

Air Quality and Dust Monitoring Monthly Report – June 2023

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 (WNDC) during June 2023.
- 1.1.2 Figures 1 and 2 in Appendix A present the current worksites together with the dust monitoring locations for June 2023.
- 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:

Twyford to Greatworth

Greatworth Hall:

- Topsoil stripping;
- Stockpile management;
- Utilisation & maintenance of Site Access Road (SAR) and Haul Road;
- Bulk excavation; and
- Drainage.

Radstone and Hall Farm:

- Topsoil Stripping;
- Stockpile management;
- Bulk Excavation;
- Site Access Road/ Haul Road use and maintenance;
- Drainage; and
- Piling works at Radstone Road.

G2S

Chipping Warden – RAMAC:

- Chipping warden Green tunnel PCC erection;
- Green Tunnel maintenance for PCC erection;
- Chipping warden green tunnel – Structural backfill;

- A361 temporary bridge – general maintenance;
- Chipping Warden earthworks Soil Swap area;
- Bulk earthworks;
- Site Access Road maintenance;
- Utilisation of haulage road for moving material;
- Chipping warden batching plant;
- General maintenance;
- Stockpile management;
- Vegetation maintenance;
- Site Access Road maintenance;
- Compound maintenance;
- Water management;
- Ditch maintenance;
- Plant maintenance; and
- Material processing.

CW Village:

- Chipping warden Green tunnel PPCC erection;
- Green Tunnel maintenance for PCC erection;
- A361 temporary bridge – general maintenance;
- Bulk earthworks;
- Site Access Road maintenance;
- Utilisation of haulage road for moving material;
- Chipping warden batching plant;
- General maintenance;
- Stockpile management;
- Vegetation maintenance;
- Site Access Road maintenance;
- Compound maintenance;
- Water management;
- Ditch maintenance;
- Plant maintenance; and
- Material processing.

Lower Boddington:

- Topsoil stripping;
- Claydon road overbridge;
- Stockpile management;
- Site Access Road maintenance;
- Utilisation of haulage road for moving material;
- Drainage and temporary ponds;
- Vegetation maintenance;
- Highfurlong brook viaduct;

- Bulk excavation – cutting;
- Lower Boddington Landscape fill; and
- Water management (Checking pumps).

Fire tree nursery:

- Topsoil stripping;
- Stockpile management;
- Site Access Road maintenance;
- Utilisation of haulage road for moving material;
- Drainage and temporary ponds;
- Vegetation maintenance;
- Site access road maintenance;
- Water management; and
- Ditch maintenance.

Greatworth Village:

- Stockpile management;
- Greatworth T Junction;
- Site Access Road maintenance;
- Utilisation of haulage road for moving material; and
- Drainage and temporary ponds.

Lower Thorpe:

- Topsoil stripping;
- Stockpile management;
- Site Access Road maintenance;;
- Utilisation of haulage road for moving material;
- Drainage and temporary ponds;
- Helmdon Road Utility Plant Crossing; and
- Lower Thorpe Viaduct excavations works and pile caps.

Backgrounds:

- Topsoil stripping;
- Stockpile management;
- Site Access Road maintenance;
- Vegetation maintenance;
- Utilisation of haulage road for moving material;
- Drainage and temporary ponds;
- Water management; and
- Ditch maintenance.

- 1.1.5 Ten (10) dust monitors are installed at the 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 2, 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 No (0) dust trigger alerts were recorded during the monitoring period (June 2023).
- 1.1.9 Data capture was below 90% for multiple monitors in June 2023 due to monitor faults that have since been resolved. No data was recorded at the blackgrounds monitor due to a solar controller fault with the monitor.
- 1.1.10 Table 1 provides a summary of the complaint information relating to dust or air quality received during the reporting period, together with the findings of any related investigations.

