

## **Air Quality and Dust Monitoring Monthly Report – April 2020**

**Birmingham City 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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# 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 April 2020.
- 1.1.2 Figure 1 in Appendix A indicates the BCC worksite together with dust monitoring locations for April 2020.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report monthly 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 phase of works commenced within BCC during July 2018 and is expected to be completed by the end of 2021. Two (2) dust monitors (Aeroqual Dust Sentry Monitors) are installed for the current phase of work, of which, one (1) is installed outside the Birmingham Museum Trust (BMT) site whilst the other one (1) is installed inside the building (artefact storage area). These dust monitors continue to collect baseline monitoring data for these locations.
- 1.1.5 An additional two (2) dust monitors (Aeroqual Dust Sentry Monitors) are installed for the current phase of work at Curzon Street Station. The archaeology ground investigation works are currently underway at this site.
- 1.1.6 Dust monitoring locations and results for April 2020 are presented in Appendix B, Table 2 together with line charts for April 2020 from each dust monitor presented in Figures 2 to 5. 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 There were no (0) dust trigger alerts recorded during the monitoring period (April 2020).
- 1.1.9 Data capture for monitors #775 and #753 was below 90% for the month of April 2020. This was due to an issue with the power supply. As a result, monitor #775 was offline and no data

was recorded between 23/04/20 and the end of the monitoring period (April 2020), and monitor #753 was offline and no data was recorded between 01/04/20 and 06/04/20, and between 07/04/20 and 21/04/20. The issue with the power supply was linked to the supply being accidentally switched off at BMT, however this was reported and has now been resolved.

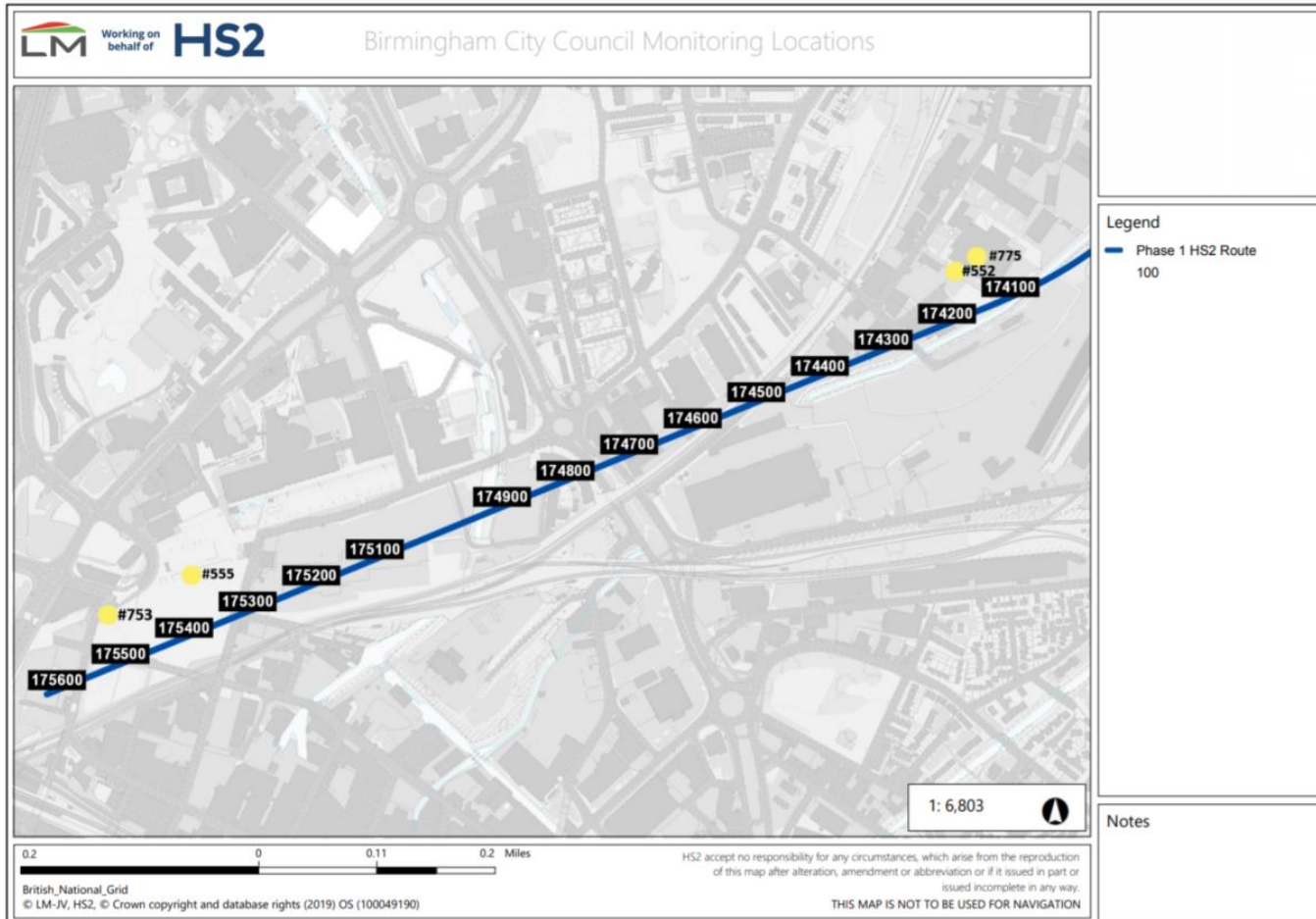
1.1.10 Table 1: provides a summary of the complaint information related to dust or air quality received during the reporting period, together with the findings of any related investigations.

