HS2

March 2020

Air Quality and Dust Monitoring MonthlyReport – March 2020

Birmingham City Council

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Department for Transport

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High Speed Two (HS2) Limited,
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared by LM 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 within Birmingham City Council (BCC) during March 2020.

1.1.2 Figure 1 in Appendix A indicates the BCC worksite together with dust monitoring locations for March 2019.

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, 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 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) were installed at the beginning of this monitoring period (March 2020) for the current phase of work at Curzon Street Station. The archaeology ground investigation works are currently underway at this site. The site was previously classified with a medium dust risk rating.

1.1.6 Dust monitoring locations and results for March 2020 are presented in Appendix B, Table 1 together with line charts for March 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_{10} concentrations of 190 $\mu g/m^3$, 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 (March 2020).

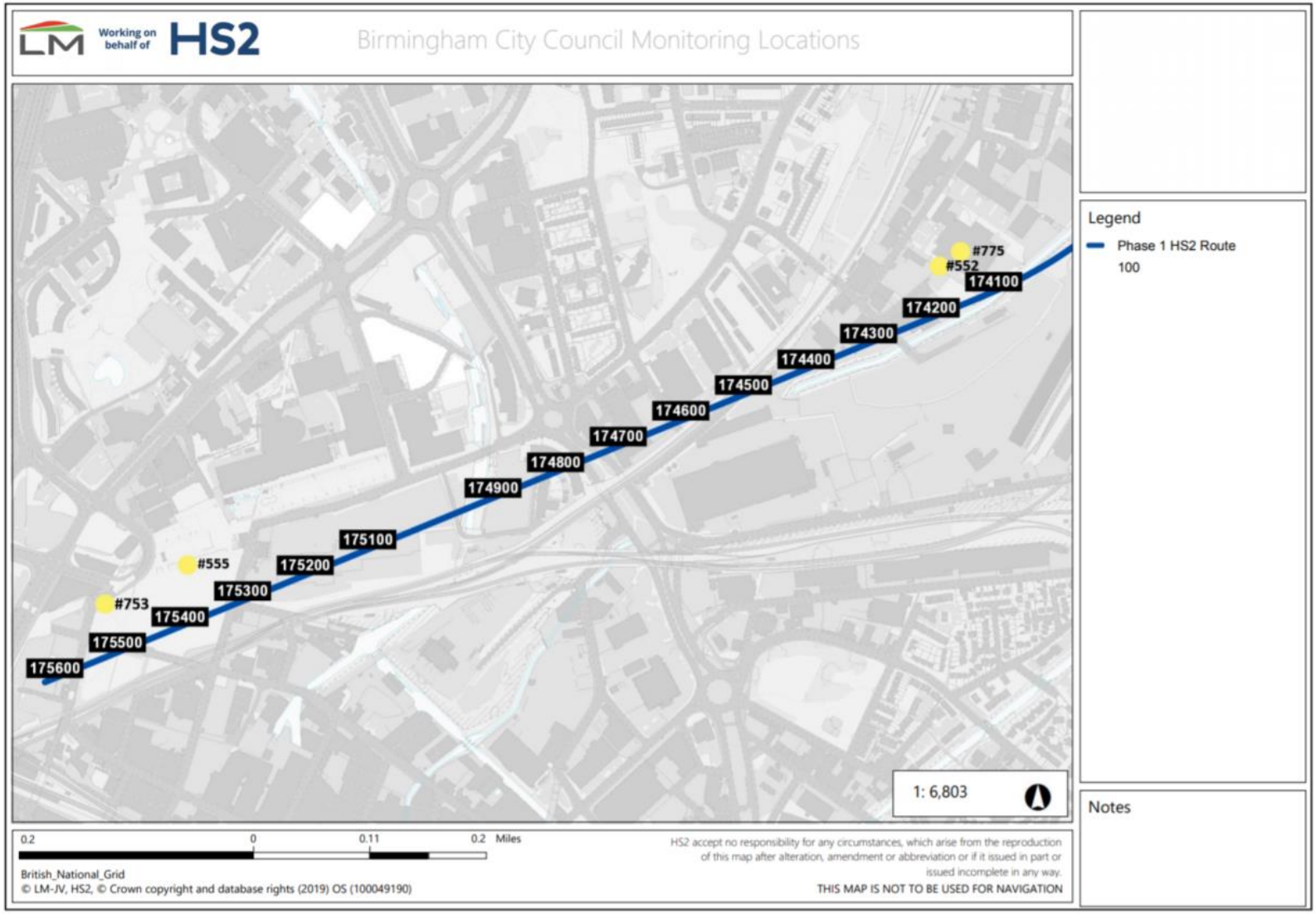
1.1.9 Data capture for dust monitor #753 was below 90% for the month of March 2020 due to an issue with the power supply. As a result, the monitor was offline from 06/03/2020 and until the