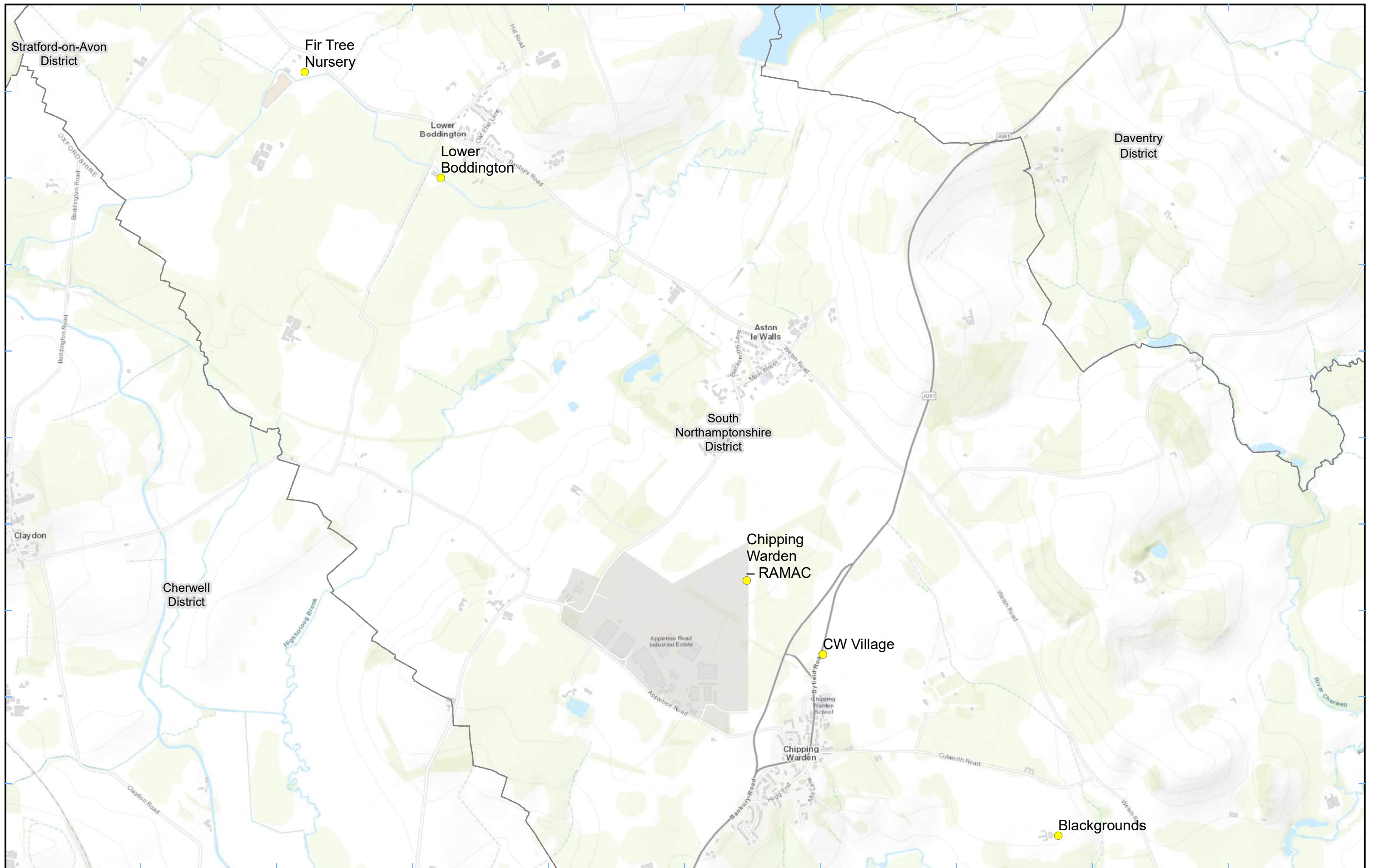
Table 1: Summary of complaints received during [Reporting period month & year]

Complaint Reference No.	Worksite Reference	Description of complaint	Results of investigation
HS2-23-44736-C		Dust on property.	Dust monitors near site boundary were checked and no exceedances found. Dust suppression measures including bowsers and wheel washers in place on site. Contractor confirmed to resident this information and that recent dry weather may have had a bearing on the levels of dust in the air generally.

