HS2

May 2025

Air Quality and Dust Monitoring Monthly Report – May 2025

Three Rivers 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.

High Speed Two (HS2) Limited,
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared by EWCs and MWCCs on behalf of HS2 Ltd.

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

recycle

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 Three Rivers District Council (TRDC) during May 2025.

1.1.2 Figure 1 in Appendix A presents the current worksite together with the 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 worksites, as presented in Appendix A, Figure 1, include:

South Portal site (Phase 10)

- General Plant: wheel washers, generators and site-wide support plant;
- Earthworks and Drainage: excavation, drainage, filling & subgrade, ground stabilisation, chalk cake placement, stockpiling and pugmill plant operation;
- Batching Plant 2 and 3: Deliveries and operation (Batching plant 2&3), collection of concrete for tunnel walkways and CP works;
- Tunnelling Works (Surface Support): Cooling plant operation, multi-service vehicles, storage on top of south portal, tunnel walkways and decommissioning of tunnel support activities;
- Concrete Breaking Activities: Concrete processing activities and breaking of building/structure base slabs and V-pier Mock-up;
- South Portal Civils Works: permanent works and porous works;
- Surface Water Management: surface water management and pond water treatment plan;
- Landscaping Works: Seeding, planting, and fencing; and
- Site demobilisation: Steel scraping area, Dismantling – Cake Shed, TBM and Warehouse, Tunnel precast factory building dismantling, and batching plant 2&3 aggregate bay dismantling.

1.1.5 Four (4) dust monitors are installed around this 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 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 PM_{10} concentrations of 190 µg/m^3, measured as a 1-hour mean, in accordance with the updated IAQM guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites – (October 2018)*' has been applied.

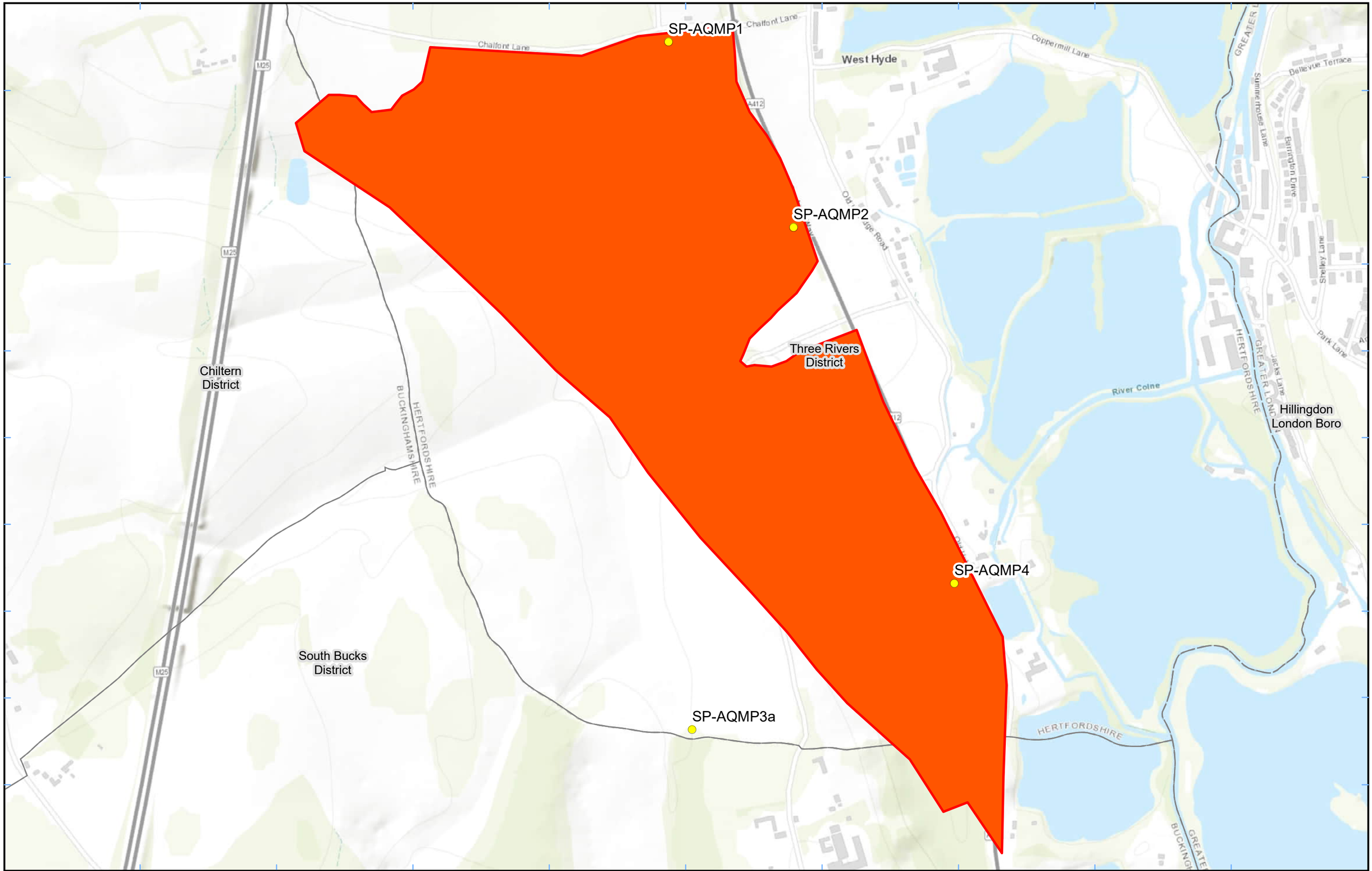
1.1.8 No (0) dust trigger alerts were recorded during the monitoring period (May 2025).

1.1.9 Data capture was below 90% for multiple monitors. Missing data at SP-AQMP3a and SP-AQMP4 is due to limited solar power due to solar panel location. The installation team are considering alternative locations to allow for better solar power as alternative power sources are not possible at these locations. SP-AQMP2 has limited data due to solar power and battery failure, a new battery is being sourced and is due to be installed in early June.

1.1.10 There were no (0) complaints received during the reporting period (May 2025).

Appendix A – Worksite and Monitoring Locations

Figure 1: Worksites and Monitoring Locations within TRDC



Legend

Dust Monitor
District Borough Unitary Boundaries
Worksite

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Map Number

Map Name

Worksite and Monitoring Locations In TRDC (Sheet 1)

Three Rivers District Council

Registered in England. Registration number 06791686.
Registered office: 2 Snowhill, Queensway, Birmingham B4 6GA.

Scale at A3: 1:7,000

0 70 140 210 280
Metres

Doc Number:

Date: 10/08/23

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 PM10 concentration (µg/m3)	Minimum 1-hour PM10 concentration (µg/m3)	Maximum 1-hour PM10 concentration (µg/m3)	Number of 1-hour periods exceeding trigger level of 190 µg/m3	Data capture (%)
SP-AQMP1	502922, 191467	On the northern boundary of the site at Chalfont Lane	M	Yes	Yes	6.8	2.0	38.0	0	97.4
SP-AQMP2	503176, 191090	On the eastern boundary of the site at Denham Way	M	Yes	Yes	-	-	-	0	-
SP-AQMP3a	502970, 190069	On the southern boundary of the site at Old Shire Lane	M	Yes	Yes	5.7	1.0	37.0	0	28.8
SP-AQMP4	503503, 190366	On the eastern boundary of the site on the A412	M	Yes	Yes	7.0	2.0	19.0	0	19.4

Figure 2: Continuous dust 1-hour mean indicative PM_{10} concentration for all dust monitors