end of the monitoring period (March 2020). The issue with the power supply has now been reported as resolved.

1.1.10 No (0) complaints were received relating to air quality and dust during this monitoring period (March 2020).

Appendix A –Worksite and Dust Monitoring Locations

Figure 1: Birmingham City Council Worksites and Monitoring locations during March 2020



Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and March 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_{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	Data capture rate (%)
Dust #552	408819, 287494	Monitor outside the building	M	N/A	N/A	12	0	47.5	0	100
Dust #775	408847, 287510	Monitor secured inside the building	M	N/A	N/A	8.8	6.4	15.9	0	100
Dust #555	407678, 287044	Curzon Street Station HS2 Site	M	Y	N/A	9.3	0	42.5	0	100
Dust #753	407593, 287005	Curzon Street Station HS2 Site	M	Y	N/A	6.1	0	20.7	0	20

Figure 2: Construction dust hourly mean indicative PM_{10} concentration for Dust #552 (March 2020)

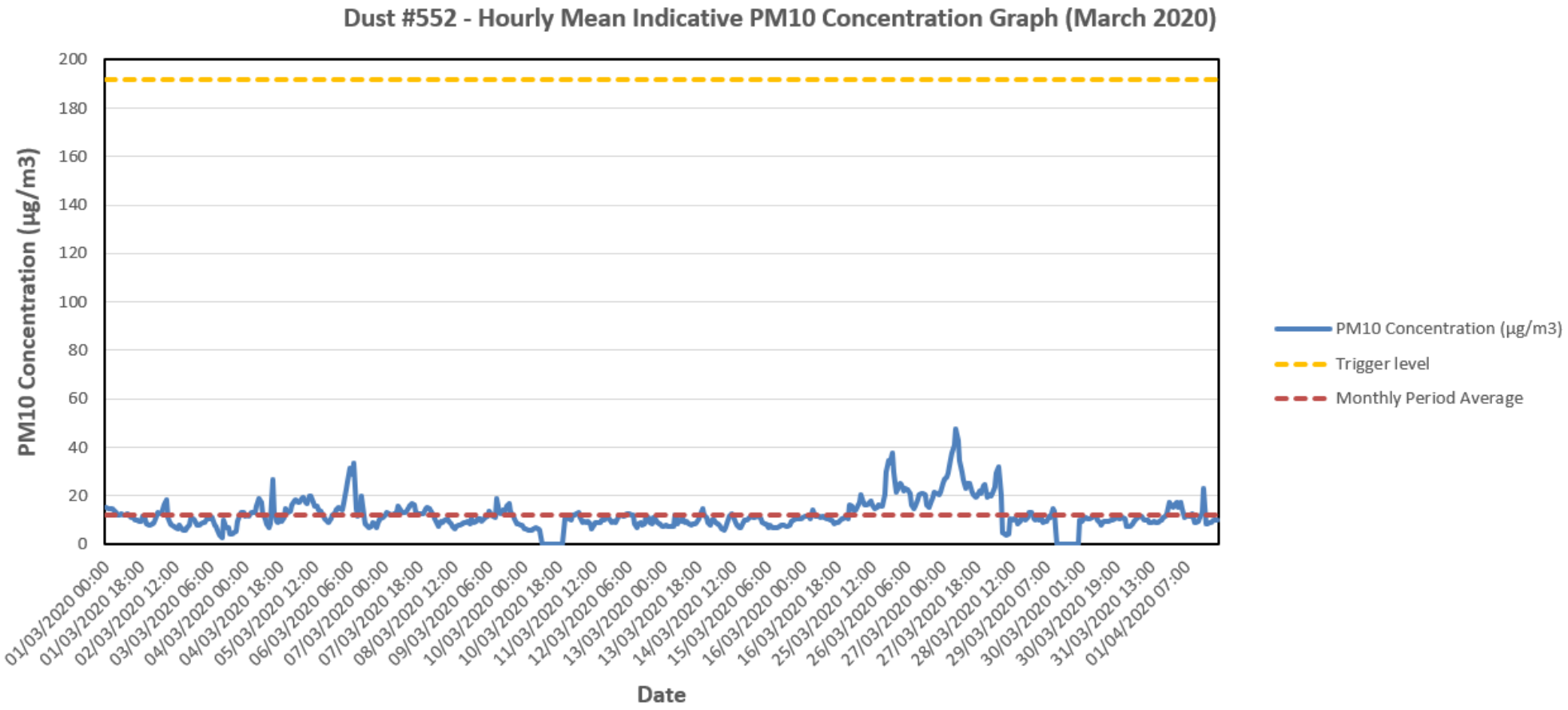


Figure 3: Construction dust hourly mean indicative PM_{10} concentration for Dust #775 (March 2020)

