HS2

December 2024

Air Quality and Dust Monitoring Monthly Report – December 2024

Lichfield District Council

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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 air quality and dust monitoring undertaken in Lichfield District Council (LDC) during December 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)

- Maintenance of site V-ditches.
- Removal of built up of silt / rematting.
- Soil stripping.
- Stone placing for laydown area, compound set up and access construction.
- Earthing and bonding.
- Technical backfill.
- Excavation for West and East Piers and abutments.
- Tractor and bowser for localised water management.
- Control Station construction.
- Site maintenance works on existing haul roads, accesses, pond levels and silt fencing.
- Installation of fencing (including silt fencing and Heras fencing).
- Plant used: Excavators, Dozers, Rollers, Insulated Hand Tools, Auger Drills, Articulated Dump Trucks (ADTs), Dumpers, Graders and a Crane.

Shaw Lane Embankment and Underbridge (Sublot 8.2)

Streethay Area 3/4/5/6 works

- Piling Works
- Piling platform maintenance
- Stone deliveries lorries
- Stone removal and installation with use of excavator
- Compaction with roller.

Streethay Area 1 works

- Deliveries and collections
- Road sweepers
- Maintenance
- Strimming.

Streethay Cutting Retaining Structure (Sublot 8.3)

Streethay Area 3/4/5/6 works

- Piling Works
- Piling platform maintenance
- Stone deliveries lorries
- stone removal and installation with use of excavator
- compaction with roller.

Streethay Area 1 works

- Deliveries and collections
- Road sweepers
- Maintenance
- Strimming.

1.1.5 Seven (7) 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 PM_{10} concentrations of 190 µg/m^3, 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 No (0) dust trigger alerts were recorded during the monitoring period (December 2024).

1.1.9 Data capture was below 90% for multiple monitors due to:

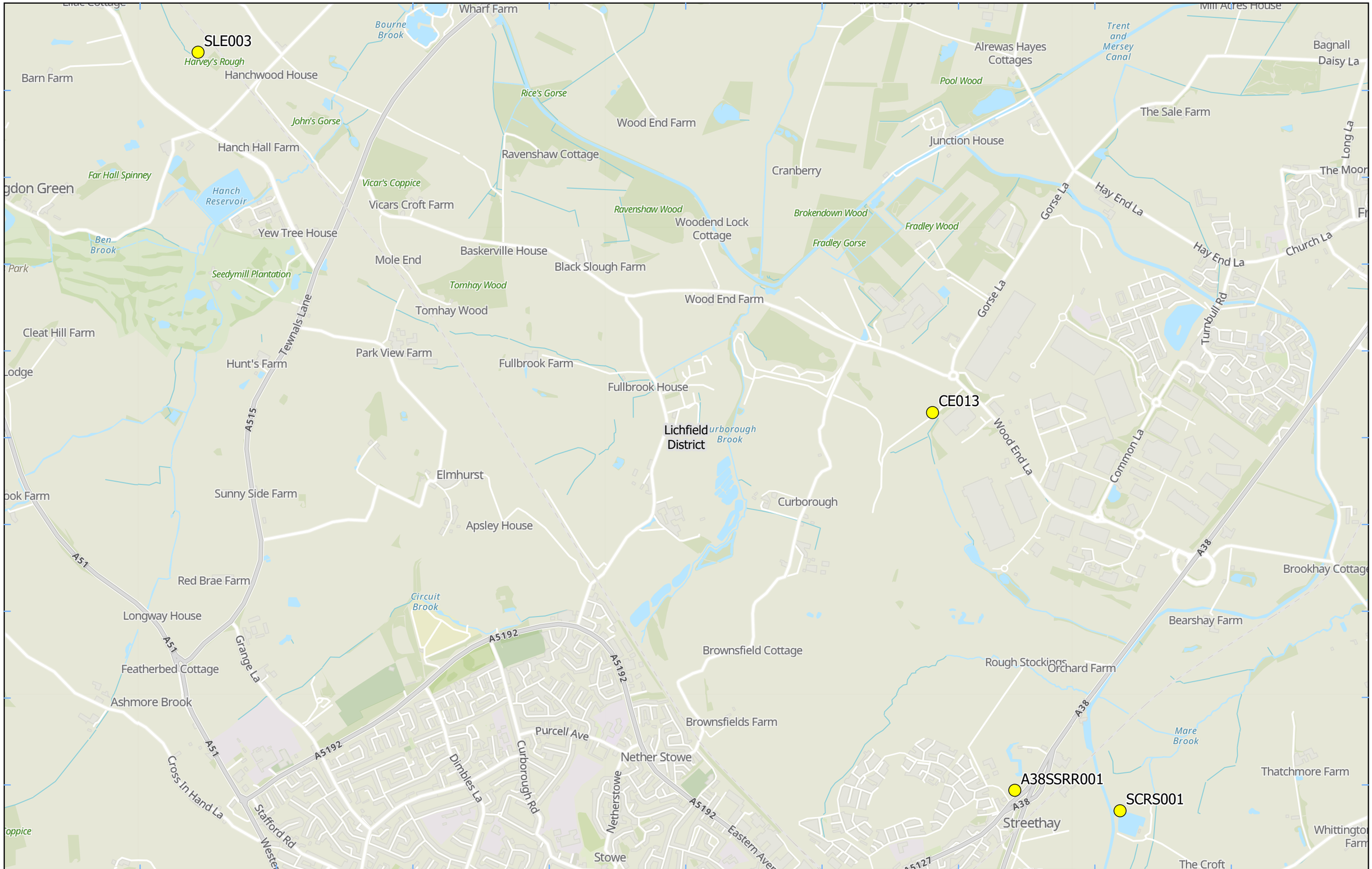
- Monitor CE013 – A battery refresh was done on 19th December 2024. The status of this monitor is to be reviewed, and a site visit is to be scheduled (if necessary).