Table 1: Summary of complaints received during April 2020 in BCC

<b>Complaint Reference No.</b>	<b>Worksite Reference</b>	<b>Description of complaint</b>	<b>Results of investigation</b>
HS2-20-19940-C	Washwood Heath Depot site	On 14/04/20 windblown dust was reported as settling on nearby properties.	Following receipt of the complaint, mitigation measures were adjusted to ensure appropriate dust suppression was in place. HS2 have committed to best practise mitigation as set out in the Code of Construction Practise.

# Appendix A –Worksite and Dust Monitoring Locations

Figure 1: Birmingham City Council Worksites and monitoring locations during April 2020.



## Appendix B – Dust Monitoring Results

Table 2: Dust monitoring locations and April 2020 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>	Data capture rate (%)
Dust #552 (old #82)	408811, 287485	Monitor outside the building	High	N/A	N/A	12.9	0	47.3	0	100
Dust #775 (old #85)	408841, 287529	Monitor secured inside the building	High	N/A	N/A	9.3	7.3	18.6	0	77
Dust #530 (old #555)	407702, 287079	Curzon Street Station HS2 Site	High	N/A	N/A	3.9	0	25.1	0	100
Dust #753	407619, 287006	Curzon Street Station HS2 Site	High	N/A	N/A	6.4	0	30.3	0	40



Figure 3: Construction dust hourly mean indicative PM<sub>10</sub> concentration for Dust #775 (April 2020)

