

Air Quality and Dust Monitoring Monthly Report – December 2024

West Northamptonshire 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 West Northamptonshire District (WNDC) during December 2024.

1.1.2 Figure 1 and Figure 2 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 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 and Figure 2, include:

Greatworth To Southam

- Chipping warden Green tunnel PCC erection and other structures activities
- Green Tunnel maintenance for PCC erection and other structures activities
- Chipping warden green tunnel – Structural backfill
- Chipping Warden earthworks Soil Swap area
- Bulk earthworks
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Chipping warden batching plant
- Chipping warden surface water sewer
- General maintenance
- Stockpile management
- Vegetation maintenance
- Site Access Road maintenance
- Compound maintenance
- Water management
- Ditch maintenance
- Plant maintenance

1.1.5 Ten (10) dust monitors are installed around these 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 line charts of monthly data from each 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 No (0) dust trigger alerts were recorded during the monitoring period (December 2024).

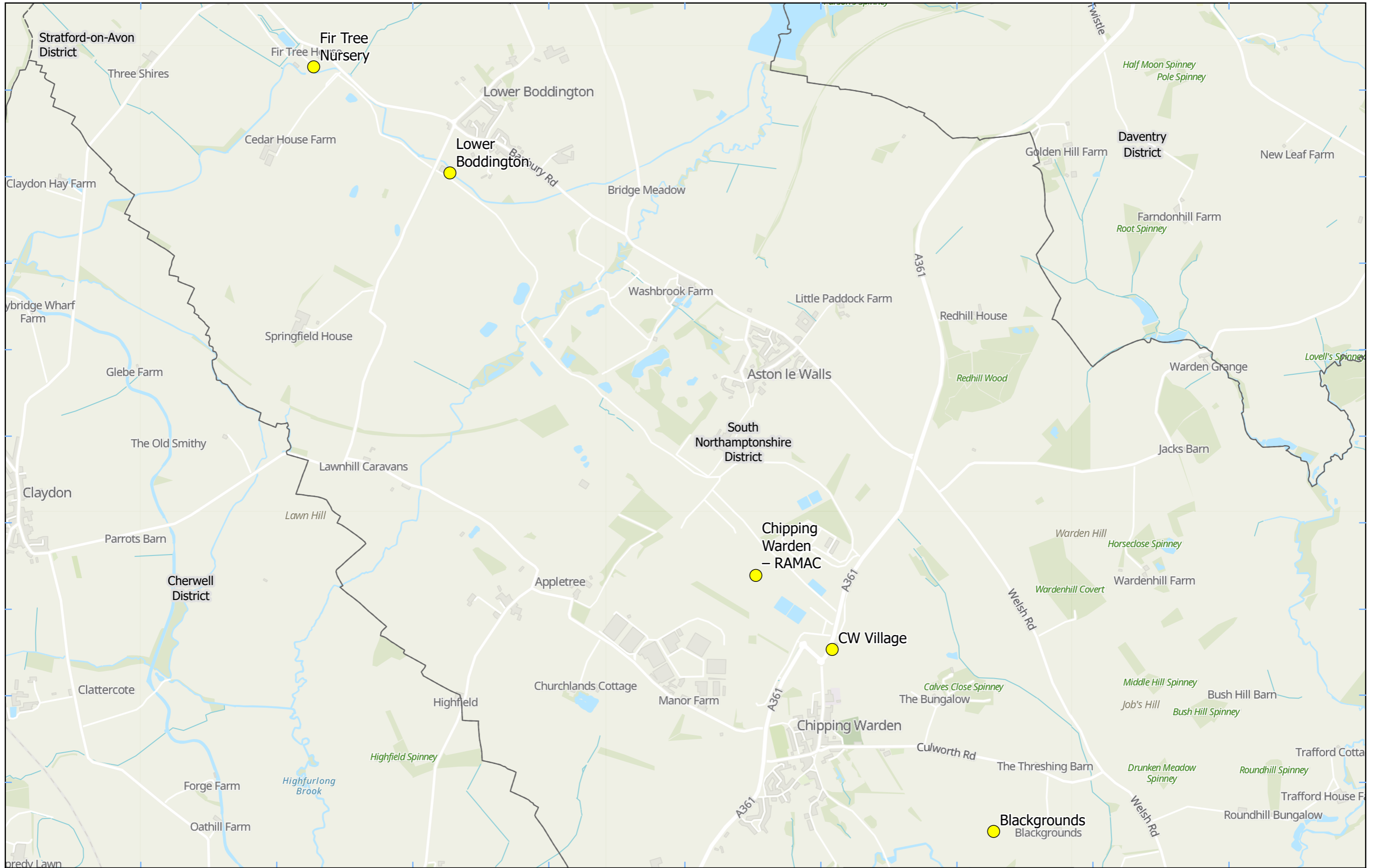
1.1.9 Data capture was below 90% for multiple monitors due to:

- Radstone monitor was 22.18% for the month of December 2024. Low data capture was due to a battery fault throughout the month. Access to location was difficult and unsafe to replace batteries due to flooding and high winds.
- Hall Farm monitor was 27.55% for the month of December 2024. Low data capture during this month was due to battery fault caused by reduced daylight hours and wet weather conditions.
- Greatworth Hall monitor was 31.85% for the month of December 2024. Low data capture during this month was due to a battery fault. Access to location was unsafe to replace batteries.
- Chipping Warden – RAMAC monitor was 14.11% for the month of December 2024. Low data capture during this month was due to multiple issues with the monitor. Replacement monitor was installed on 17th December. There is still an ongoing issue with the turbine regulator causing insufficient battery charge and awaiting replacement.
- Chipping Warden Village monitor was 27.96% for the month of December 2024. Low data capture during this month was due to battery fault caused by reduced daylight hours and wet weather conditions. Location was inaccessible.
- Lower Boddington monitor was 71.24% for the month of December 2024. Intermittent data capture during this month was due to a battery fault caused by reduced daylight hours and wet weather conditions.
- Fir Tree Nursery monitor was 71.24% for the month of December 2024. Intermittent data capture during this month was due to a battery fault caused by reduced daylight hours and wet weather conditions.
- Greatworth Village monitor was 82.93% for the month of December 2024. Low data capture was due to a battery fault throughout the month caused by reduced daylight hours and wet weather conditions.
- Lower Thorpe monitor was 36.96% for the month of December 2024. Low data capture was due to a battery fault throughout the month caused by reduced daylight hours and wet weather conditions.
- Blackgrounds monitor was 29.17% for the month of December 2024. Low data capture was due to the shaded location of monitor causing insufficient charge to the battery.

