

Air Quality and Dust Monitoring Monthly Report – November 2023

Cherwell District Council



Department for Transport

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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 dust monitoring undertaken in the Cherwell District Council (CDC) during November 2023.

1.1.2 Figure 1 in Appendix A presents the current worksites together with the dust monitoring locations for November 2023.

1.1.3 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, 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

- Landscape bund construction
- Excavate and replace
- Earth bund creation
- Overbridge construction
- Dewatering/Pumping
- 1A1 deliveries
- Local excavation.

A421 Overbridge worksite

- Earth fill for the working platform
- 6N deliveries
- Class 2 material deliveries.

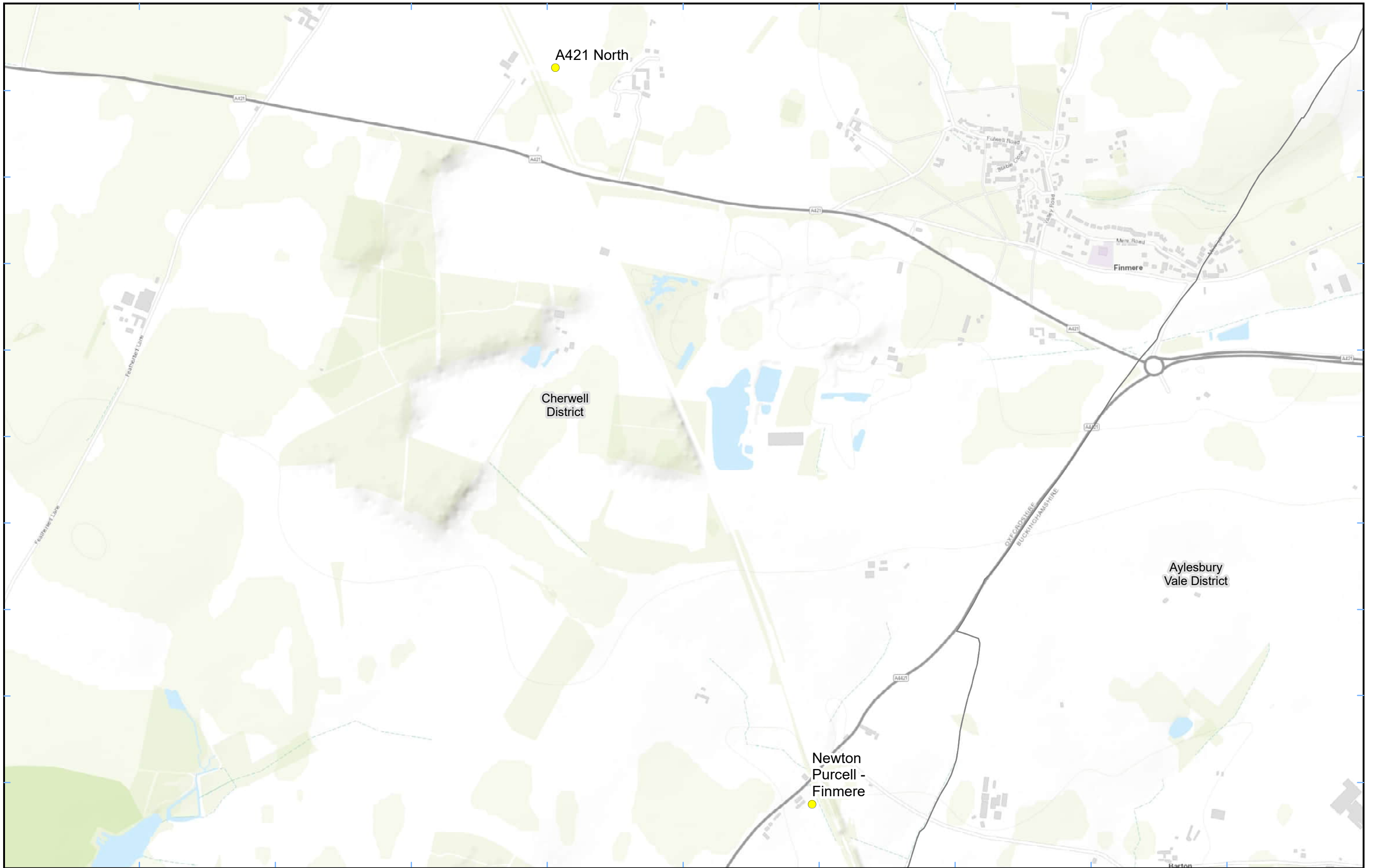
1.1.5 Two (2) dust monitors are installed around these worksites, where works are underway. These sites returned a medium dust risk rating.

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 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 2.
- 1.1.9 Data capture was below 90% for multiple monitors due to a lack of solar charge. Missing data from the A421 North monitor was due to a fault with the PT10 part resulting in the monitor not receiving power.
- 1.1.10 There were no (0) complaints received during the reporting period (November 2023).

Appendix A – Worksites and Monitoring Locations

Figure 1: Worksite and Monitoring locations within CDC



Legend

- Dust Monitor
- District Borough Unitary Boundaries

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Map Number

Map Name
**Monitoring Locations
In T2G, Cherwell DC (Sheet 1)**

Cherwell District Council

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Scale at A3: 1:10,000

0 100 200 300 400
Metres

Doc Number:

Date: 06/07/23

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 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	1-hour data capture (%)
Newton Purcell - Finmere	462904, 231144	Site boundary adjacent property on A4421	M	Yes	Y	8.8	1.0	374.0	1	55.0
A421 North	462156, 233290	A421	M	Yes	Y	5.0	1.0	33.0	0	26.9

Table 2: Summary of exceedances during period (November 2023)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
Newton Purcell - Finmere	23/11/23: 14:00 - 14:59; 374 µg m ⁻³	There is no direct evidence of the cause for this exceedance using the data from the day of the 23 rd November or data from before or after the event. Therefore this dust exceedance may have been caused by the movement of aggregate along the site access road. The monitor is positioned circa 30m from the site access road. The exceedance may have been caused by the adjacent residential caravans circa 5-10m behind a fence, and the dust producing activities that were undertaken on that day. There were no heavy dust producing work activities near this location occurring on the 23 rd November. This exceedance is an anomaly, and it is difficult to be certain on the cause.	Dust levels will continue to be monitored by the site black hats, and water will be dripped from the water bowser tractors in areas at risk of dust generation.

Figure 2: Continuous dust 1-hour mean indicative PM₁₀ concentration for all monitors

