

Air Quality and Dust Monitoring Monthly Report – August 2024

Lichfield 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 air quality and dust monitoring undertaken in Lichfield District Council (LDC) during August 2024.
- 1.1.2 Figures 1 and Figure 2 in Appendix A presents the current worksites together with the dust monitoring locations.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report monthly 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, Figures 1 and 2, include:

Whittington Common Cutting (Sublot 8.1)

- Topsoil stripping.
- Stockpiling.
- Cut and fill earthworks for Embankment constructions.
- Import of soils from other HS2 sites.
- Soil compaction and testing.
- Darnford Lane – topsoil stripping and soil imports started on 1st August 2024.
- Plant used: 1 x D6 Dozer, 1 x D3 Dozer, 2 x 30 tonne Articulated Dump Trucks (ADTs), 2 x 19 tonne rollers, 1 x 21 tonne excavator, 1 x 9 tonne excavator, 10 lorries (for importing soil from other HS2 sites), 1 x 35 tonne excavator on Darnford Lane.

Streethay Cutting Retaining Structure (Sublot 8.2)

Streethay Area 3/4/5 works

- Installation of ducts for utilities using excavator, dumper and roller.
- Drainage installation (pipes, chamber) using excavator, dumper, roller and concrete deliveries.
- Maintenance activities and preparation for the next stage using excavator, roller, stone delivery by lorry and small machinery.
- Concrete activities.

Streethay Area 1 works

- Deliveries and collection.
- Road sweepers.

- Drainage installation.
- Plant used: Small items of plant including plate compacters, excavators and dumpers.

Streethay Cutting Retaining Structure (Sublot 8.3)

Streethay Area 3/4/5 works

- Installation of ducts for utilities using excavator, dumper and roller.
- Drainage installation (pipes, chamber) using excavator, dumper, roller and concrete deliveries.
- Maintenance activities and preparation for the next stage using excavator, roller, stone delivery by lorry and small machinery.
- Concrete activities.

Streethay Area 1 works

- Deliveries and collection.
- Road sweepers.
- Drainage installation.
- Plant used: Small items of plant including plate compacters, excavators and dumpers.

Shaw Lane Embankment and Underbridge (Sublot 8.4)

