

July 2020

# Air Quality and Dust Monitoring Monthly Report – July 2020

**Birmingham City Council** 

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## **Monthly Summary**

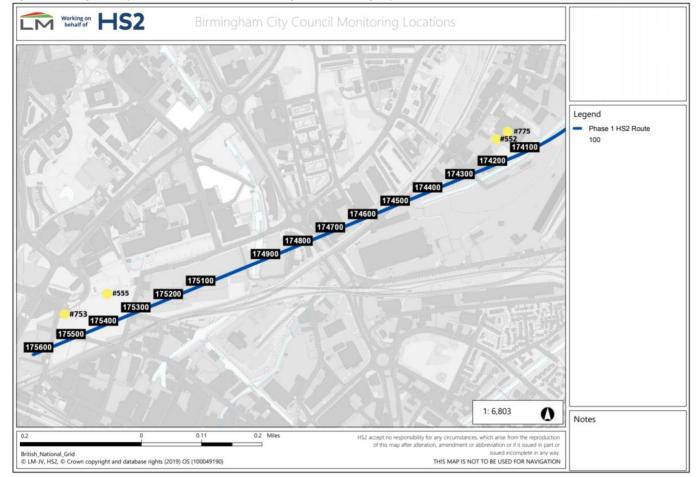
- 1.1.1 This Summary Report is published in fulfilment of commitments detailed in the High-Speed Rail (London-West Midlands) Environmental Minimum Requirements, Annex 1: Code of Construction Practice, for the nominated undertaker to present the results of dust monitoring undertaken within Birmingham City Council (BCC) during July 2020.
- 1.1.2 Figure 1 in Appendix A indicates the BCC worksite together with dust monitoring locations for July 2020.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report monthly available from <a href="https://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 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). The demolition works along Erskine Street and Inkerman Street, Birmingham mobilised were completed on the 12/06/2020 and the site was demobilised. Monitoring to remain in place for some upcoming demolition works in August 2020.
- 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 ground remediation works are currently underway at this site and continued through the month of July 2020.
- 1.1.6 Dust monitoring locations and results for July 2020 are presented in Appendix B, Table 1 together with line charts for July 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  $PM_{10}$  concentrations of 190  $\mu$ g/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 (July 2020).

Air Quality and Dust Monitoring Summary Report, July 2020 Birmingham City Council

- 1.1.9 Data capture for both monitors at Curzon Street (Dust #530 and Dust #753) was below 90% for the month of July 2020. This was due to power supply issues. These issues have now been resolved.
- 1.1.10 There were no (0) complaints related to dust or air quality received during the reporting period (July 2020).

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

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



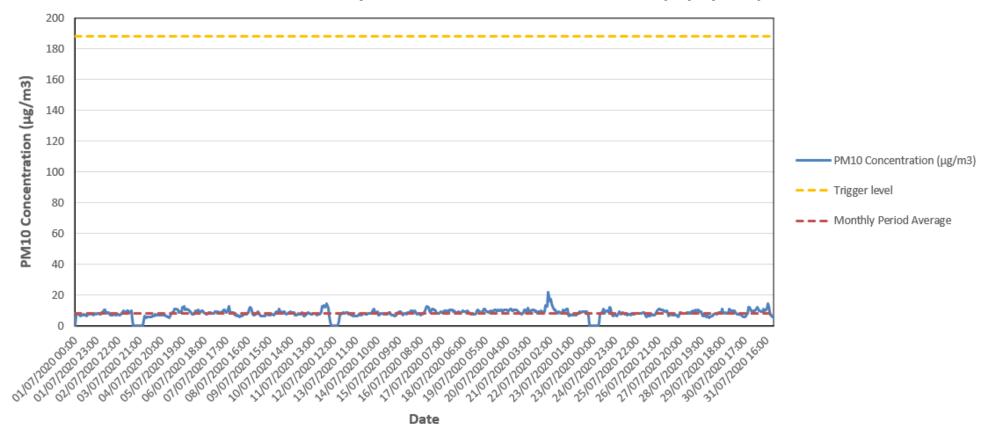
### **Appendix B – Dust Monitoring Results**

Table 1: Dust monitoring locations and July 2020 Results

| Monitoring<br>site ID   | Coordinates (X,Y) | Location description                | Dust<br>risk<br>rating<br>for site | Monitoring<br>site active<br>during<br>period | Change to<br>site since<br>previous<br>period<br>report | Mean 1-hour<br>PM <sub>10</sub><br>concentration<br>(µg/m <sup>3</sup> ) | Minimum 1-hour<br>PM <sub>10</sub><br>concentration<br>(µg/m <sup>3</sup> ) | Maximum 1-hour<br>PM <sub>10</sub><br>concentration<br>(µg/m <sup>3</sup> ) | Number of 1-hour<br>periods exceeding<br>trigger level of<br>190 µg/m <sup>3</sup> | Data<br>capture<br>rate (%) |
|-------------------------|-------------------|-------------------------------------|------------------------------------|---|---|--|---|---|--|-----------------------------|
| Dust #552<br>(old #82)  | 408811, 287485    | Monitor outside the building        | High                               | N/A   | N/A   | 8.1  | 0   | 22.0  | 0  | 100                         |
| Dust #775<br>(old #85)  | 408841, 287529    | Monitor secured inside the building | High                               | N/A   | N/A   | 7.6  | 6.7   | 10.3  | 0  | 100                         |
| Dust #530<br>(old #555) | 407702, 287079    | Curzon Street Station HS2<br>Site   | High                               | N/A   | N/A   | 3.0  | 0.2   | 16.9  | 0  | 48.4                        |
| Dust #753               | 407619, 287006    | Curzon Street Station HS2<br>Site   | High                               | N/A   | N/A   | 2.4  | 0   | 21.5  | 0  | 71                          |

