

Air Quality and Dust Monitoring Monthly Report – December 2019

Birmingham City Council



Department
for Transport

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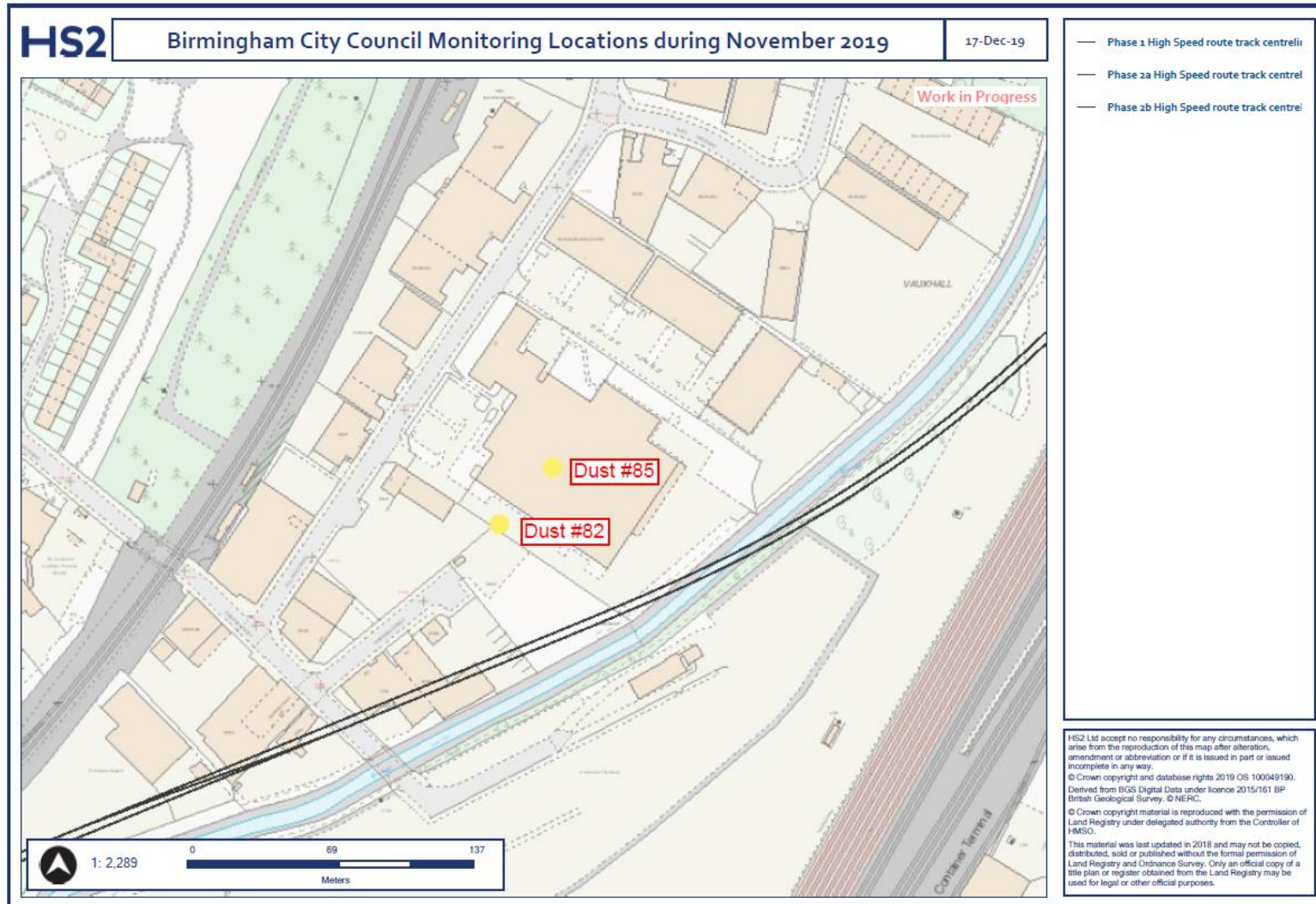
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Monthly Summary

- 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 December 2019.
- 1.1.2 Figure 1 in Appendix A indicates the BCC worksite together with dust monitoring locations for December 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) were 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 Dust monitoring locations and results for December 2019 are presented in Appendix B, Table 1 together with line charts for December from each dust monitor. 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.
- 1.1.6 The trigger level of 190 $\mu\text{g}/\text{m}^3$, 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.
- 1.1.7 There were no (0) dust trigger alerts recorded during the monitoring period (December 2019).
- 1.1.8 Data capture for the monitor Dust #775 was below 90% for the month of December 2019. This was due to power disconnection on site.
- 1.1.9 No (0) complaints were received relating to air quality and dust during this monitoring period (December 2019).

