

Air Quality and Dust Monitoring Monthly Report – December 2018

Birmingham City Council



Department for Transport

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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 2018.
- 1.1.2 Figure 1 in Appendix A indicates the current work site together with dust monitoring locations for December 2018.
- 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 monitoring methodologies to be implemented by nominated undertakers throughout construction.
- 1.1.4 The current phase of works commenced in BCC during September 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, 2 and 3 respectively, 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 and Unite, however there will be no works taking place below slab level. There will be no crushing at Saltley.
- 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) dust monitors at the Saltley Network Park Site. The demolition and pre-demolition works is underway at these sites. The sites were previously classified with a High dust risk rating (Washwood Heath) and a Medium to High dust risk rating (Saltley and Unite).
- 1.1.7 Dust monitoring locations and results for December 2018 are presented in Appendix B, Table 1, together with line charts for December from each dust monitor.
- 1.1.8 The trigger levels have been revised in this December report 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 $\mu\text{g}/\text{m}^3$, measured as a 1-hour mean has been applied. No exceedances of the 1-hour average dust trigger level of either 120 $\mu\text{g}/\text{m}^3$ or 190 $\mu\text{g}/\text{m}^3$ were recorded during the monitoring period.

1.1.9 Data capture at all sites is below 90%, with the exception of Monitor 274 at Washwood Heath; problems with power supply at these sites has been the cause of this loss of data.

