

Air Quality and Dust Monitoring Monthly Report – January 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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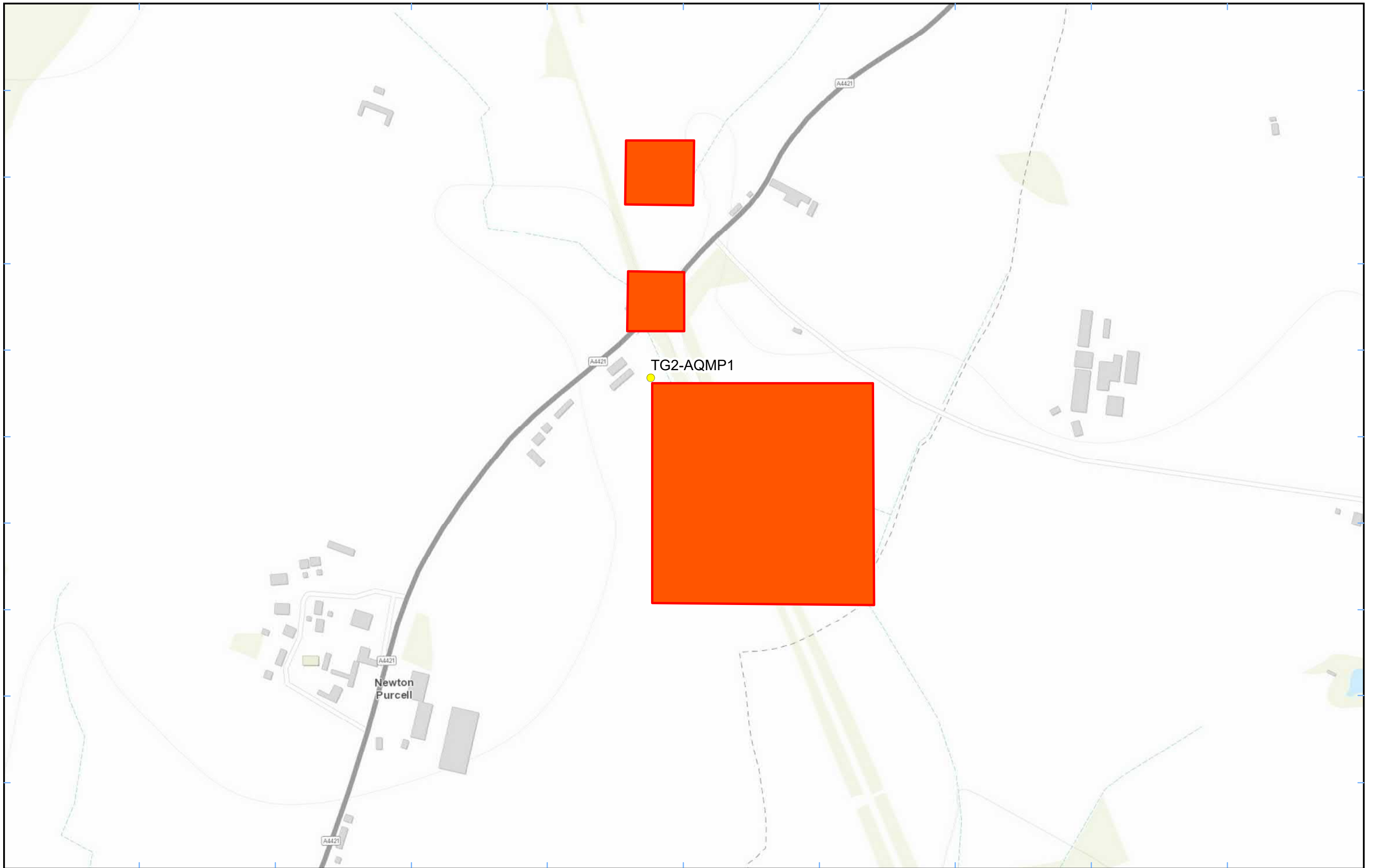
Monthly Summary

- 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 February 2022.
- 1.1.2 Figure 1 in Appendix A indicates the current worksites together with dust monitoring locations.
- 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 phase of works commenced in April 2021 and is expected to be completed by December 2025. The current worksite, as presented in Appendix A, Figure 1, includes:
- Finmere bridge installation (North and South);
 - Stone deliveries (North and South);
 - Stockpiling; and
 - Removal of the existing railway embankment.
- 1.1.5 One (1) dust monitor is installed at the worksite, where works are underway. The site returned a medium dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with a line chart of monthly data from the 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 One (1) dust trigger alert was recorded at Newton Purcell-Finmere during the February 2022 monitoring period.
- 1.1.9 Details of the trigger alert investigations and remediations are presented in Appendix B, Table 2.

- 1.1.10 Data capture was below 90% for monitor Newton Purcell-Finmere in January 2022, due to damage from Storm Eunice on the 18th of February.
- 1.1.11 There were no (0) complaints received during this reporting period.

Appendix A –Monitoring Locations

Figure 1: Worksite and monitoring locations during February 2022 – within the CDC



Legend

- Worksite
- Dust Monitor

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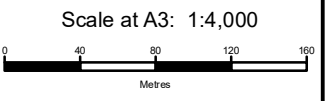
Map Number
Map Name Worksite and Monitoring Locations In T2G, Cherwell DC (Sheet 1)
Cherwell District Council



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Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and February 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	7.1	1.0	265.0	1	57.4

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

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
Newton Purcell - Finmere	12:00 03/02/2022 265.0 µg/m ³	<p>During the day, EKFB were placing Type 1 on the connection ramp to temporary bridge and excavated the rest of the existing railway embankment. These activities have been carried out previously in very close vicinity of the monitoring. No dust exceedances were recorded before.</p> <p>Furthermore, dust exceedances were recorded during the lunch break for operators with a peak at 12:15 = 1219 µg/m³. It is a very high concentration of dust, especially at this time of the year. After 13:05, dust level stayed below 190µg/m³.</p> <p>According to the supplier, no malfunction was detected.</p>	N/A

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