Appendix A –Monitoring Locations

Figure 1 and Figure 2: Worksite and Monitoring locations within WNDC






Legend

- Dust
- District Borough Unitary Boundaries

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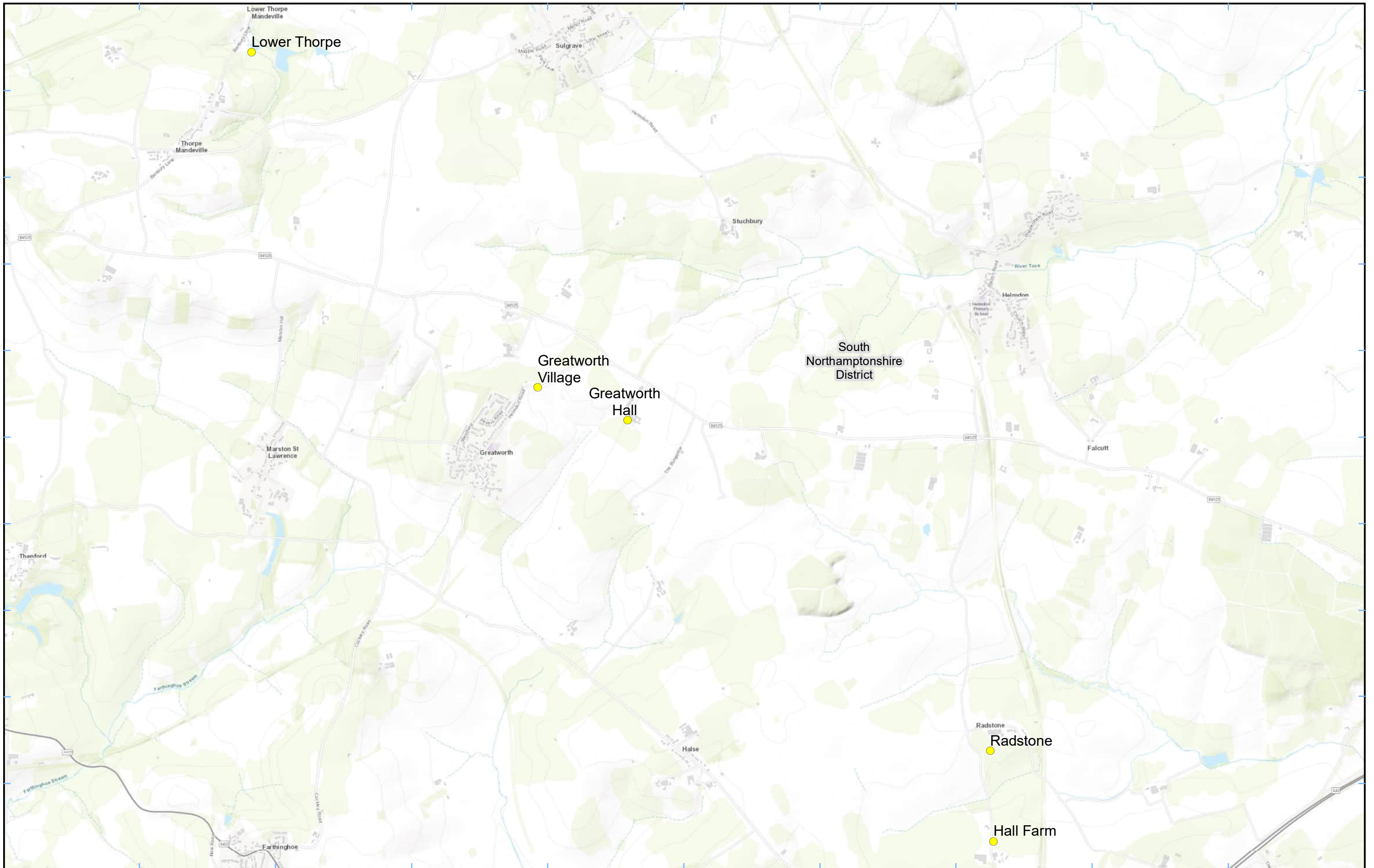