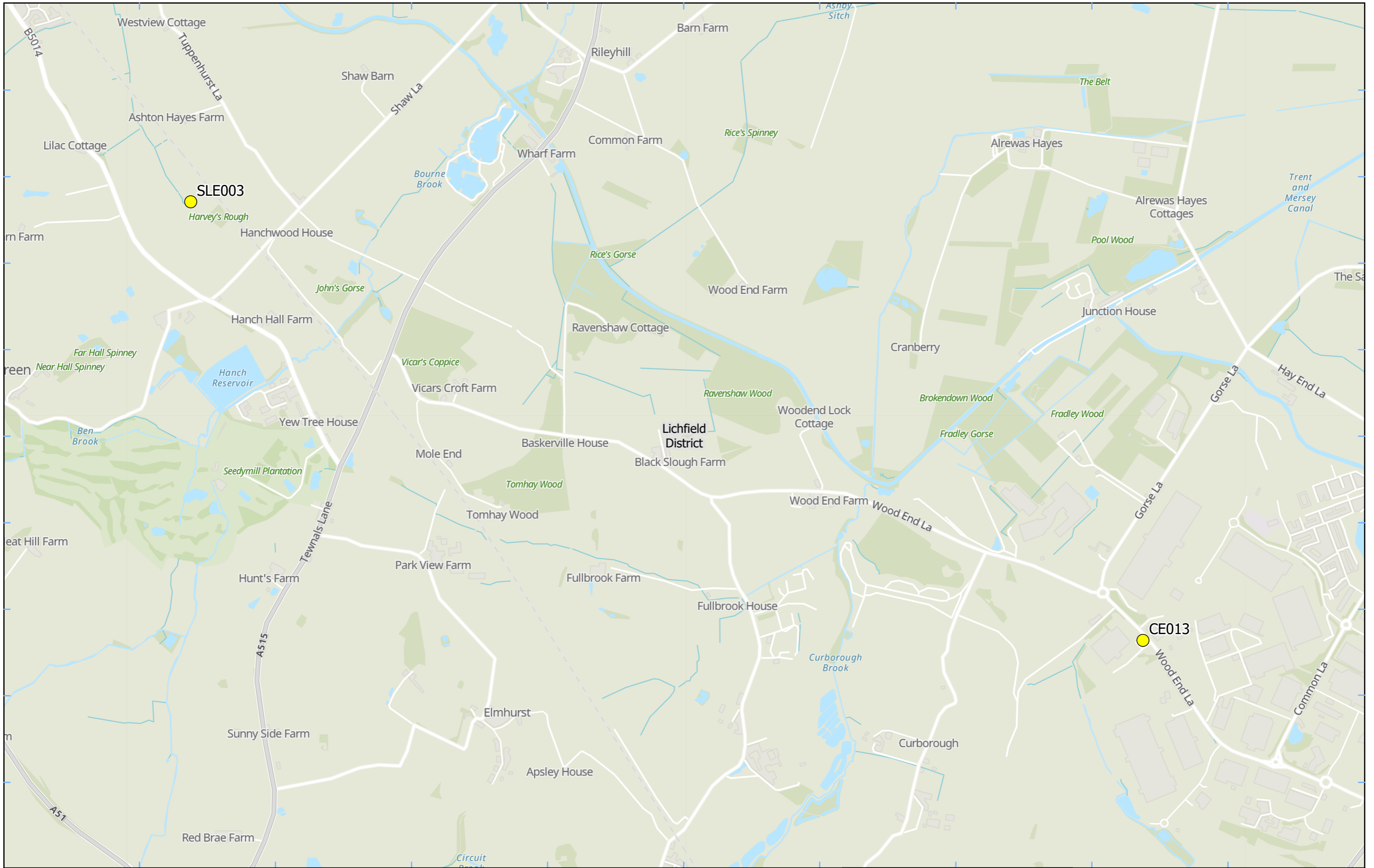
Shaw Lane Embankment

- No works in August.

- 1.1.5 Six (6) dust monitors are installed around these worksites, where works are underway. These sites returned a low to 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 3. 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 There were no (0) complaints received during the reporting period (August 2024).

Appendix A – Worksites and Monitoring Locations

Figures 1-2: Worksites and Monitoring Locations within LDC



Legend
 Dust Monitor
 District Borough Unitary Boundaries

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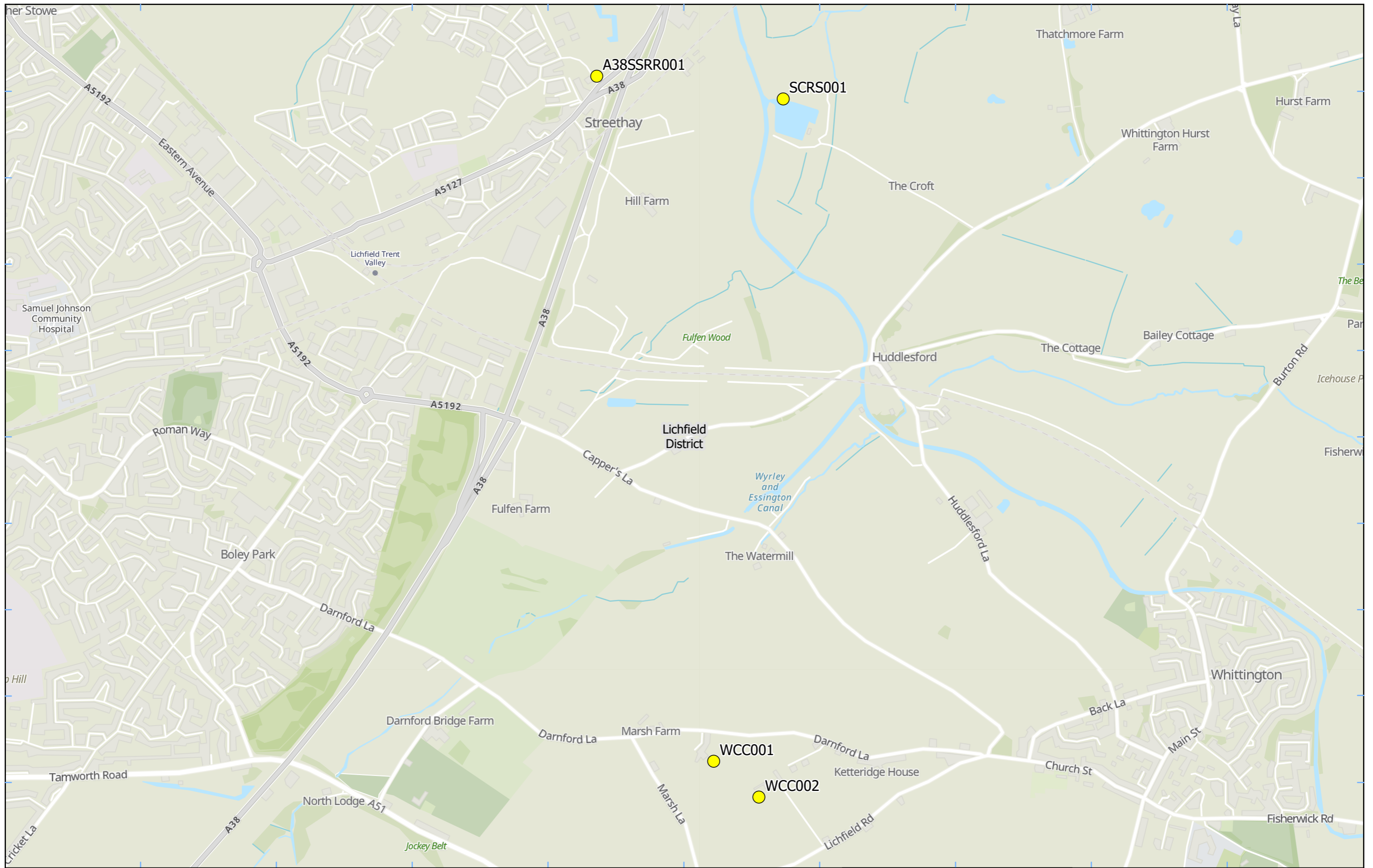
Map Number
 Map Name
**Monitoring Locations
 In LDC (Sheet 1)**
 Lichfield District Council