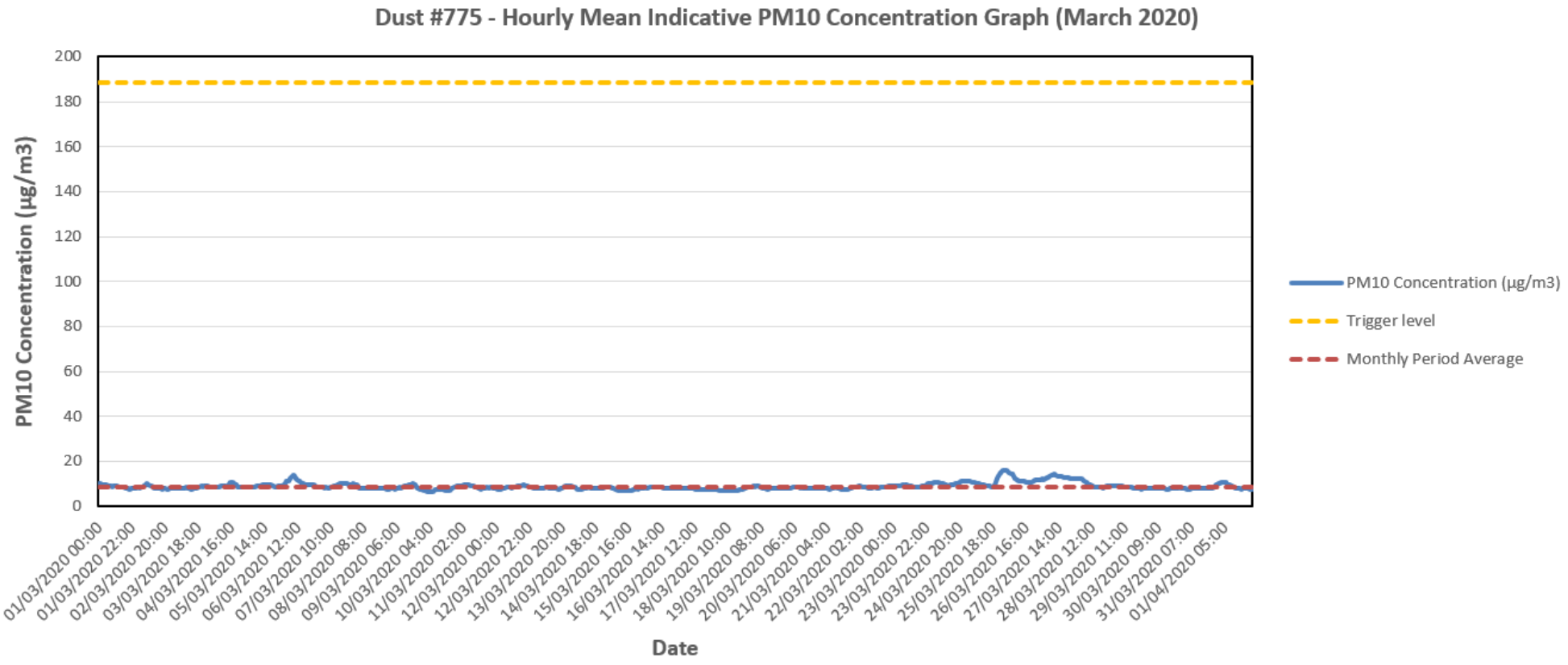


Figure 4: Construction dust hourly mean indicative PM_{10} concentration for Dust #555 (March 2020)