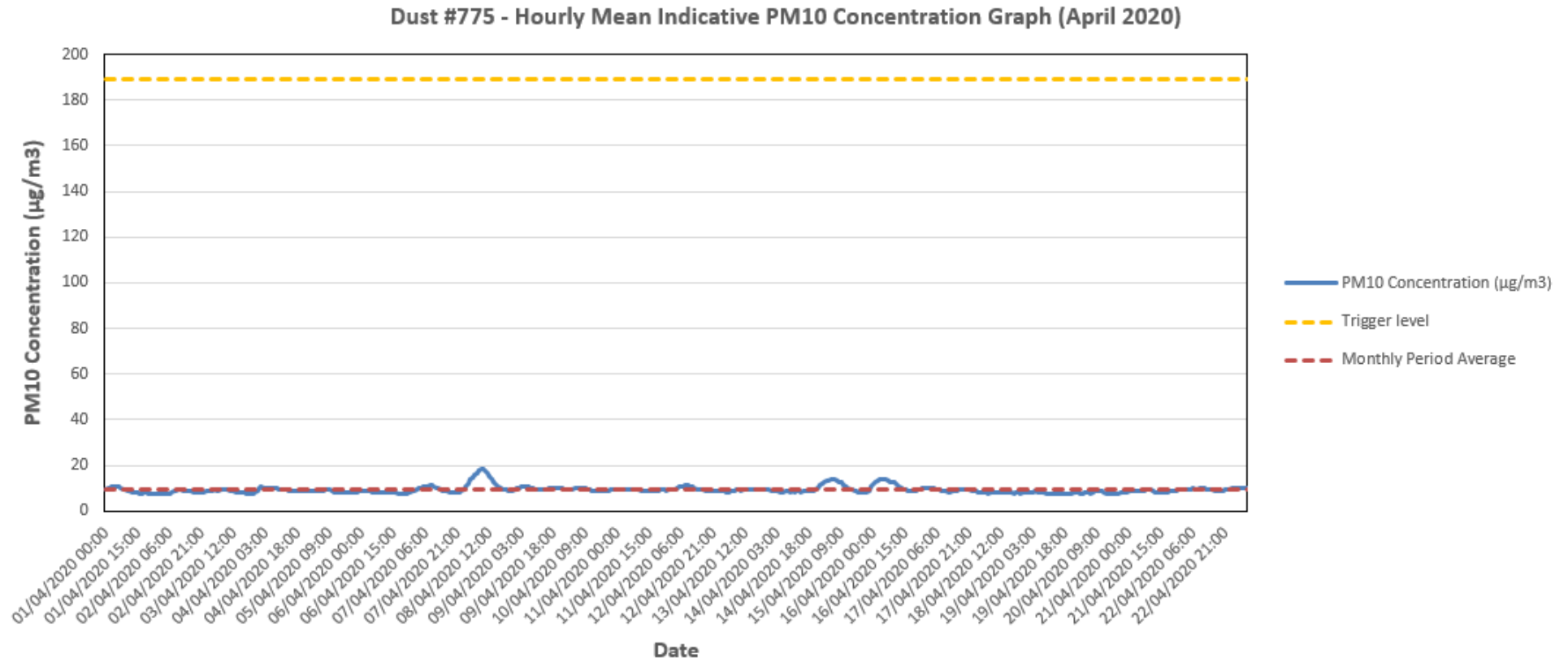




Figure 4: Construction dust hourly mean indicative PM<sub>10</sub> concentration for Dust #530 (old #555) (April 2020)

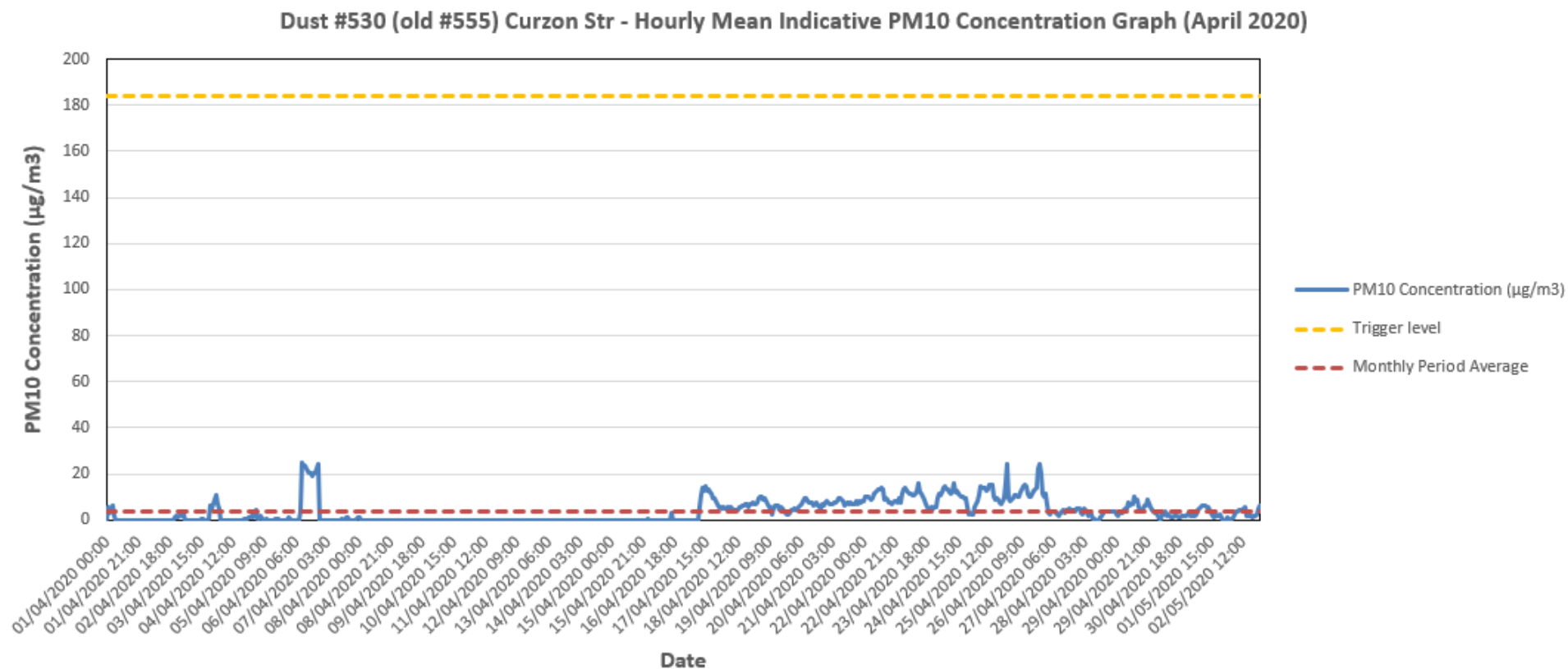


Figure 5: Construction dust hourly mean indicative PM<sub>10</sub> concentration for Dust #753 (April 2020)

