February 2019



## **Air Quality and Dust Monitoring Monthly Report – February 2019**

**Birmingham City Council** 



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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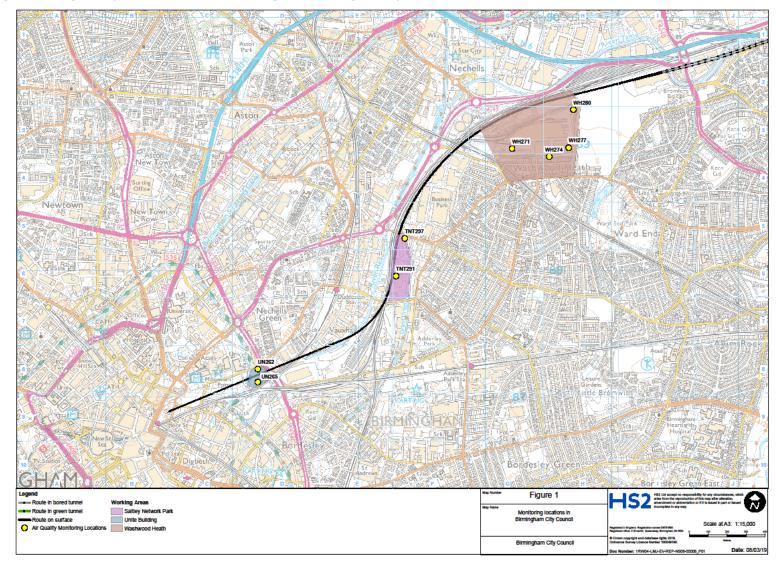
## **Monthly Summary**

- 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 within Birmingham City Council (BCC) during February 2019.
- 1.1.2 Figure 1 in Appendix A indicates the current work site together with dust monitoring locations for February 2019.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report monthly available from <a href="www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2">www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2</a>, 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 phase of works commenced in BCC during September 2018 at the Washwood Heath Site, and in December at the Unite Building Site and Saltley Network Park Site, and will continue to run into 2019. Following completion of the demolition works at the UK Mail Site in September 2018, the dust monitoring was decommissioned (monitoring ID: HS21UKM262 and HS2 2UKM265).
- 1.1.5 The current worksites (Washwood Heath, Saltley and Unite), as presented in Appendix A, Figure 1, include demolition of the existing buildings. The majority of the buildings to be demolished are constructed of metal cladding and brick, with steel structures at Unite. Crushing of the material will take place at Washwood Heath, Saltley Network park and Unite, however there will be no works taking place below slab level.
- 1.1.6 Eight (8) dust monitors (DM11s) were installed for the current phase of work, of which, four (4) were installed at the Washwood Heath site, two (2) at the Unite Building Site, and two (2) at the Saltley Network Park Site. The demolition and pre-demolition works are underway at these sites. The sites were previously classified as high dust risk (Washwood Heath) and medium to high dust risk rating (Saltley and Unite).
- 1.1.7 Dust monitoring locations and results for February 2019 are presented in Appendix B, Table1 together with line charts for February from each dust monitor.
- 1.1.8 The trigger levels within this February report are in accordance with the updated guidance document 'Guidance on Monitoring in the Vicinity of Demolition and Construction Sites October 2018)'. Therefore, a trigger level of 190  $\mu$ g/m³, measured as a 1-hour mean has been applied.
- 1.1.9 No exceedances of the 1-hour average dust trigger level of 190  $\mu$ g/m³ were recorded during the monitoring period.

- 1.1.10 Data capture for the February 2019 monitoring data was below 90% for monitors 271 (Washwood Heath 3), 277 (Washwood Heath 5), and 297 (Network Park 9). Washwood Heath 3 is currently experiencing ongoing telemetry issues; however, an investigation has shown no attributable faults with the device and it is considered to be a localised black spot. Problems with power supply at these sites has therefore been determined as the cause of this loss of data. Monitors 274, 280, 262, 265, and 291 showed a data capture of more than 90%.
- 1.1.11 No complaints were received for dust or air quality during the monitoring period (February 2019).

