

Air Quality and Dust Monitoring Monthly Report – May 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.

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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) area during May 2022.

1.1.2 Figure 1 in Appendix A indicates the current worksites together with dust monitoring locations for April 2022.

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 worksite

- Bridge removal;
- Site Access Road - New Compound Access;
- Site Access Road - Barton Hartshorn connection;
- A4421 North - temporary drainage;
- Break from highway;
- Removing existing railway embankment;
- Japanese Knotweed remediation; and
- GI and material testing.

A421 worksite

- A421 Bridge structure: abutment wall, concrete pouring, associated steel fixing, formwork installations and removal;
- Embankment formation to the south of A421 road; and
- Vegetation clearance.

1.1.5 Two (2) dust monitors are installed at the worksite, where works are underway. These sites returned a medium dust risk rating.

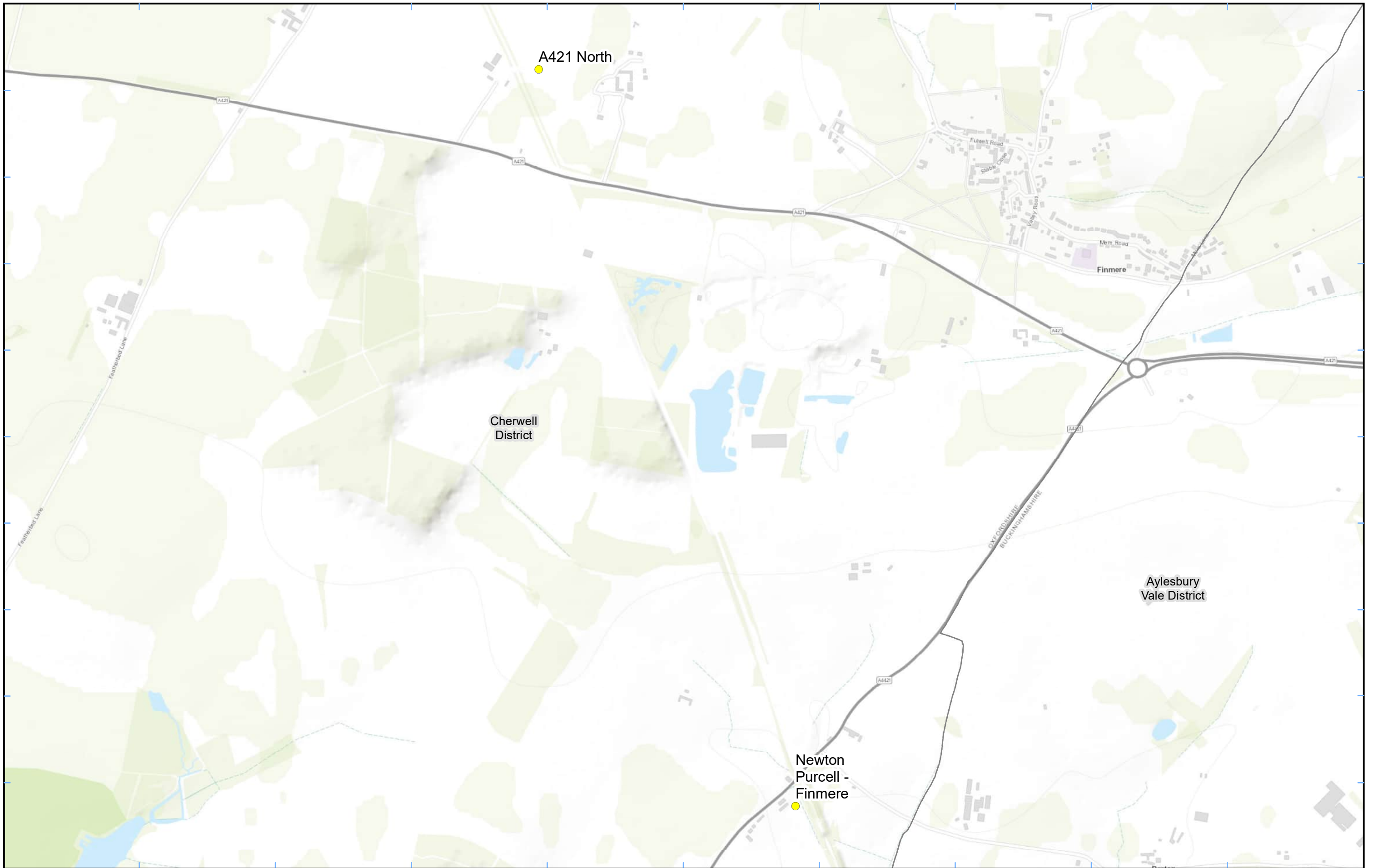
1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from the dust monitors presented in Figure 2. All continuous dust monitoring is undertaken using indicative monitors. Despite being Environment Agency (MCERTS) certified, indicative 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.

- 1.1.7 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 Dust trigger alerts were recorded during the monitoring period (May 2022) and are reported in Appendix B, Table 2.
- 1.1.9 Data capture at the A421 North worksite was below 90% in May 2022 due to intermittent power due to suspected solar controller issue.
- 1.1.10 No (0) complaints were received during the reporting period.

Appendix A –Monitoring Locations


Figure 1: Worksite and monitoring locations within the CDC



Legend
 ● Dust Monitor
 □ District Borough Unitary Boundaries

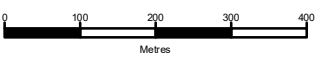
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Map Number
 Map Name
**Monitoring Locations
 In T2G, Cherwell DC (Sheet1)**
 Cherwell District Council


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Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and May 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 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	Yes	8.5	1.0	217.0	1	100.0
A421 North	462156, 233290	A421	M	Yes	Yes	5.0	1.0	13.0	0	19.0

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

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
Newton Purcell - Finmere	13/05/22 14:01 - 15:00; 217.0 µg/m ³	During this day, EKFB were moving type 1 material from the North of Finmere bridge to the South. Also, 1.400t of 6C were moved to Twyford.	Dust suppression was in place and effective every 1-2h and no external dust activities were observed on site. Therefore, dust exceedances may have been generated by type 1 stockpiling in the South.

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