1.1.10 No complaints were received for air quality during the monitoring period (December 2018).

Appendix A – Worksite and Dust Monitoring Locations

Figure 1: Washwood Heath Worksite and Monitoring locations during December 2018

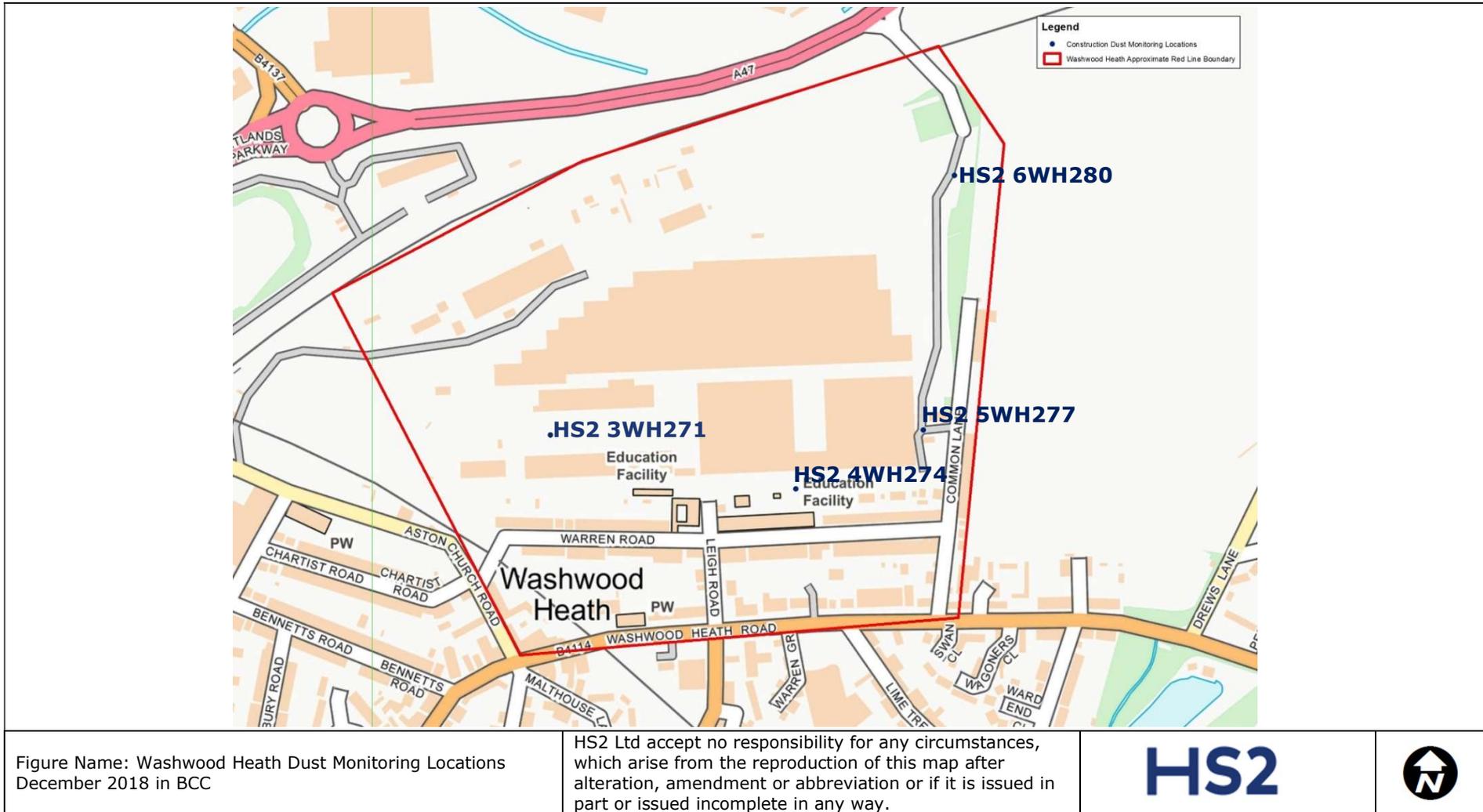


Figure 2: Saltley Network Park Worksite and Monitoring locations during December 2018

