

## Air Quality and Dust Monitoring Monthly Report – July 2022

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) area during July 2022.
- 1.1.2 Figures 1 and 2 in Appendix A present the current worksites together with the dust monitoring locations for July 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](http://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**

### Radstone/Hall Farm

- Topsoil stripping
- Bulk excavation – Cutting
- Stockpile management
- Site Access Road maintenance
- Compound maintenance
- Drainage, temporary ponds

### Greatworth Hall

- Topsoil stripping
- Stockpile management
- Site Access Road maintenance
- Drainage, temporary ponds

## **Greatworth to Southam**

### Chipping Warden - RAMAC worksite

- Excavation for chipping warden green tunnel;
- Green tunnel Structure unit placement;
- Stockpiling;
- Chipping Warden Compound development;
- A361 Temporary Overbridge material movement preparation works; and

- Installation of waterproofing and blinding.

#### Chipping Warden Village worksite

- Topsoil stripping and material movement;
- Excavation for chipping warden green tunnel;
- Green tunnel Structure unit placement;
- Stockpiling;
- Chipping Warden Compound development;
- A361 Temporary Overbridge material movement preparation works; and
- Installation of waterproofing and blinding.

#### Lower Boddington worksite

- Topsoil stripping and material movement;
- Water Management;
- Stockpiling; and
- Established of site access road

#### Fir Tree Nursery worksite

- Water Management;
- Established of site access road;
- Stockpiling; and
- Topsoil stripping and material movement.

#### Greatworth Village worksite

- Water Management;
- Established of site access road;
- Stockpiling; and
- Topsoil stripping and material movement.

#### Lower Thorpe worksite

- Water Management;
- Established of site access road;
- Stockpiling; and
- Topsoil stripping and material movement.

1.1.5 Nine (9) dust monitors are installed around 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 line charts of monthly data from the dust monitors 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.

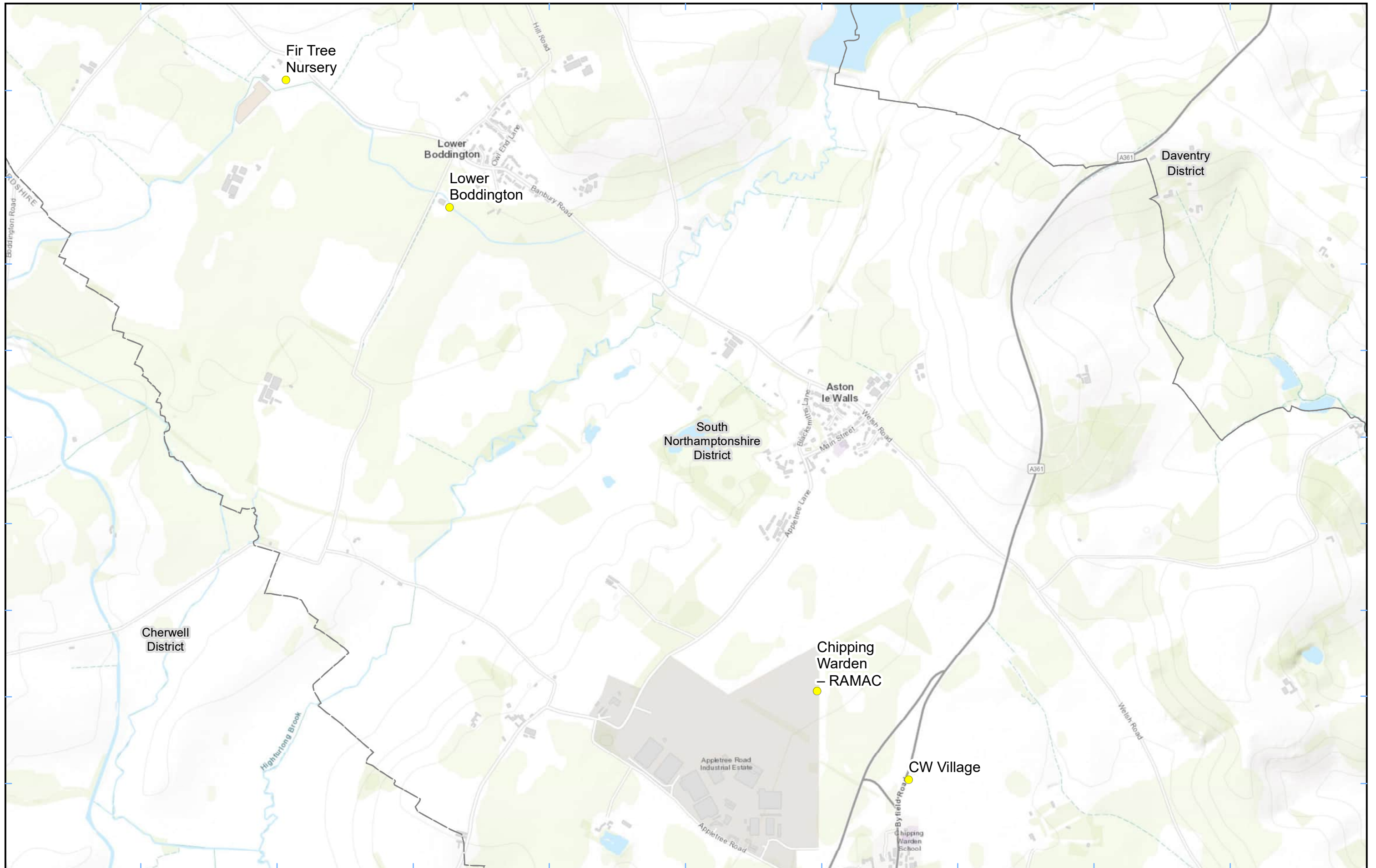
- 1.1.7 The trigger level for PM<sub>10</sub> concentrations of 190 µg/m<sup>3</sup>, over a 1-hour period, in accordance with the updated guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites - (October 2018)*' has been applied.
- 1.1.8 No (0) trigger alerts were recorded during the monitoring period (July 2022).
- 1.1.9 Data capture was below 90% for the Hall Farm monitor as it was installed on the 28<sup>th</sup> of July 2022. For the monitor installed at Fire Tree Nursery, there was no data recorded due to a damaged controller box caused by water ingress.
- 1.1.10 Table 1 provides a summary of the complaint information related 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 July 2022 in WNDC