## **Appendix A – Worksite and Dust Monitoring Locations**

Figure 1: Birmingham City Council Worksites and Monitoring locations during February 2019



## **Appendix B – Dust Monitoring Results**

Table 1: Dust monitoring locations and February 2019 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/m³)	Minimum 1-hour PM <sub>10</sub> concentration (μg/m³)	Maximum 1- hour PM <sub>10</sub> concentration (μg/m³)	Number of 1-hour periods exceeding trigger level of 190 µg/m³	Data capture rate (%)
HS2 3 WH 271	410698,289273	Monitor secured on a stand	High	Yes	N/A	20.0	7.7	133.0	None	64.6
HS2 4WH 274	410661,288971	Monitor secured on a stand	High	Yes	N/A	20.9	8.7	74.8	None	98.1
HS2 5WH 277	410508,288901	Monitor secured on a stand	High	Yes	N/A	26.8	7.8	99.4	None	83.8
HS2 6WH 280	410214,288965	Monitor secured on a stand	High	Yes	N/A	24.3	9.6	92.9	None	97.8
HS2 1 UNITE 262	408204,287222	Monitor secured on a stand	Medium to High	Yes	N/A	21.1	5.6	80.3	None	96.9
HS2 2 UNITE 265	408203,287119	Monitor secured on a stand	Medium to High	Yes	N/A	20.4	5.7	76.1	None	96.9
HS2 7 TNT 291	409365,288254	Monitor secured on a stand	Medium to High	Yes	N/A	23.0	6.7	110.7	None	100.0
HS2 9 TNT 297	409296,287957	Monitor secured on a stand	Medium to High	Yes	N/A	29.6	2.6	80.4	None	52.1

Figure 1: Construction dust hourly mean indicative PM<sub>10</sub> concentration for WSP HS2 3WH 271 (February 2019)

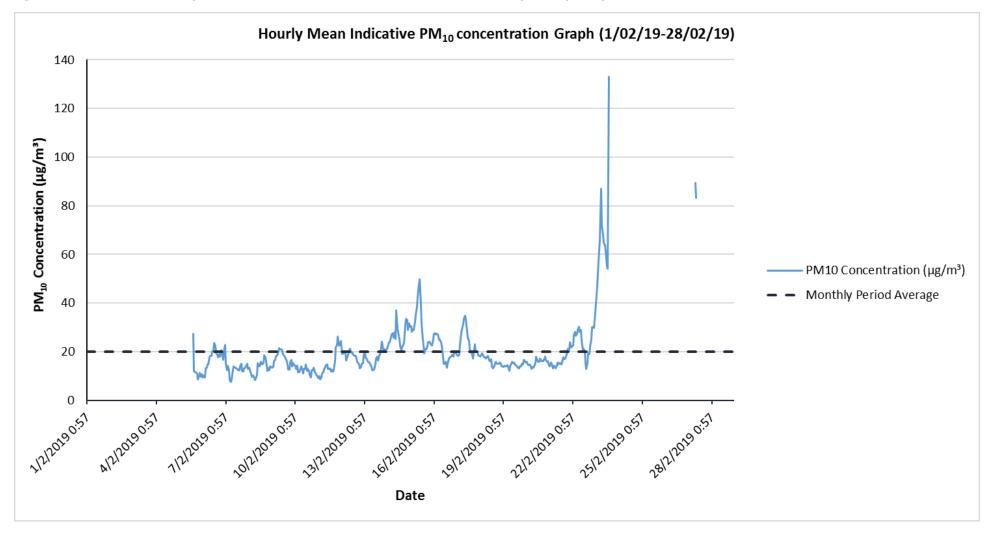


Figure 2: Construction dust hourly mean indicative PM<sub>10</sub> concentration for WSP HS2 4WH 274 (February 2019)