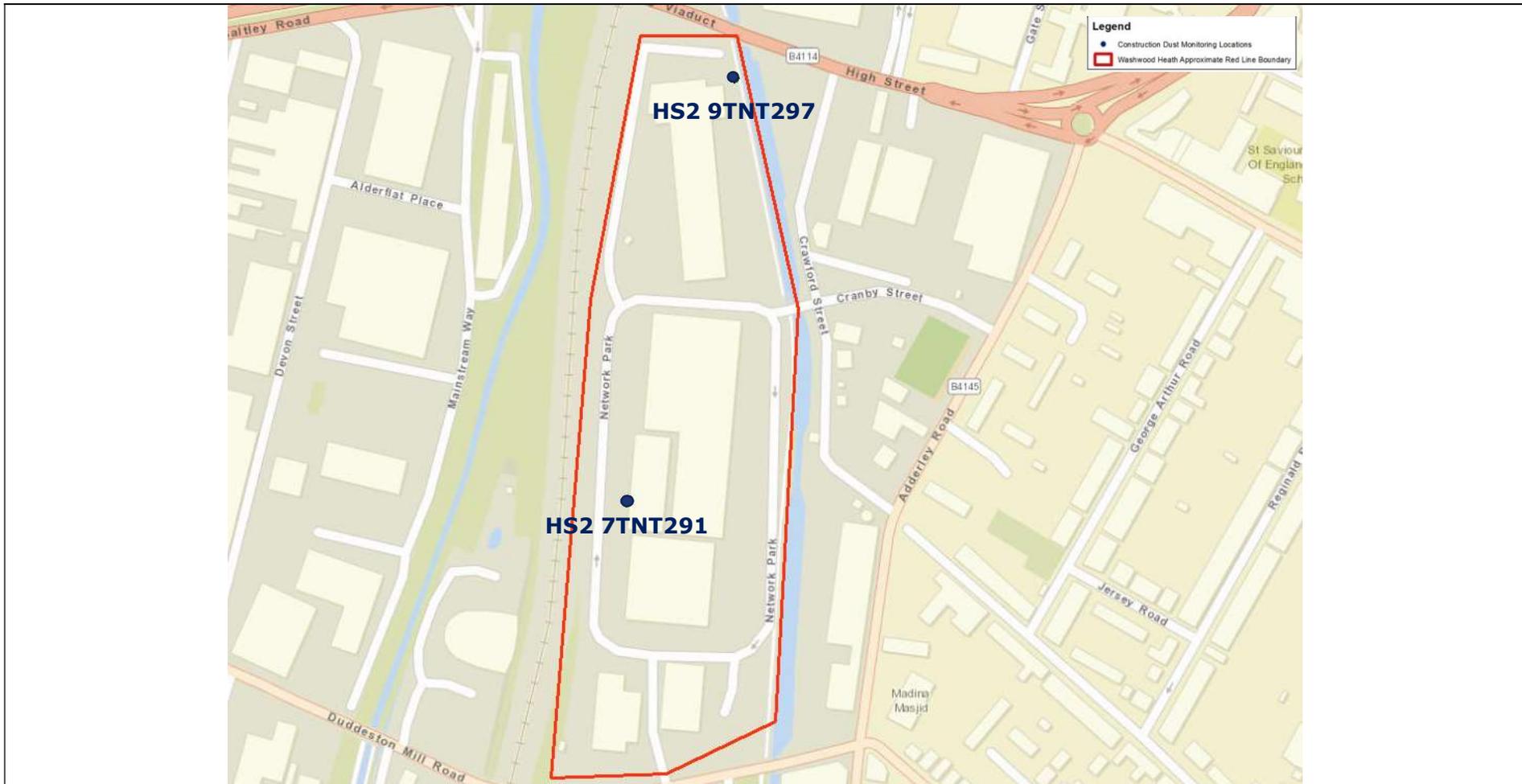


Figure Name: Saltley Network Park Dust Monitoring Locations
December 2018 in BCC

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Figure 3: Unite Worksite and Monitoring locations during December 2018



Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and December 2018 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 (%)
HS2 3 WH 271	410698,289273	Monitor secured on a stand	High	Yes	N/A	17.7	7.9	40.1	None	85.1
HS2 4WH 274	410661,288971	Monitor secured on a stand	High	Yes	N/A	15.1	8.6	31.5	None	99.9
HS2 5WH 277	410508,288901	Monitor secured on a stand	High	Yes	N/A	16.3	1.0	39.0	None	79.2
HS2 6WH 280	410214,288965	Monitor secured on a stand	High	Yes	N/A	16.7	9.2	37.3	None	84.8
HS2 1 UNITE 262	408204,287222	Monitor secured on a stand	Medium to High	Yes	N/A	13.1	5.6	33.4	None	62.9
HS2 2 UNITE 265	408203,287119	Monitor secured on a stand	Medium to High	Yes	N/A	13.9	6.3	30.8	None	41.5
HS2 7 TNT 291	409365,288254	Monitor secured on a stand	Medium to High	Yes	N/A	15.1	6.2	43.4	None	87.9
HS2 9 TNT 297	409296,287957	Monitor secured on a stand	Medium to High	Yes	N/A	13.5	5.0	51.2	None	77.7

Figure 1: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 3WH 271 (December 2018)