Complaint Reference No.	Worksite Reference	Description of complaint	Results of investigation
HS2-22-43810-C	N/A	Ongoing issues with dust.	In the case of extreme weather conditions as experienced the past couple months, dust generated on site increases. To minimise the potential dust impact EKFB are continuously using tractor with water bowser for dust suppression across the construction site. In the worst-case scenario, works can be also limited to avoid further impact.

# Appendix A –Monitoring Locations

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



**Legend**  
 ● Dust Monitor  
 □ District Borough Unitary Boundaries

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Map Number  
 Map Name  
**Monitoring Locations  
 In WNDC (Sheet 1)**  
 West Northamptonshire Council

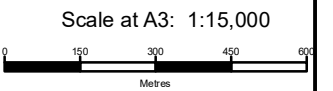


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- Legend**
- Dust Monitor
  - District Borough Unitary Boundaries

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Map Number	
Map Name	<b>Monitoring Locations In WNDC (Sheet 2)</b>
<b>West Northamptonshire Council</b>	



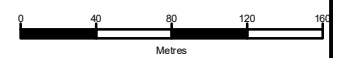
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## Appendix B – Dust Monitoring Results

Table 2: Dust monitoring locations and July 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 <sub>10</sub> concentration (µg/m <sup>3</sup> )	Minimum 1-hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Maximum 1-hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Number of 1-hour periods exceeding trigger level of 190 µg/m <sup>3</sup>	1-hour data capture (%)
Chipping Warden – RAMAC	449600, 249755	Chipping Warden, West Northamptonshire	M	Yes	Yes	4.7	1.0	32.0	0	100.0
CW Village	450000, 249367	Chipping Warden, West Northamptonshire	M	Yes	Yes	5.1	1.0	33.0	0	99.3
Lower Boddington	447997, 251865	Lower Boddington, West Northamptonshire	M	Yes	Yes	4.9	1.0	29.0	0	99.6
Fir Tree Nursery	447283, 252421	Fire Tree Nursery, West Northamptonshire	M	Yes	Yes	-	-	-	-	-
Radstone	458712, 240454	Radstone Road, Brackley, West Northamptonshire	M	Yes	Yes	5.4	1.0	59.0	0	96.6
Hall Farm	458734, 239823	Hall Farm, Radstone Road	M	Yes	Yes	5.5	1.0	64.0	0	99.5
Greatworth Village	455551, 242992	Greatworth Village, Helmdon Road,	M	Yes	Yes	4.8	1.0	41.0	0	99.1
Lower Thorpe	453553, 245334	Banbury Lane, Lower Thorpe	M	Yes	Yes	4.8	1.0	37.0	0	99.9
Greatworth Hall	456179, 242763	Greatworth Hall, Greatworth	M	Yes	Yes	3.1	1.0	6.0	0	10.8

Figure 3: Continuous dust 1-hour mean indicative PM<sub>10</sub> concentration for all monitors