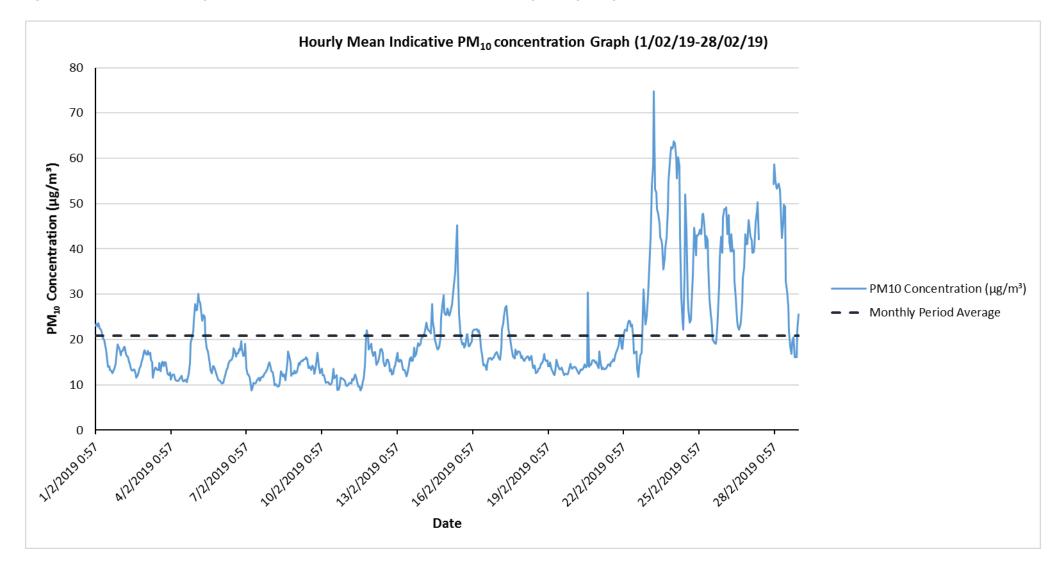


Figure 3: Construction dust hourly mean indicative PM<sub>10</sub> concentration for WSP HS2 5WH 277 (February 2019)

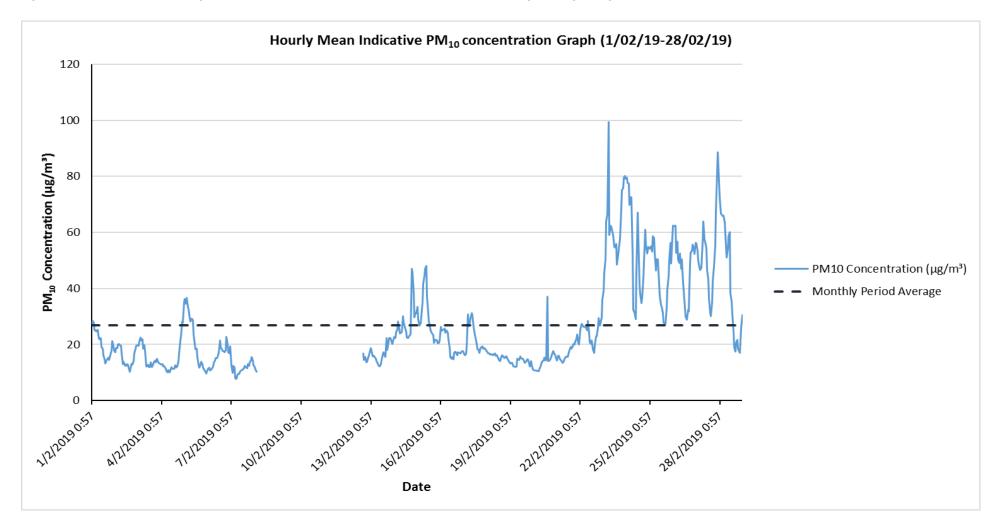


Figure 4: Construction dust hourly mean indicative PM<sub>10</sub> concentration for WSP HS2 6WH 280 (February 2019)

