

Air Quality and Dust Monitoring Monthly Report – December 2024

Stratford-on-Avon District Council



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 Stratford-on-Avon District (SoADC) during December 2024.
- 1.1.2 Figure 1 in Appendix A present 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, Figure 1, include:

Southam worksite

- Installation of drainage and culverts
- Pond maintenance
- Topsoil stripping and material movement
- Further establishment of the site access road
- Bulk earthworks Southam Cutting, Windmill Hill & Ladbroke Cutting
- Southam Embankment bulk earthworks
- Embankment fill
- Earthworks for piling platform works at Ladbroke Grove Farm AOB.
- Earthworks for piling platform works at Lower Radbourne Farm AOB.
- Pouring of pile cap at Lower Radbourne Farm AOB
- Earthworks for piling platform works at Lower and Upper Radbourne viaducts
- Southam Culvert excavations.

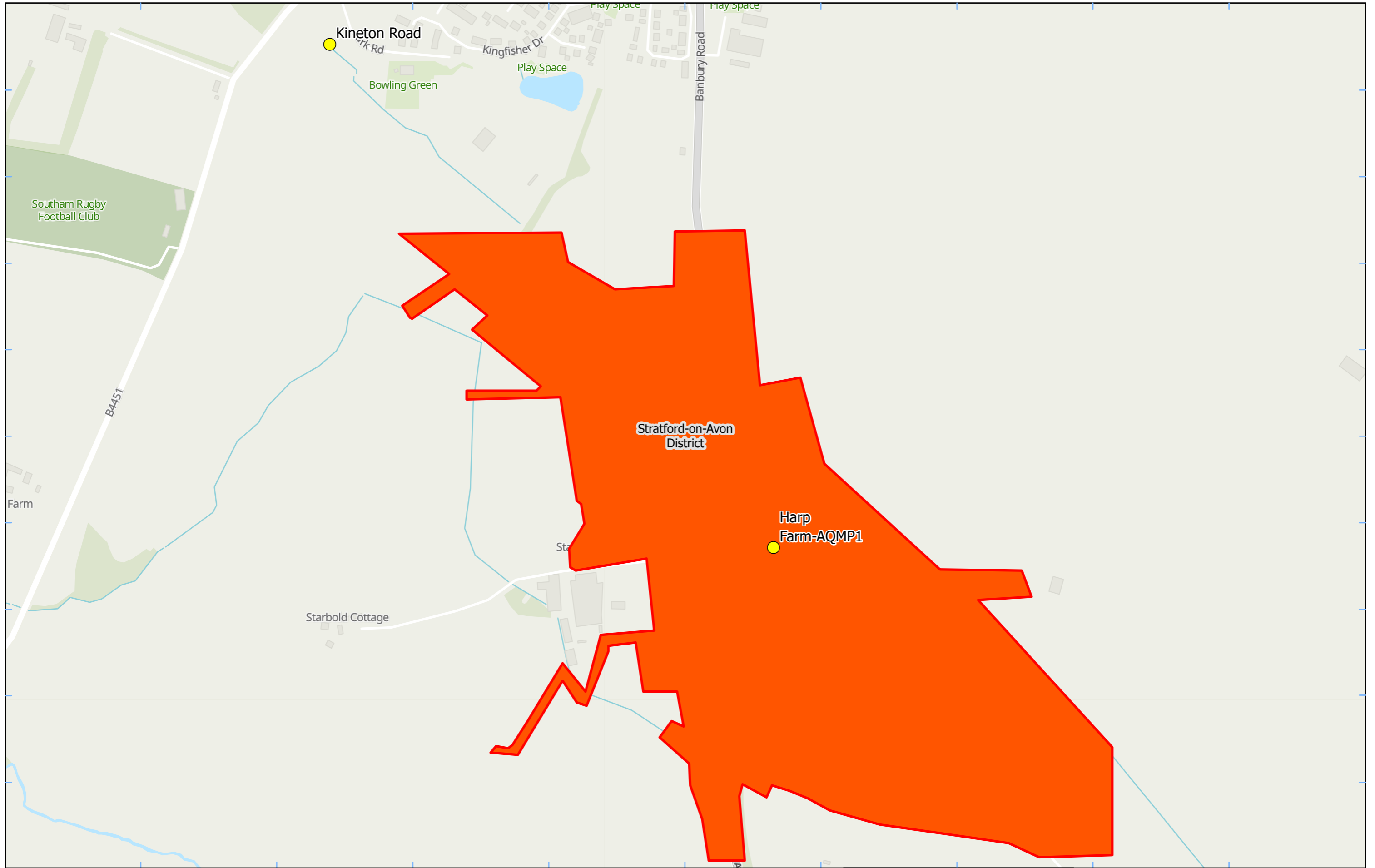
- 1.1.5 Two (2) dust monitors are installed around these worksites, where works are underway. These sites returned a medium dust risk rating.
- 1.1.6 The dust monitoring location and results are presented in Appendix B, Table 1, together with line charts of monthly data from each dust monitor presented 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 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 Data capture was below 90% for multiple monitors due to:
- Southam worksite was 55.91% at Harp Farm-AQMP1 for the month of December 2024. No data capture from 20th December was due to a battery fault.
 - Data capture at the Southam worksite was 88.44% at Kineton Road for the month of December 2024. High readings and exceedances between 4th and 8th December were due to a blockage fault with the instrument. Intermittent data from 14th to 31st December was due to a battery fault.
- 1.1.10 There were no (0) complaints received during the reporting period (December 2024).

Appendix A – Worksites and Monitoring Locations

Figure 1: Worksites and Monitoring Locations within SoADC






Legend

- Dust Monitor
- District Borough Unitary Boundaries
- Worksite

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Contains data from OS Zoomstack

Map Number
Map Name
Worksite and Monitoring Locations In SoADC (Sheet 1)
Stratford-on-Avon District Council


Doc Number:




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Scale at A3: 1:5,000



Metres

Date: 26/03/24

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 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 (%)
Harp Farm-AQMP1	441738, 260075	Site boundary adjacent property on Harp Farm	M	Yes	Yes	5.0	1.0	27.0	0	55.9
Kineton Rd	441092, 260808	Adjacent to Kineton Road roundabout	M	Yes	Yes	84.9	1.0	12777.0	18	88.4

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

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
Kineton Rd	04/12/2024 12:01 – 13:00; 794 µg/m ³ 13:01 – 14:00; 1931 µg/m ³ 05/12/2024 00:01 – 01:00; 439 µg/m ³ 01:01 – 02:00; 397 µg/m ³ 06:01 – 07:00; 223 µg/m ³ 07:01 – 08:00; 4887 µg/m ³ 11:01 – 12:00; 194 µg/m ³ 12:01 – 13:00; 3053 µg/m ³ 13:01 – 14:00; 10018 µg/m ³ 14:01 – 15:00; 314 µg/m ³ 15:01 – 16:00; 6598 µg/m ³ 16:01 – 17:00; 3910 µg/m ³ 17:01 – 18:00; 12777 µg/m ³	Monitor had experienced a blockage and was purging dust from the filter.	The monitor resolved itself.

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
	23:01 - 00:00; 400 µg/m ³ 06/12/2024 01:01 - 02:00; 927 µg/m ³ 02:01 - 03:00; 2047 µg/m ³ 13:01 - 14:00; 199 µg/m ³ 19:01 - 20:00; 2006 µg/m ³		

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