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Metres

Date: 31/10/22



Legend

- Dust
- District Borough Unitary Boundaries

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Map Number

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

West Northamptonshire Council

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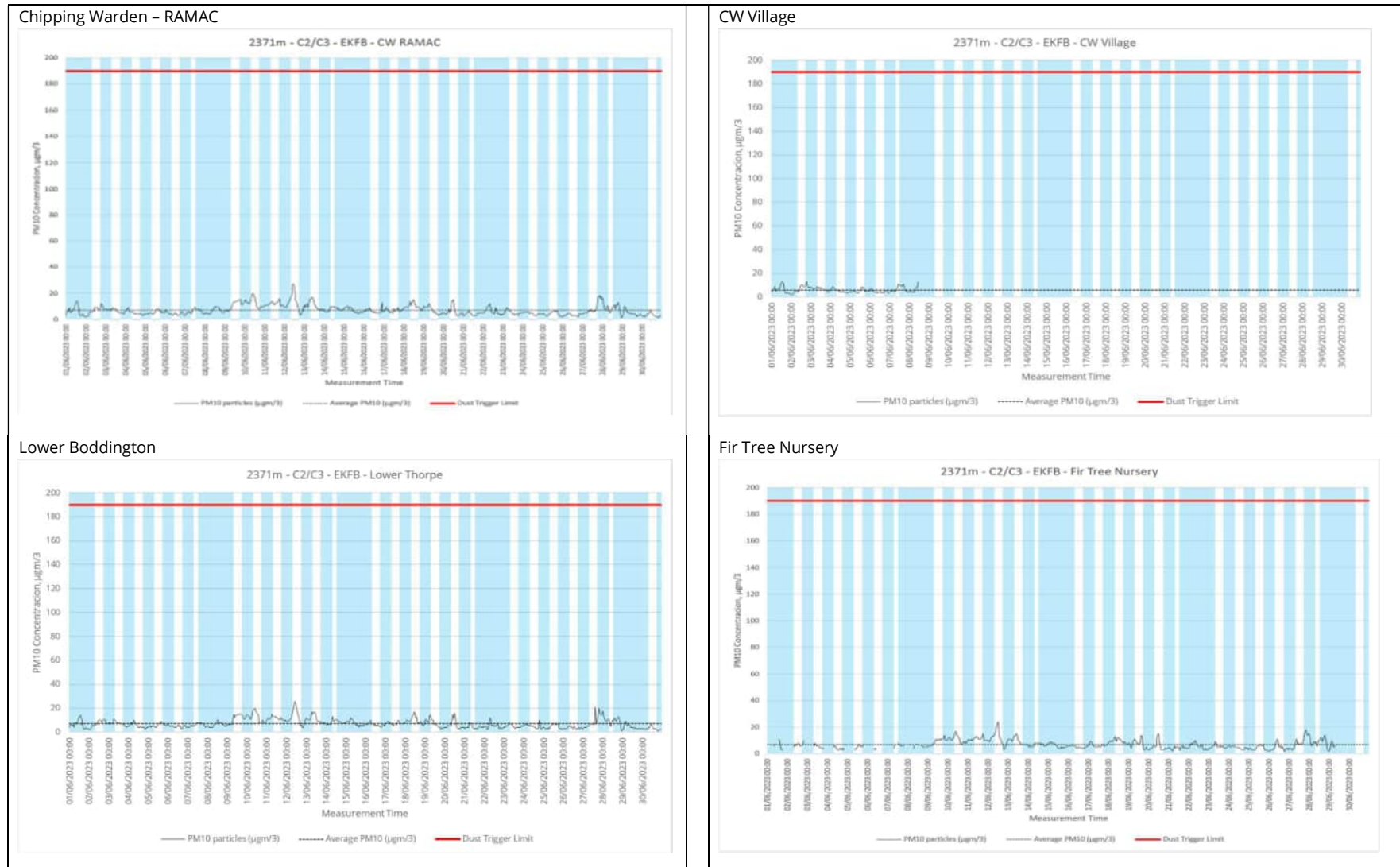
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Appendix B – Dust Monitoring Results