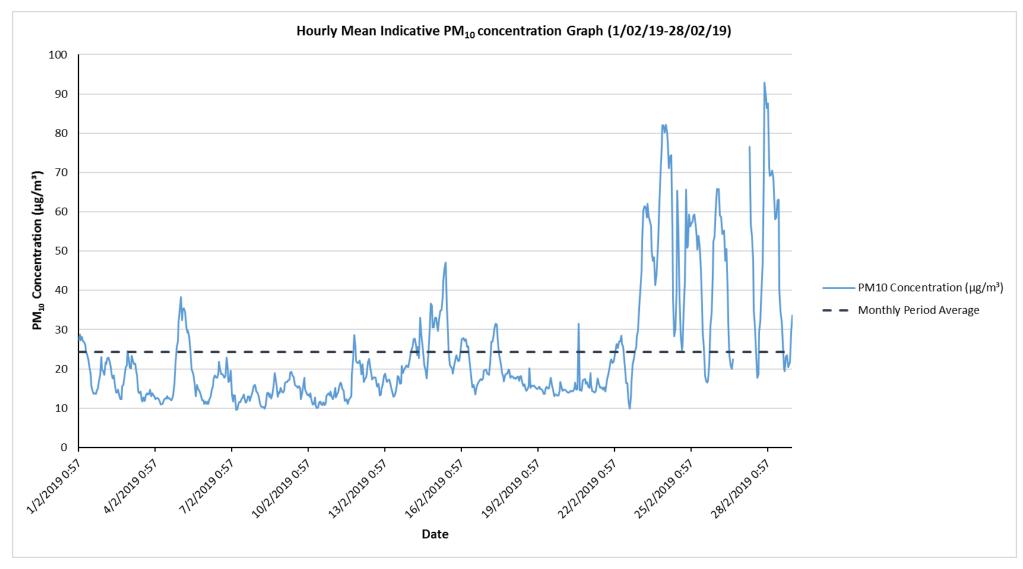


Figure 5: Construction dust hourly mean indicative PM<sub>10</sub> concentration for WSP HS2 1 UNITE 262 (February 2019)

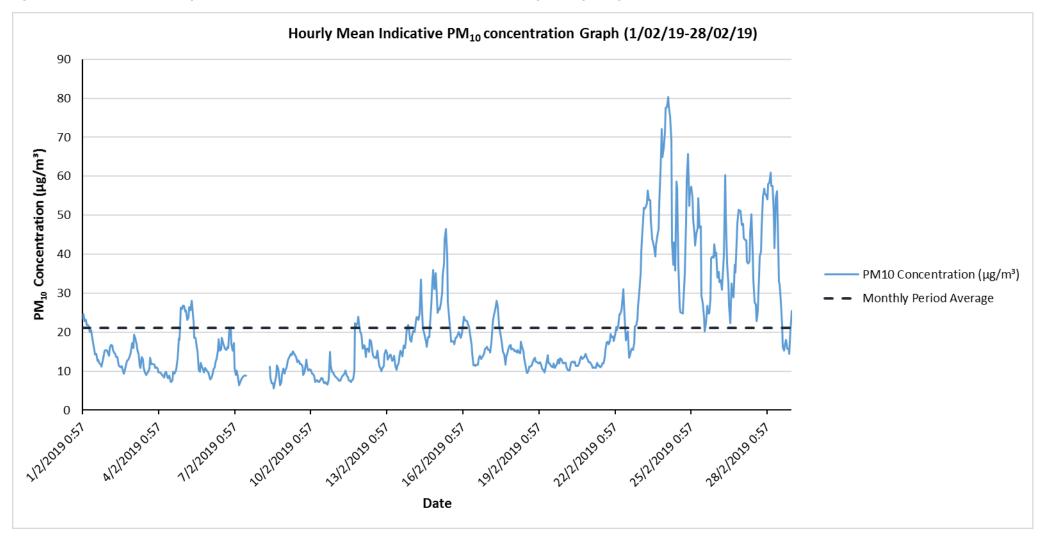


Figure 6: Construction dust hourly mean indicative PM10 concentration for WSP HS2 2 UNITE 265 (February 2019)