- Monitor SCRS001 – Battery refreshes were done on 3rd December 2024 and 12th December 2024. A monitor swap out and battery refresh are scheduled for 17th January 2025.
- Monitor SLE003 – A battery refresh is scheduled for 17th January 2025.
- Monitor WCC001 – A battery refresh is scheduled for 23rd January 2025.
- Monitor WCC002 - A battery refresh is scheduled for 23rd January 2025.
- Monitor SCS001 – A battery refresh is scheduled for 23rd January 2025.

1.1.10 There were no (0) complaints received during the reporting period (December 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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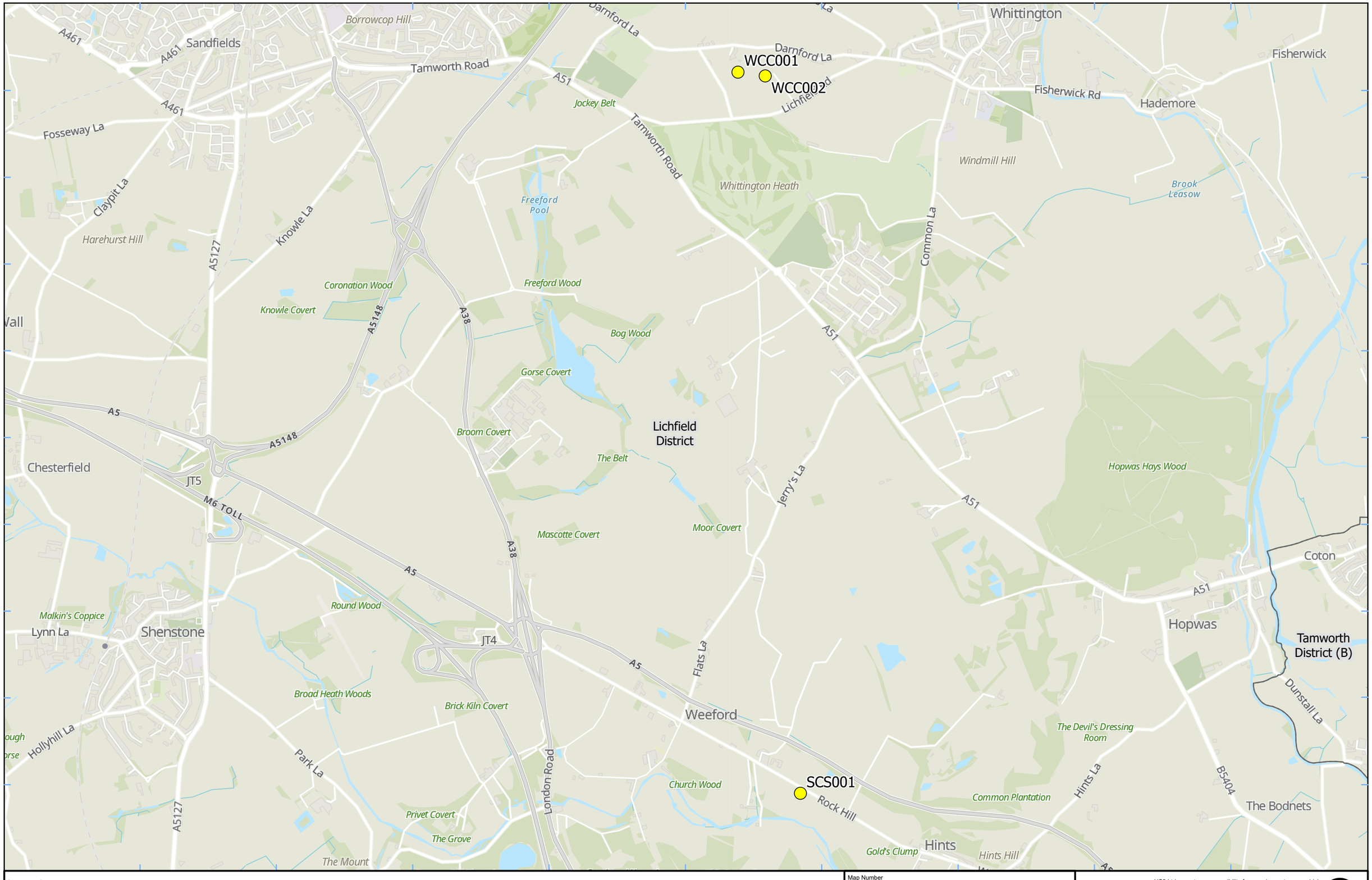
Metres

Doc Number:

Date: 19/12/24



Legend

- Dust Monitor
- District Borough Unitary Boundaries

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Map Number

Map Name

Monitoring Locations In LDC (Sheet 2)

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Scale at A3: 1:22,000

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Metres

Doc Number:

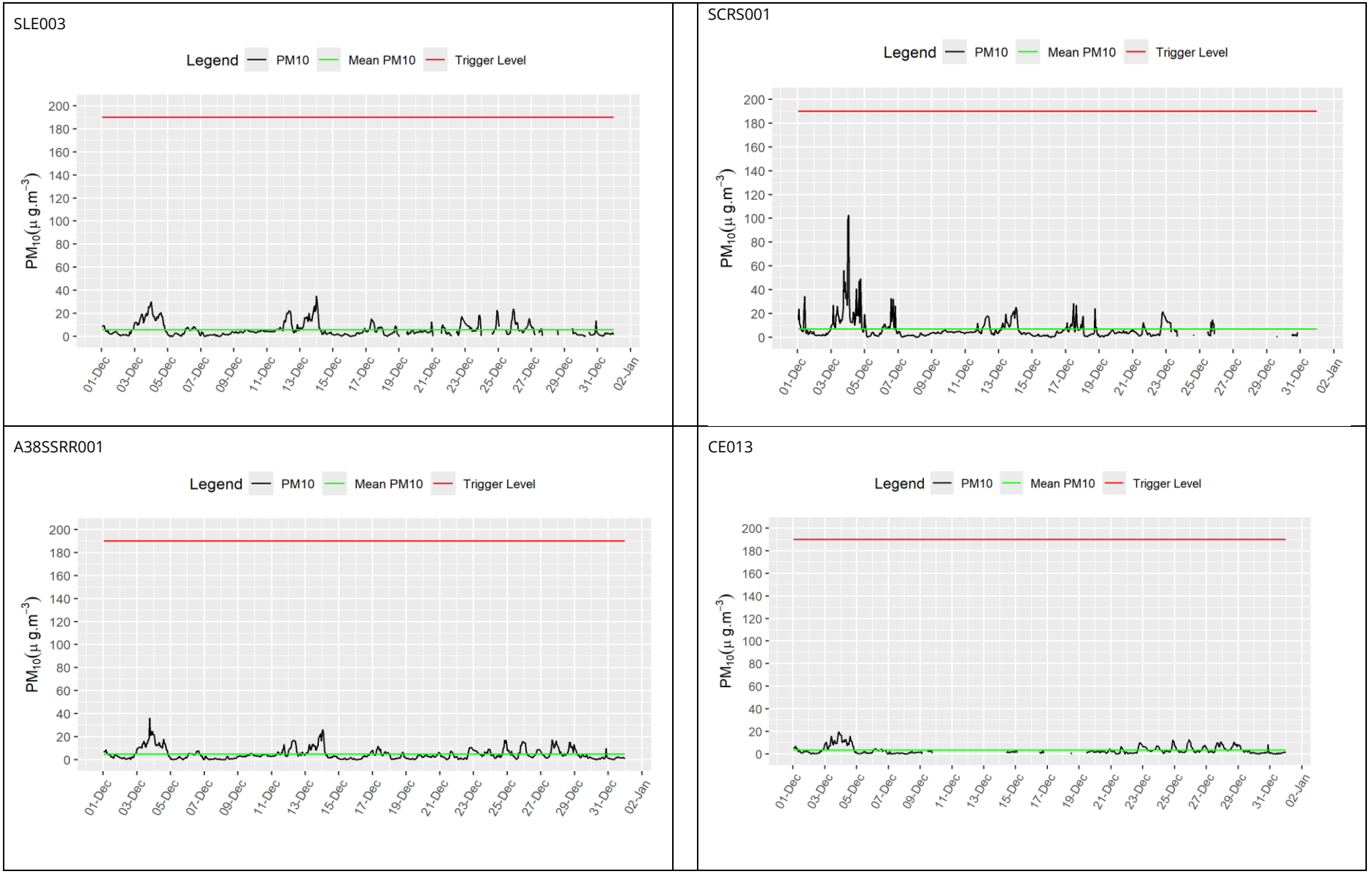
Date: 19/12/24

Appendix B – Dust Monitoring Results

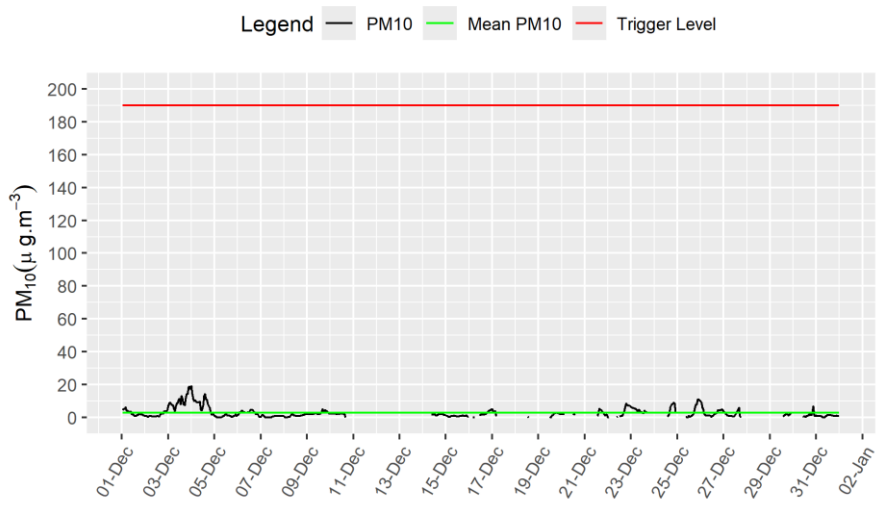
Table 1: Dust Monitoring Locations and Results

