

Air Quality and Dust Monitoring Monthly Report – February 2022

Stratford-on-Avon 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 Stratford-on-Avon District Council (SoADC) area during February 2022.

1.1.2 Figures 1 and 2 in Appendix A indicate the current worksites together with the dust monitoring locations for February 2022.

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, Figures 1 and 2, include:

Southam Worksite (Harp Farm)

- Further establishment of the main site compound;
- Installation of drainage and culverts, excavation of ponds;
- Topsoil stripping and material movement;
- Establishment of the site access road; and
- Plant crossing (A423 Banbury Road).

Sublot 1A

- 24/7 tunnel boring works;
- Operation of the Slurry Treatment Plant; and
- Operation of the Water Treatment Plant.

Sublot 2A2

- Topsoil stripping;
- Haul roads construction; and
- Earthworks cutting.

1.1.5 Three (3) dust monitors are installed around worksites, where works are underway. These sites returned a medium dust risk rating.

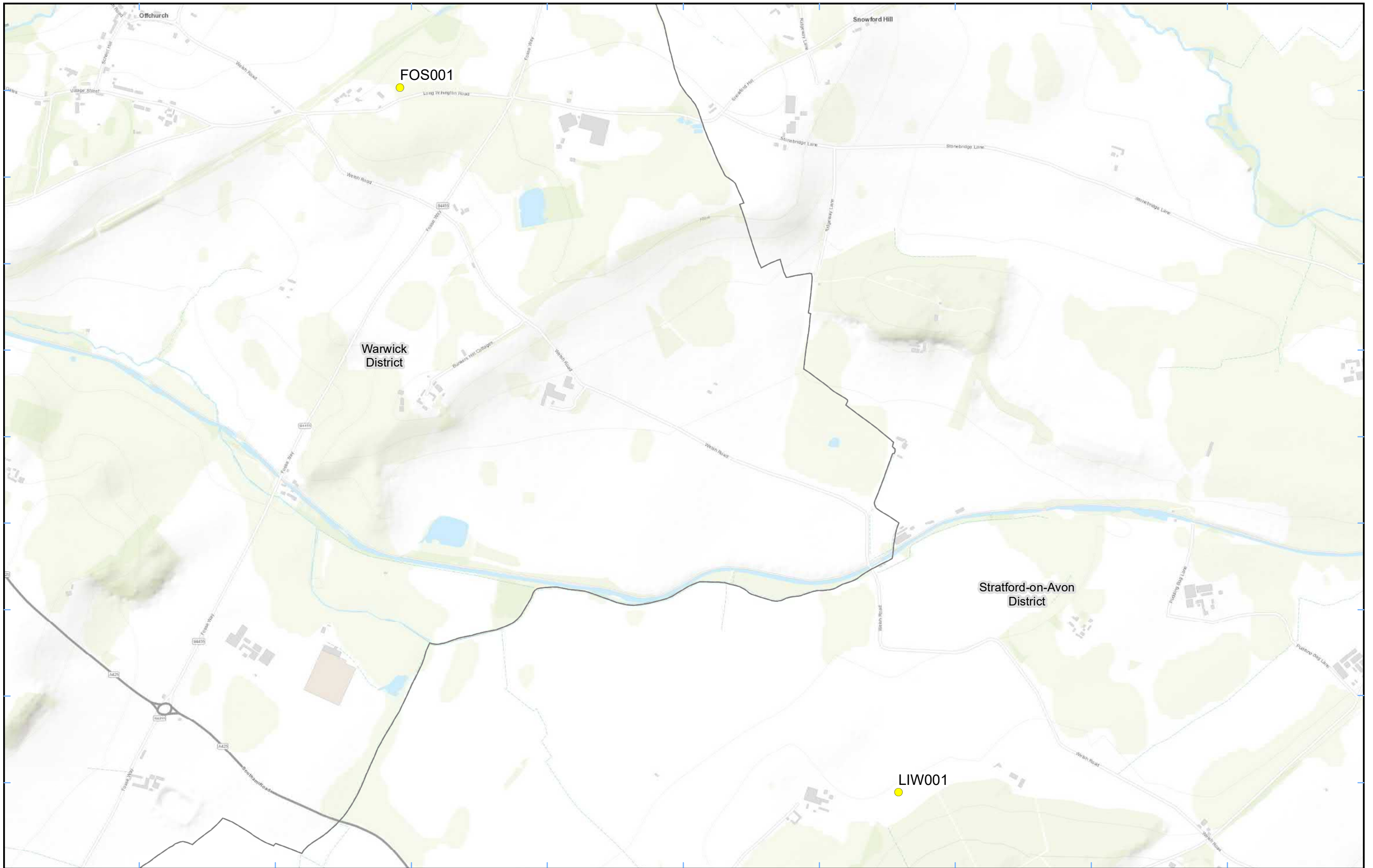
1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with a line chart of monthly data from the dust monitor presented in Figure 3. All continuous dust monitoring is undertaken using indicative monitors. Despite being Environment Agency (MCERTS) certified, indicative 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 One (1) dust trigger alert was recorded during the monitoring period (February 2022) and is reported in Appendix B, Table 2.
- 1.1.9 Data capture was below 90% for monitor Harp Farm-AQMP1 due to power supply issues.
- 1.1.10 No (0) complaints were received during the reporting period (February 2022).