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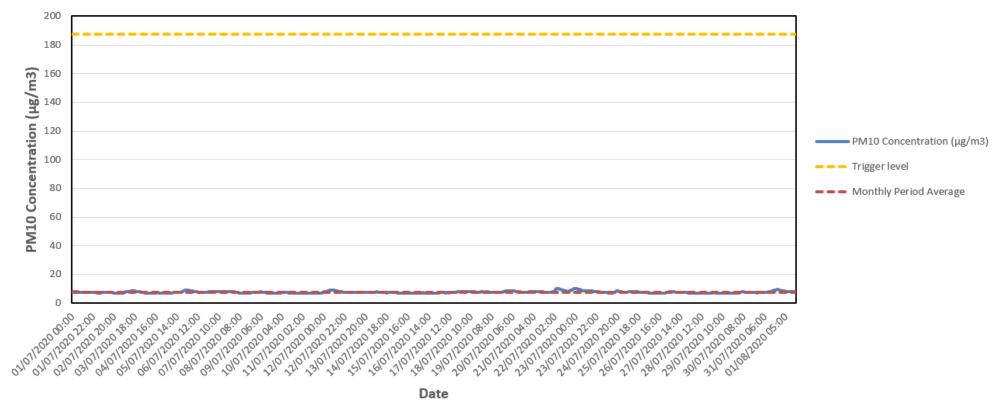
Figure 2: Construction dust hourly mean indicative  $PM_{10}$  concentration for Dust #552 (July 2020)



#### Dust #552 - Hourly Mean Indicative PM10 Concentration Graph (July 2020)

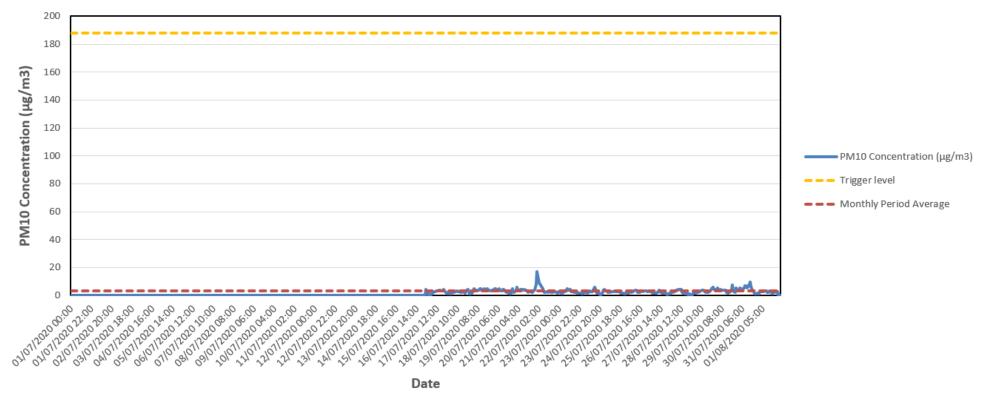
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Figure 3: Construction dust hourly mean indicative PM<sub>10</sub> concentration for Dust #775 (July 2020)



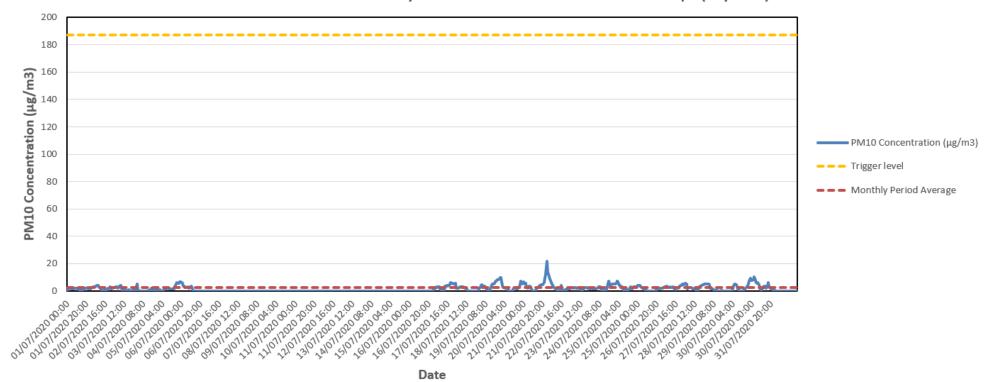
#### Dust #775 - Hourly Mean Indicative PM10 Concentration Graph (July 2020)

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



#### Dust #530 (old #555) Curzon Str - Hourly Mean Indicative PM10 Concentration Graph (July 2020)

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



#### Dust #753 Curzon Str - Hourly Mean Indicative PM10 Concentration Graph (July 2020)