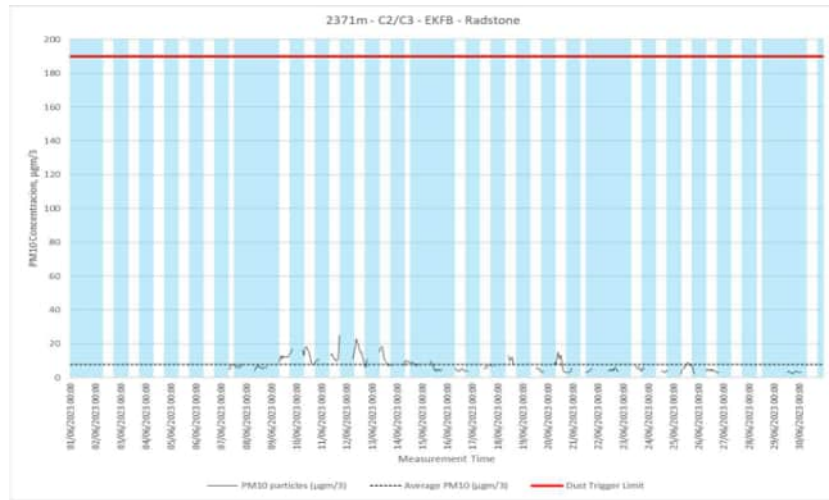
Table 2: Dust monitoring locations and June 2023 Results

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	Y	7.0	1.0	27.0	0	100.0
CW Village	450000, 249367	Chipping Warden, West Northamptonshire	M	Yes	Y	5.9	2.0	13.0	0	25.1
Lower Boddington	447997, 251865	Lower Boddington, West Northamptonshire	M	Yes	Y	6.8	1.0	32.0	0	100.0
Fir Tree Nursery	447283 , 252421	Fir Tree Nursery, West Northamptonshire	M	Yes	Y	7.0	2.0	24.0	0	80.4
Radstone	458712 , 240454	Radstone Road, Brackley, West Northamptonshire	M	Yes	Y	7.6	2.0	25.0	0	36.3
Hall Farm	458734, 239823	Hall Farm, Radstone Road	M	Yes	Y	8.0	1.0	27.0	0	100.0
Greatworth Village	455551, 242992	Greatworth Village, Helmdon Road,	M	Yes	Y	7.2	1.0	23.0	0	100.0
Lower Thorpe	453553, 245334	Banbury Lane, Lower Thorpe	M	Yes	Y	7.1	1.0	26.0	0	100.0
Greatworth Hall	456179, 242763	Greatworth Hall, Greatworth	M	Yes	Y	6.9	1.0	22.0	0	100.0
Blackgrounds	450846, 248413	Blackgrounds, West Northamptonshire	M	Yes	Y	-	-	-	-	-

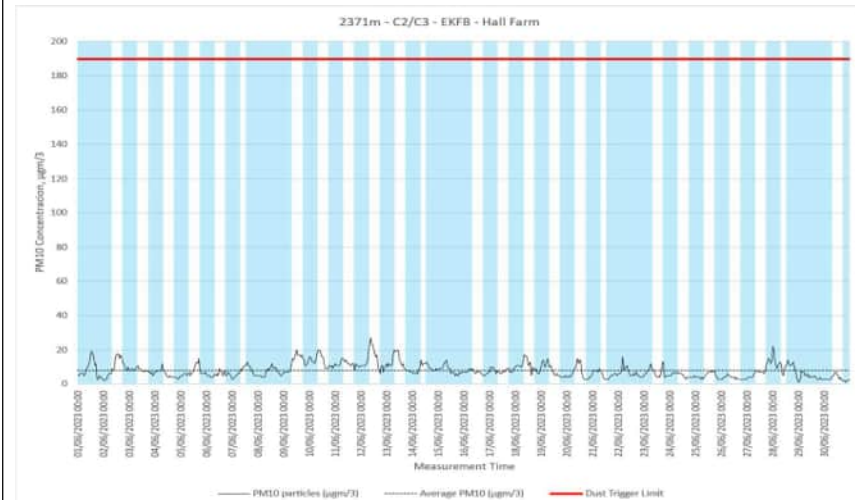
Figure 3: Construction dust 1-hour mean indicative PM₁₀ concentration for dust monitors