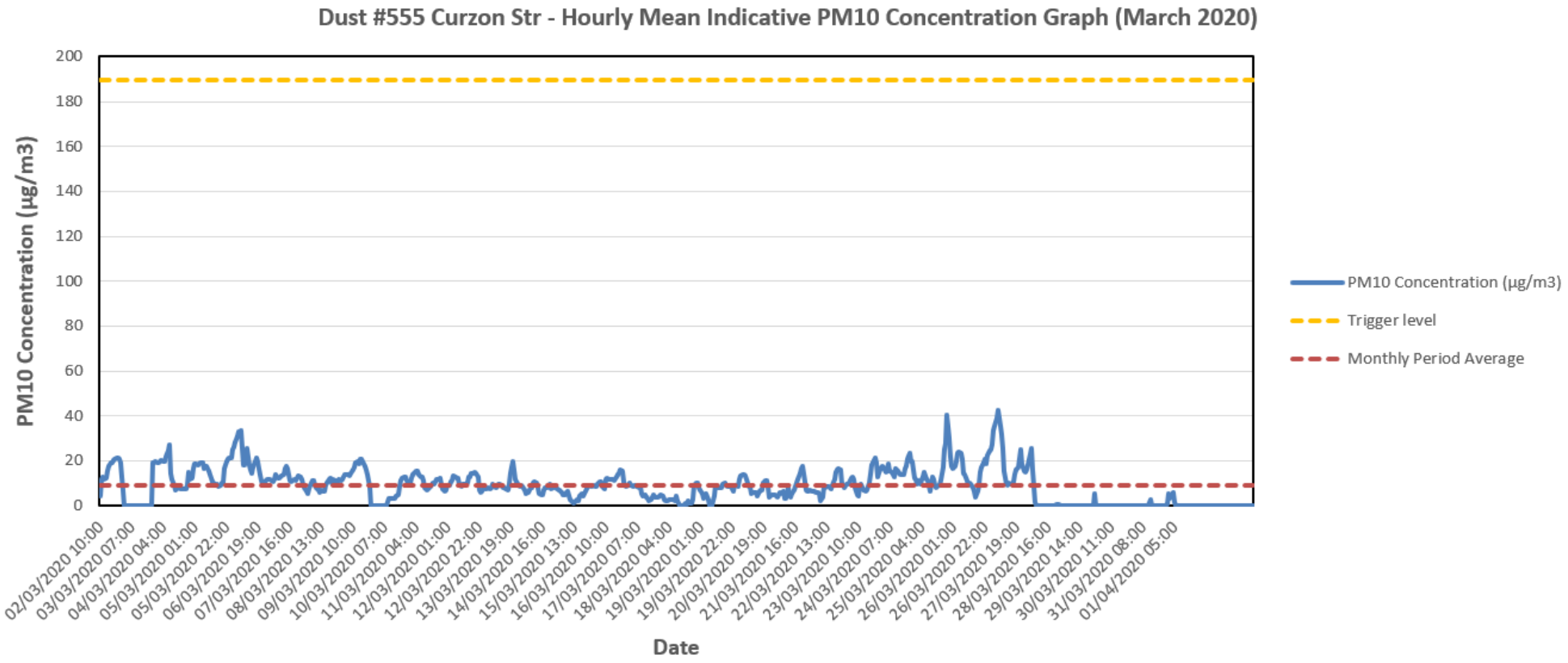


Figure 5: Construction dust hourly mean indicative PM_{10} concentration for Dust #753 (March 2020)