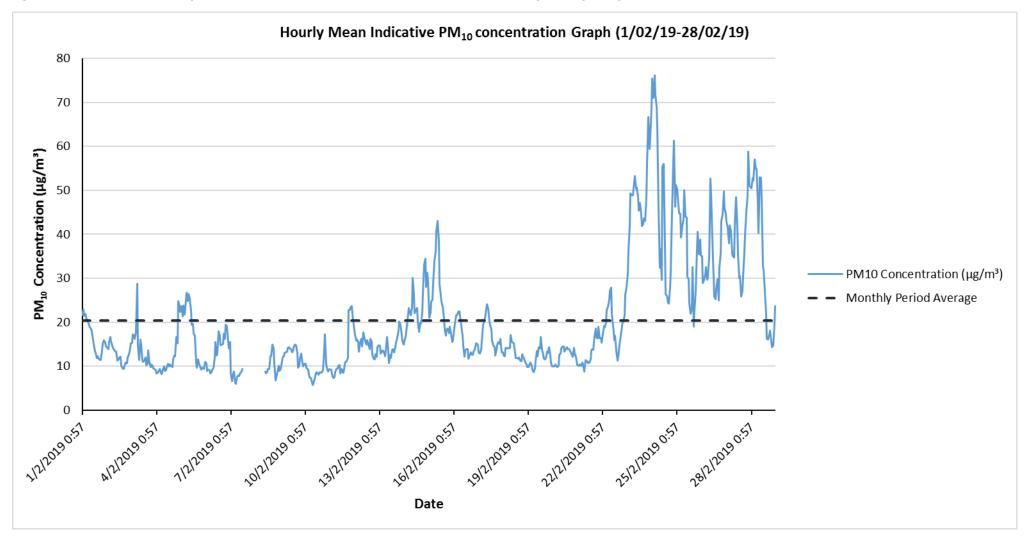


Figure 7: Construction dust hourly mean indicative PM10 concentration for WSP HS2 7 TNT 291 (February 2019)

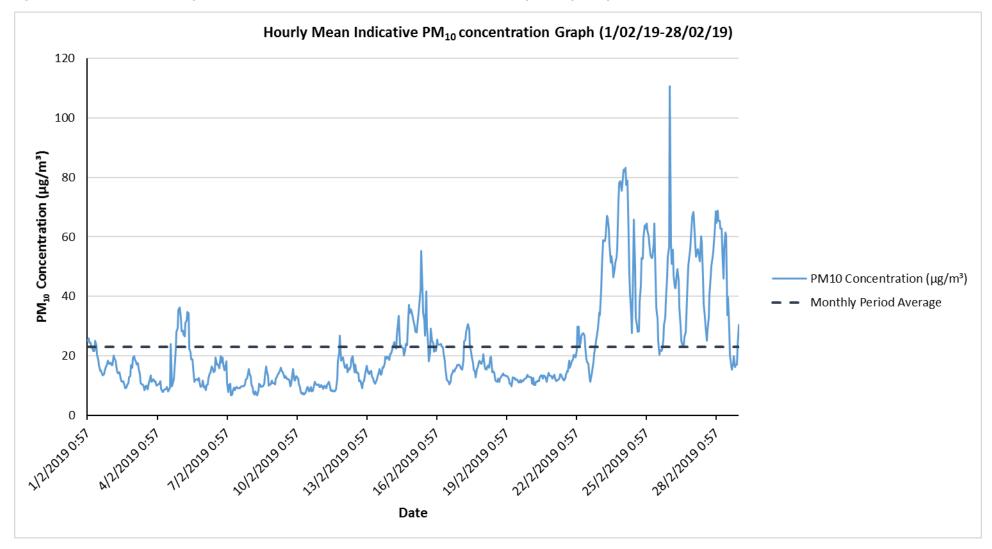


Figure 8: Construction dust hourly mean indicative PM10 concentration for WSP HS2 9TNT 297 (February 2019)