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 Metres
 Date: 12/09/24



Legend
 Dust Monitor
 District Borough Unitary Boundaries

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Map Number	
Map Name	Monitoring Locations In LDC (Sheet 2)
Lichfield District Council	

Map Number

Map Name

**Monitoring Locations
In LDC (Sheet 2)**

Lichfield District Council

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Appendix B – Dust Monitoring Results

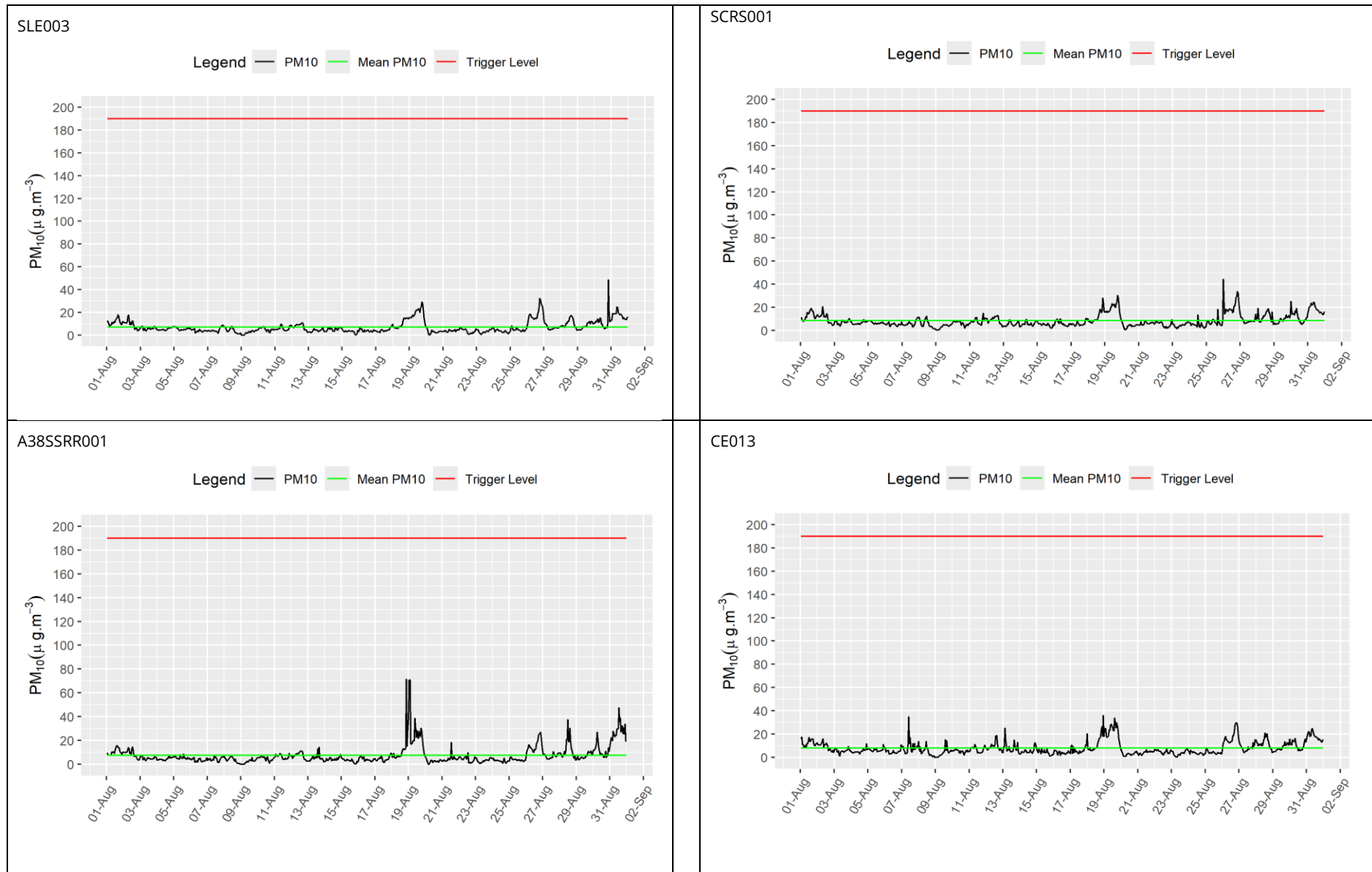
Table 1: Dust Monitoring Locations and Results