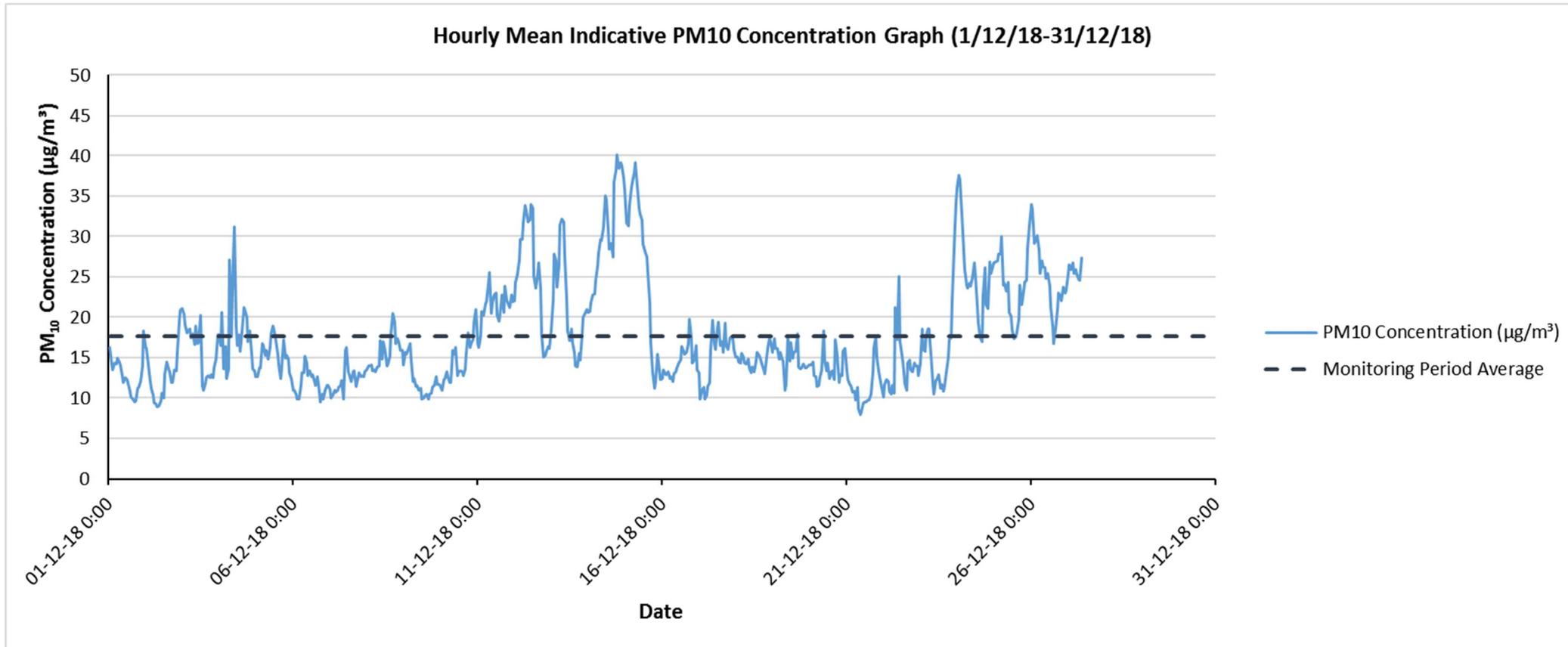


Figure 2: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 4WH 274 (December 2018)