Appendix A – Worksite and Dust Monitoring Locations

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

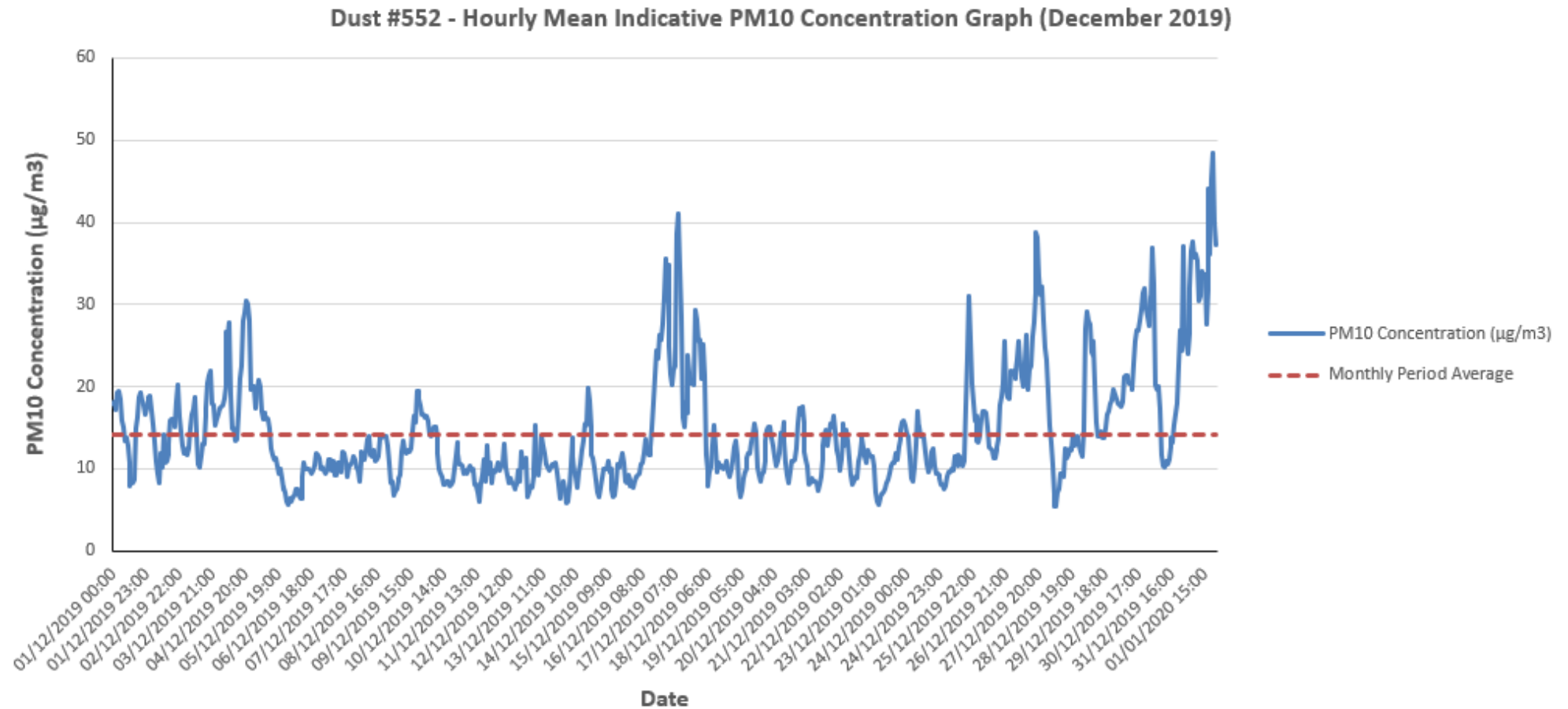


Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and December 2019 Results

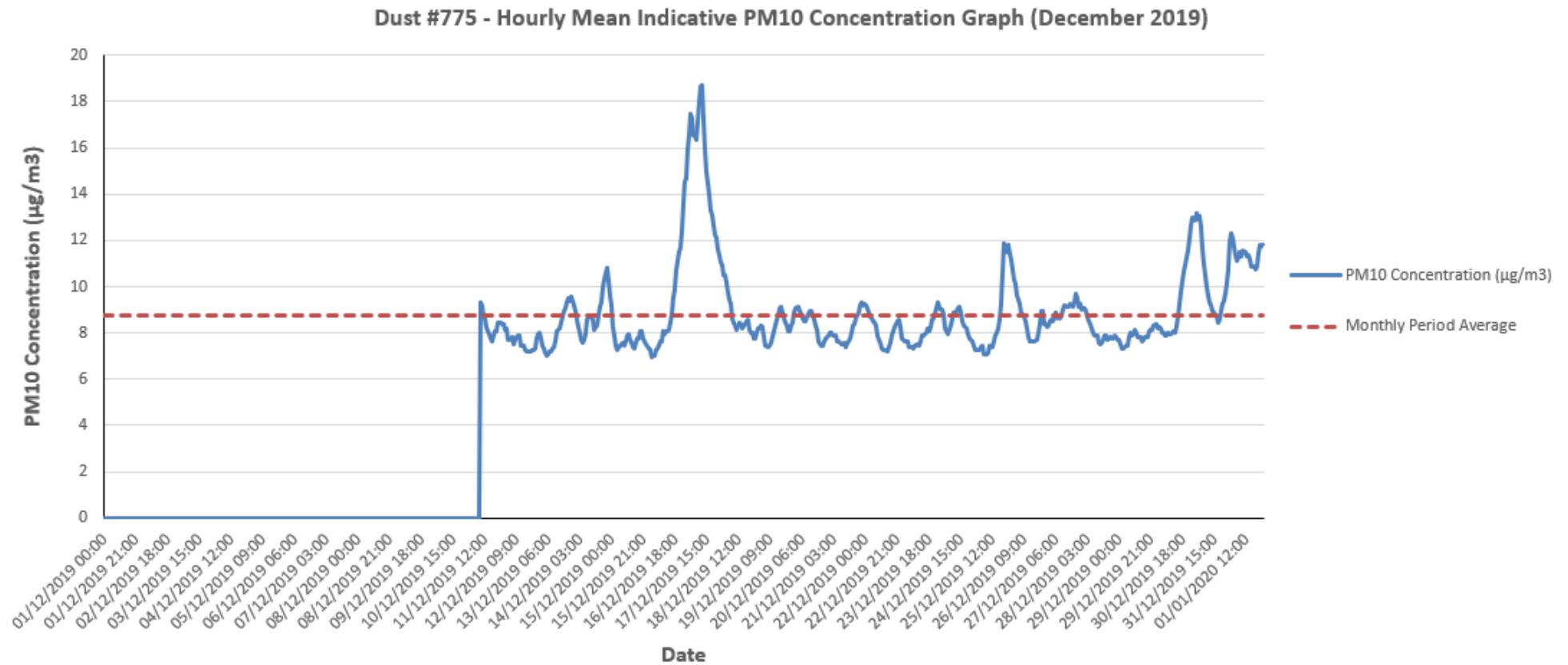
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1-hour periods exceeding trigger level of 190 µg/m ³	Data capture rate (%)
Dust #552 (old #82)	3890193,127124	Monitor outside the building	High	N/A	N/A	14.3	5.4	48.4	0	100.0
Dust #775 (old #85)	3890165,127105	Monitor secured inside the building	High	N/A	N/A	8.8	6.9	18.7	0	67.7

Figure 2: Construction dust hourly mean indicative PM₁₀ concentration for Dust #552 (December 2019)



Note¹ : Dust s/n 1026 - #82 has been replaced by #552 on 20th of November.

Figure 3: Construction dust hourly mean indicative PM₁₀ concentration for Dust #775 (December 2019)



Note¹ : Dust unit - s/n 1031 - #85 has been replaced by #775 on 20th of November.

Note² : Dust unit #775 was offline up to 11th of December due to power disconnection on site.