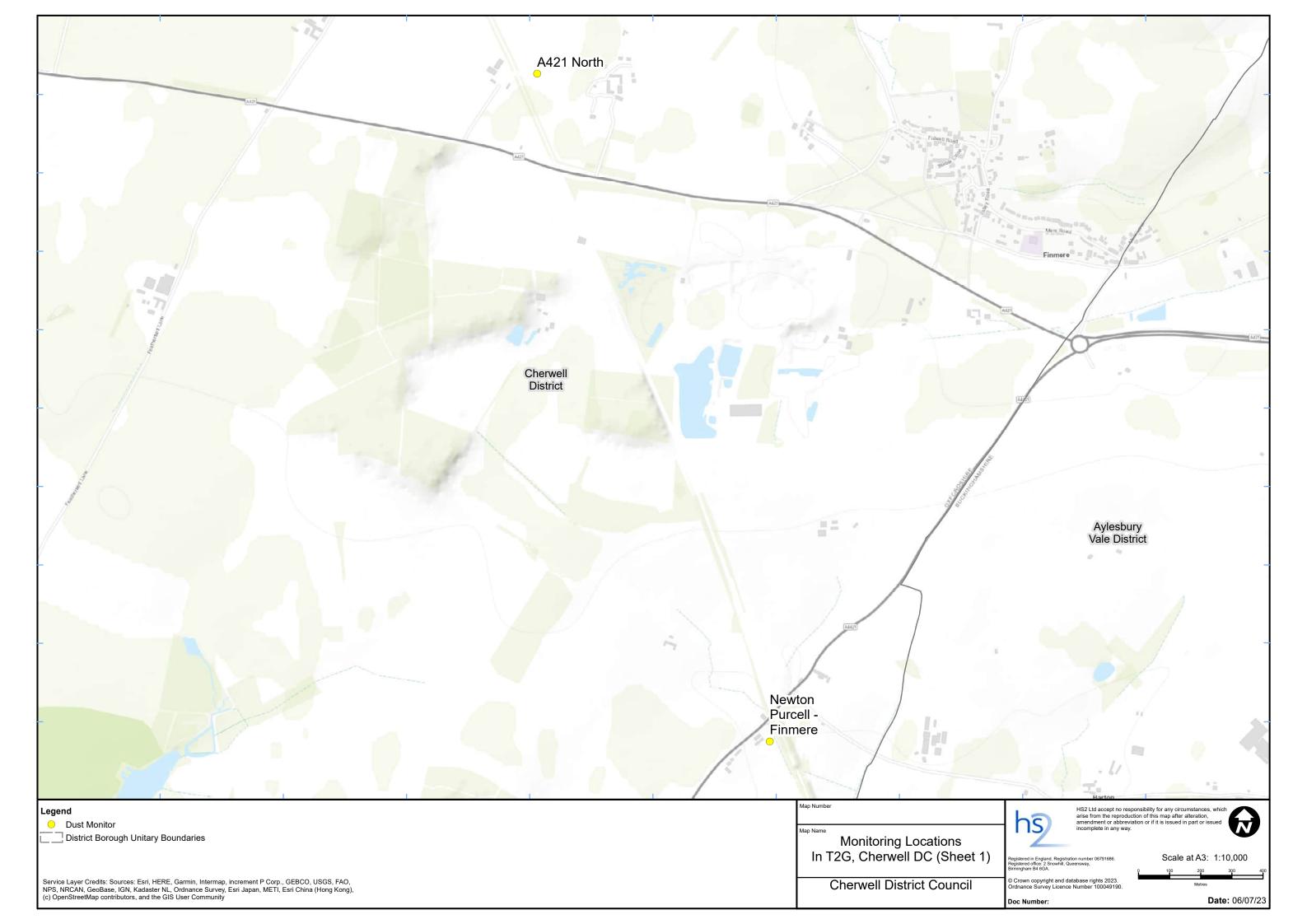
- Dismantling and demolition of the bridge structure
- · Construction of the bridge deck
- Backfill between abutments
- Beam installation with a crane
- 1.1.5 Two (2) dust monitors are installed around these worksites, where works are underway. These sites returned a medium dust risk rating.
- 1.1.6 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 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.
- 1.1.7 The trigger level for  $PM_{10}$  concentrations of 190  $\mu$ g/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.
- 1.1.8 Details of the trigger alert investigations and remediations are presented in Appendix B, Table 2.
- 1.1.9 Data capture was below 90% for the A421 North monitor due to no data being recorded from 1<sup>st</sup> to 5<sup>th</sup> June due to a faulty communications cable which was replaced on 5<sup>th</sup> June.

Low data capture was also due to external battery fault causing insufficient charge to power both noise and dust monitors during low solar hours during the month. The battery was replaced on 20<sup>th</sup> June and intermittent data stopped.

1.1.10 There were no (0) complaints received during the reporting period (June 2024).

## **Appendix A - Worksites and Monitoring Locations**

Figure 1: Worksite and Monitoring locations within CDC



## **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 <sub>10</sub> concentration (µg/m³)	Minimum 1- hour PM <sub>10</sub> concentration (μg/m³)	Maximum 1- hour PM <sub>10</sub> concentration (µg/m³)	Number of 1- hour periods exceeding trigger level of 190 µg/m³	1-hour data capture (%)
Newton Purcell - Finmere	462904, 231144	Site boundary adjacent property on A4421	М	Yes	Υ	6.2	1.0	191.0	1	99.9
A421 North	462156, 233290	A421	М	Yes	Υ	6.2	1.0	28.0	0	56.5

Table 2: Summary of exceedances during period (June 2024)

Monitoring Site ID	Period of trigger alert &	Investigation	Outcomes / Resolution / Remedial measures
	Concentration recorded		implemented
Newton Purcell - Finmere	21/06/24: 13:01 - 14:00; 191 µgm <sup>-3</sup>	Stockpiling works were ongoing through most of the day, but over 100m away from the dust monitor with dust suppression occurring consistently. The works were actually paused during the period that the trigger was recorded, as the workers were on a break. The preceding and post event readings were low.  Furthermore, the monitor in question was overdue a calibration at the time. It was recalibrated a week following the exceedance and no further exceedances have been recorded.	N/A

Figure 2: Continuous dust 1-hour mean indicative PM<sub>10</sub> concentration for all monitors