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	Data capture for Month (%)
SLE003	410041, 314481	New Lane Produce South, Shaw Lane Embankment	N	Yes	No	7.2	0.2	48.7	0	100.0
SCRS001	414913, 310498	Streethay Cutting Retaining Structure, King's Orchard Marina	M	Yes	No	8.6	0.4	44.3	0	100.0
A38SSRR001	414315, 310571	Thompson Way, Streethay, Fradley and Streethay	M	Yes	No	7.5	0.1	71.5	0	100.0
CE013	414198, 312565	Midlands Karting, Wood End Lane	M	Yes	No	8.1	0.1	36.1	0	100.0
WCC001	414690, 308373	Whittington Hill Farm, Darnford Lane	L	Yes	No	7.4	0.3	69.2	0	100.0
WCC002	414835, 308258	Ellfield House, Darnford House	L	Yes	No	11.3	0.5	333.2	2	100.0

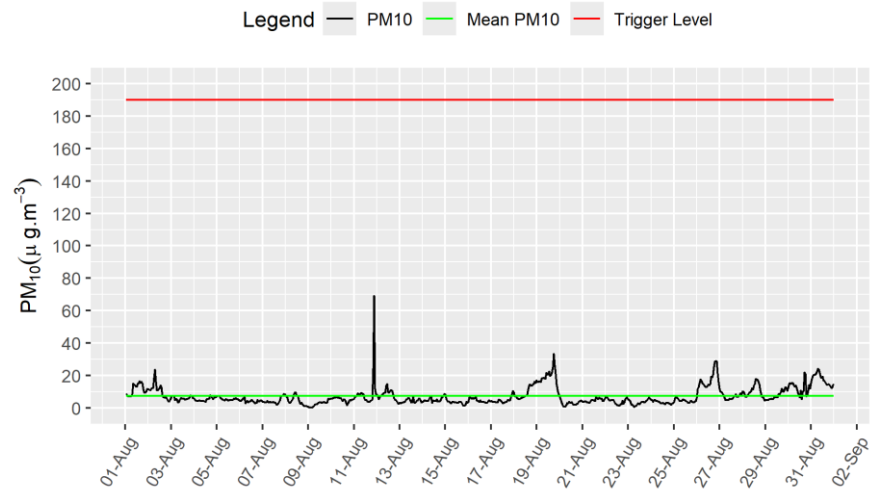
Table 2: Summary of exceedances during period (August 2024)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
WCC002	09/08/2024 12:01 - 13:00; 333 µg/m ³ 13:01 - 14:00; 298 µg/m ³	Exceedance caused by soil stripping that were occurring in the area of the monitor.	Dust suppression measures in the area of the monitor included tractors and bowsers in area doing constant dust suppression and TM bowser in situ spraying when needed on stockpiles and the ground, in addition to natural rainfall.

Figure 3: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors



WCC001



WCC002