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 ($\mu g/m^3$)	Minimum 1-hour PM_{10} concentration ($\mu g/m^3$)	Maximum 1-hour PM_{10} concentration ($\mu g/m^3$)	Number of 1- hour periods exceeding trigger level of 190 $\mu g/m^3$	Data capture for Month (%)
SLE003	410041, 314481	New Lane Produce South, Shaw Lane Embankment	N	Yes	No	5.9	0.1	35.1	0	86.8
SCRS001	414913, 310498	Streethay Cutting Retaining Structure, King's Orchard Marina	M	Yes	No	6.9	0.1	102.9	0	76.7
A38SSRR001	414315, 310571	Thompson Way, Streethay, Fradley and Streethay	M	Yes	No	4.9	0.1	36.0	0	100.0
CE013	414198, 312565	Midlands Karting, Wood End Lane	M	Yes	No	3.5	0.1	19.7	0	70.6
WCC001	414690, 308373	Whittington Hill Farm, Darnford Lane	L	Yes	No	3.0	0.1	19.2	0	62.8
WCC002	414835, 308258	Ellfield House, Darnford House	L	Yes	No	5.6	0.1	19.6	0	9.4
SCS001	415081, 303691	The Lodge, Rock Hill	N	Yes	No	4.6	0.1	23.0	0	40.1

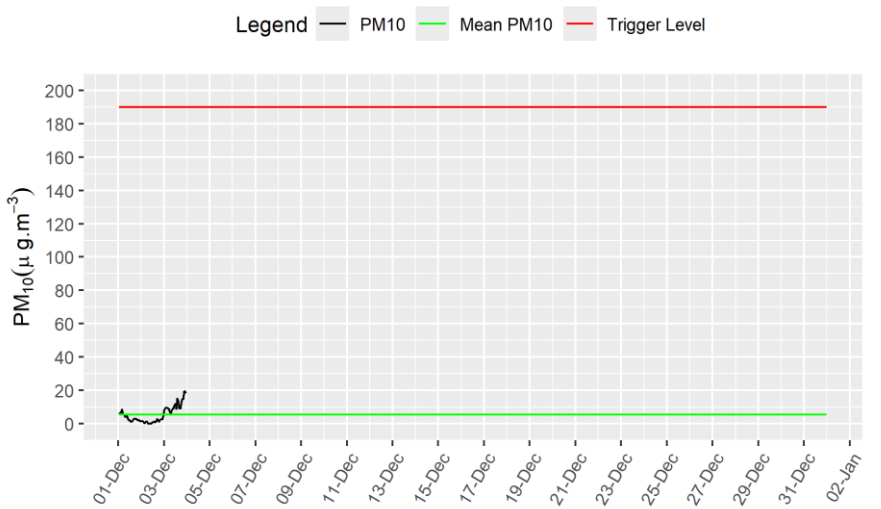
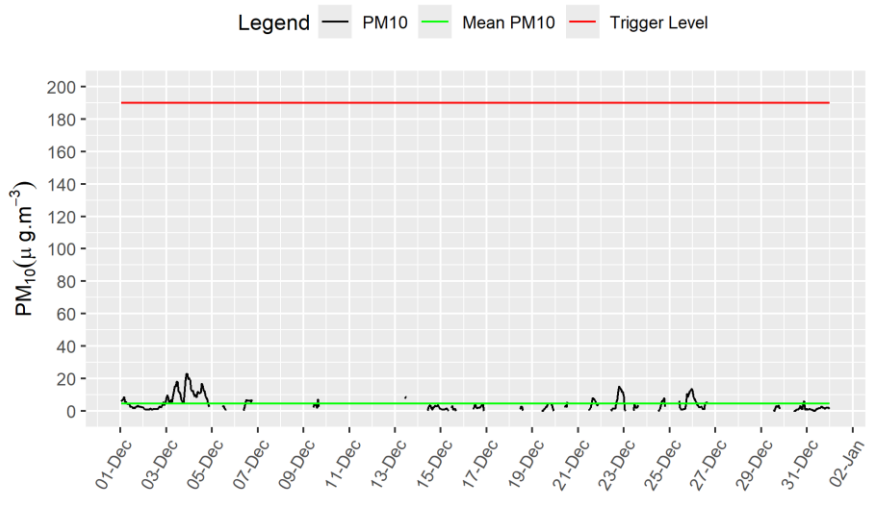
Figure 3: Construction dust 1-hour mean indicative PM_{10} concentration for all dust monitors



WCC001



WCC002



SCS001