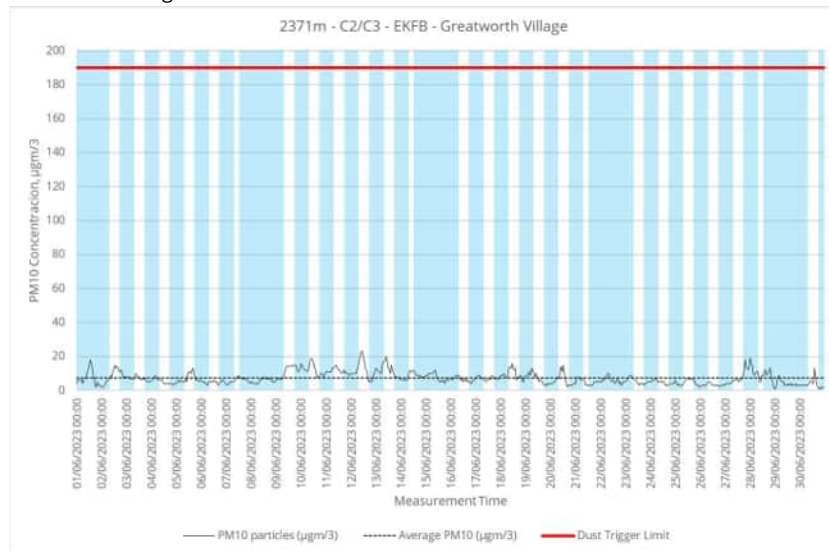
Radstone



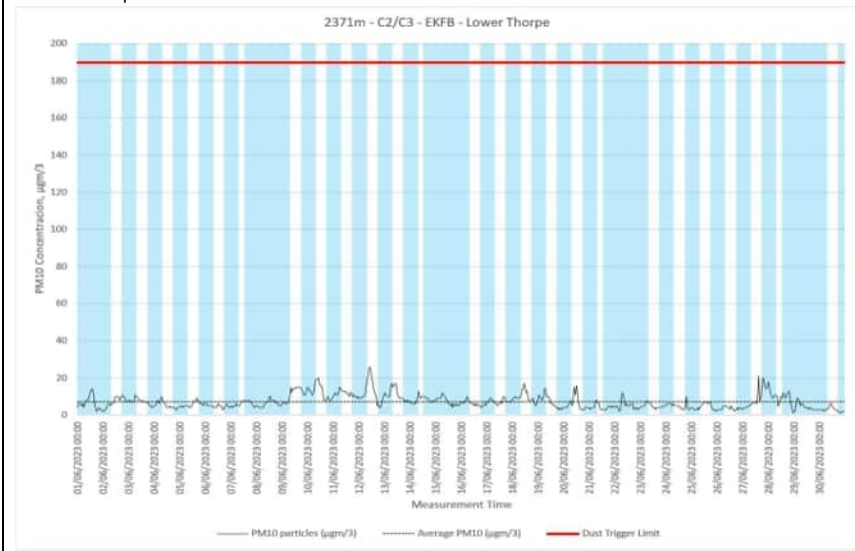
Hall Farm



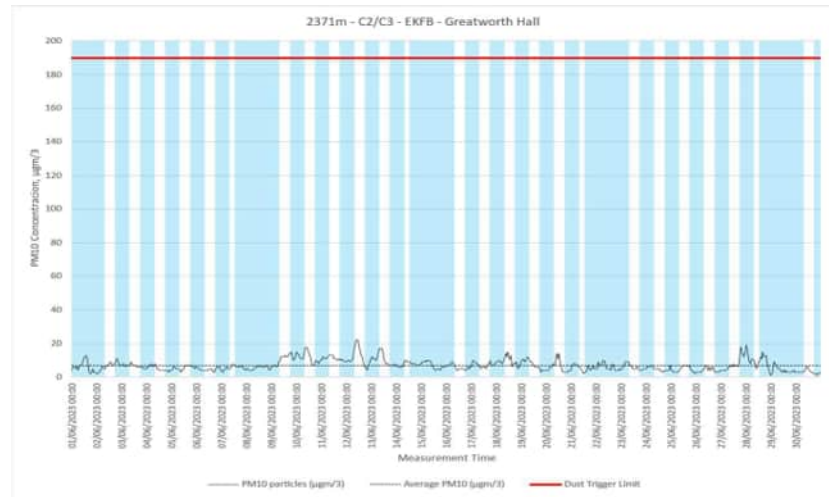
Greatworth Village



Lower Thorpe



Greatworth Hall



Backgrounds

NO DATA CAPTURED FOR JUNE 2023