1.1.10 There were no (0) complaints received during the reporting period (December 2024).

Appendix A – Worksites and Monitoring Locations

Figures 1 and 2: Worksites and Monitoring Locations within WNDC



Legend

- Dust Monitor
- District Borough Unitary Boundaries

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Map Number

Map Name
**Monitoring Locations
In WNDC (Sheet 1)**

**West Northamptonshire District
Council**

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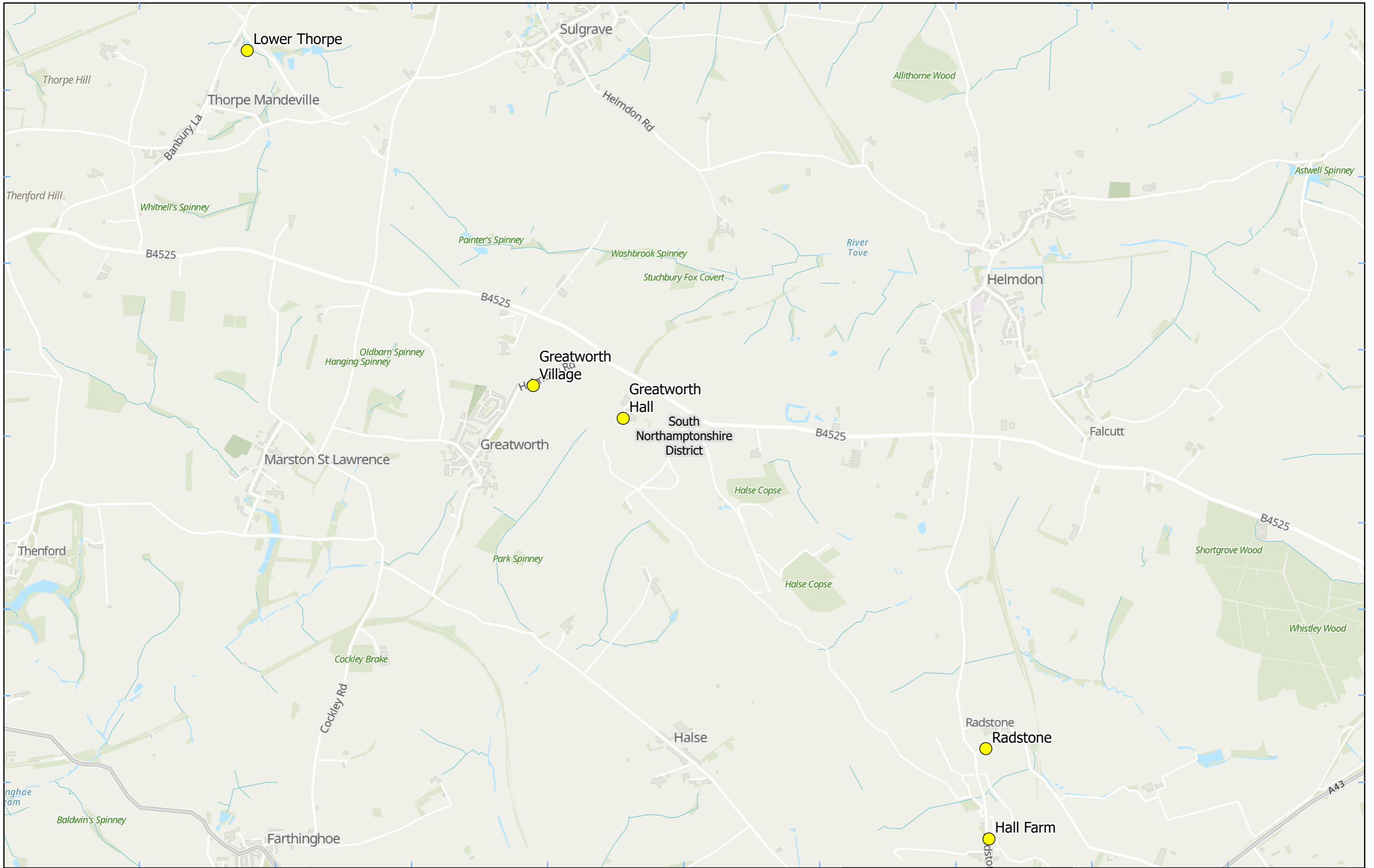
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Map Number

Map Name
**Monitoring Locations
In WNDC (Sheet 2)**

**West Northamptonshire District
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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	1-hour data capture (%)
Chipping Warden – RAMAC	449600, 249755	Chipping Warden, West Northamptonshire	M	Yes	Yes	6.2	1.0	23.0	0	14.1
CW Village	450000, 249367	Chipping Warden, West Northamptonshire	M	Yes	Yes	4.3	1.0	22.0	0	28.0
Lower Boddington	447997, 251865	Lower Boddington, West Northamptonshire	M	Yes	Yes	4.4	1.0	26.0	0	71.2
Fir Tree Nursery	447283, 252421	Fir Tree Nursery, West Northamptonshire	M	Yes	Yes	4.3	1.0	21.0	0	71.2
Radstone	458712, 240454	Radstone Road, Brackley, West Northamptonshire	M	Yes	Yes	4.1	1.0	18.0	0	22.2
Hall Farm	458734, 239823	Hall Farm, Radstone Road	M	Yes	Yes	3.9	1.0	17.0	0	27.6
Greatworth Village	455551, 242992	Greatworth Village, Helmdon Road,	M	Yes	Yes	4.7	1.0	33.0	0	82.9
Lower Thorpe	453553, 245334	Banbury Lane, Lower Thorpe	M	Yes	Yes	4.6	1.0	23.0	0	37.0
Greatworth Hall	456179, 242763	Greatworth Hall, Greatworth	M	Yes	Yes	3.7	1.0	18.0	0	31.9
Blackgrounds	450846, 248413	Blackgrounds, West Northamptonshire	M	Yes	Yes	3.2	1.0	12.0	0	29.2

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