Appendix A – Monitoring Locations

Figure 1 and 2: Worksite and monitoring locations within the SoADC



Legend
 ● Dust Monitor
 □ District Borough Unitary Boundaries

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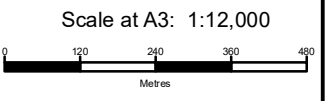
Map Number
 Map Name
**Worksite and Monitoring Locations
 In SoADC (Sheet 1)**
 Stratford-on-Avon District Council



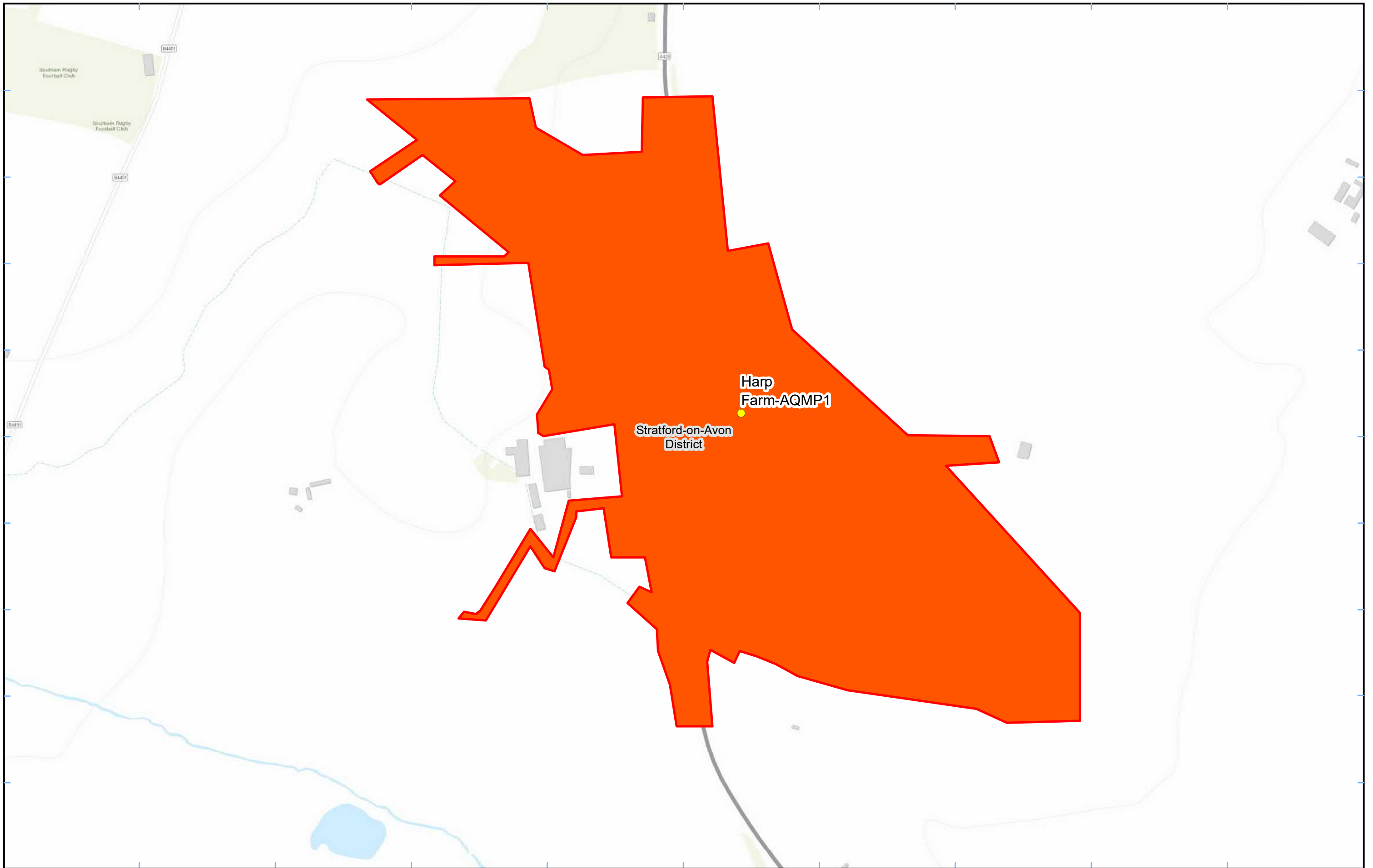
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- Legend**
- Dust Monitor
 - Worksite
 - District Borough Unitary Boundaries

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Map Number
Map Name Worksite and Monitoring Locations In SoADC (Sheet 2)
Stratford-on-Avon District Council

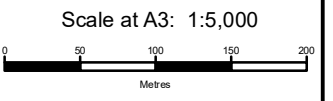


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Appendix B – Dust Monitoring Results

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 (%)
Harp Farm-AQMP1	52.23729, -1.39022	Site boundary adjacent property on Harp Farm	M	Yes	Yes	5.3	1.0	28.0	0	74.7
LIW001	438656, 263180	Long Itchington Wood North Portal, at boundary with Long Itchington and Ufton Woods SSSI.	M	Yes	No	2.5	0.1	863.6	1	90.8
FOS001	436914, 265643	Fosse Way Compound, on Long Itchington Road	M	Yes	No	3.6	0.1	75.5	0	100.0

Table 2: Summary of exceedances of trigger level in February 2022

Monitoring site ID	Period exceeding trigger level	Investigation	Outcomes / Resolution / Remedial measures implemented
LIW001	20/02/2022 17:01 – 18:00; 863.6 µg/m ³	Currently under investigation as the cause is not clear. At the time of the exceedance, construction work on site was being undertaken, but such an extreme spike in PM ₁₀ concentration is unexpected, particularly as weather conditions at the time were wet and windy. The nearest Automatic Urban and Rural Network (AURN) monitoring station in Royal Leamington Spa did not record any corresponding rise in PM ₁₀ concentration around the time of exceedance, suggesting that the high concentration may have been caused by local factors or may have resulted from spurious measurements.	N/A

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