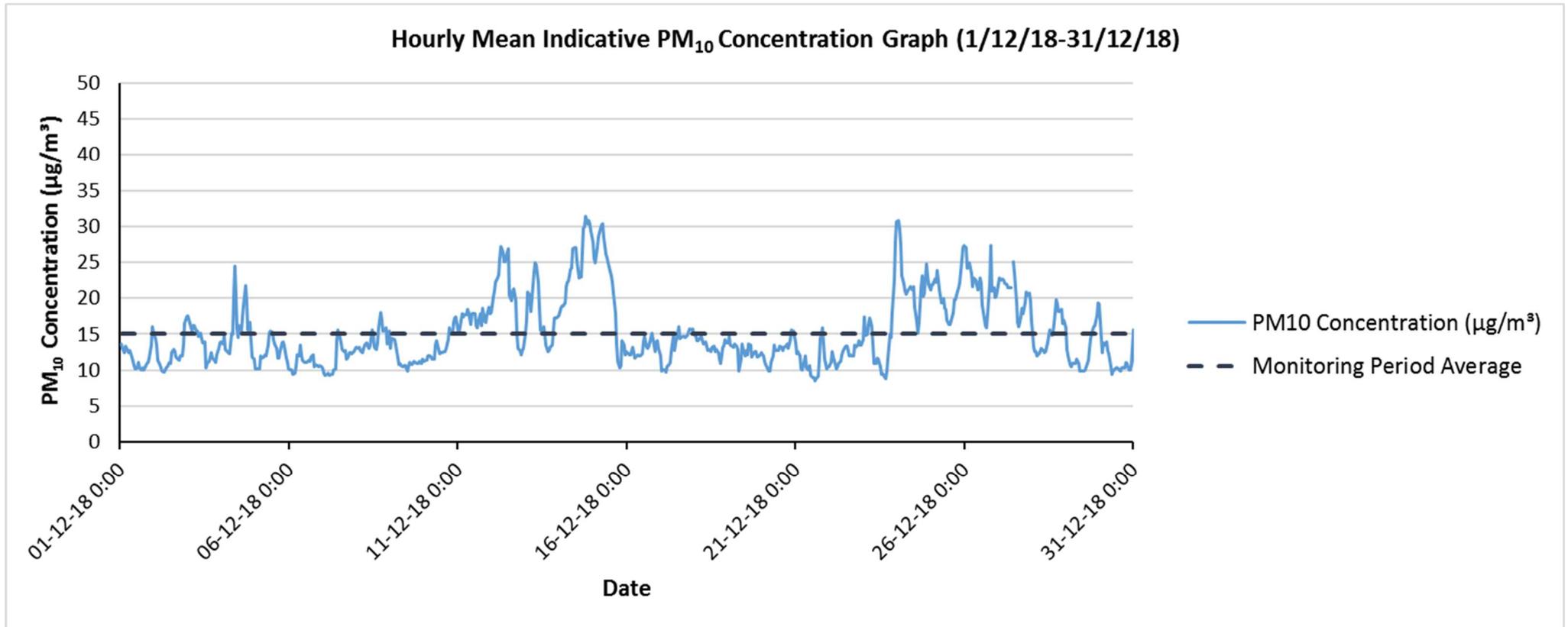


Figure 3: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 5WH 277 (December 2018)

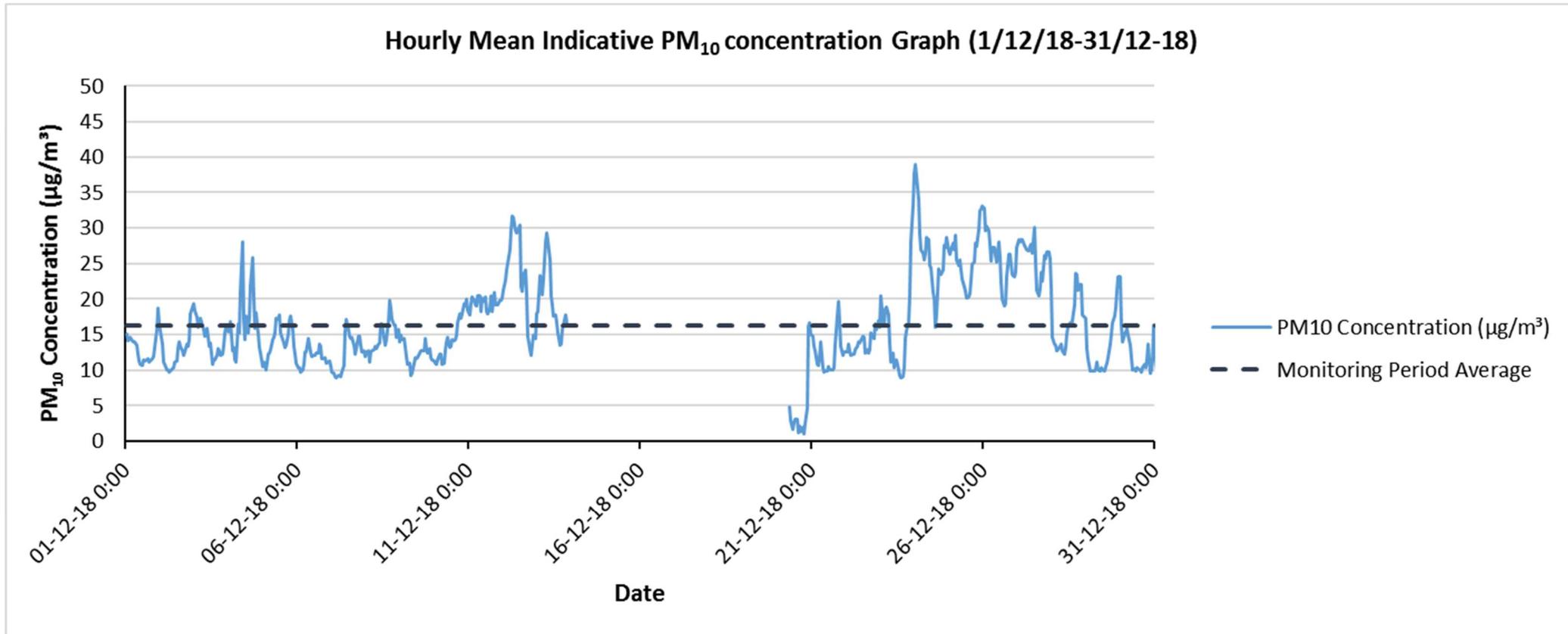


Figure 4: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 6WH 280 (December 2018)

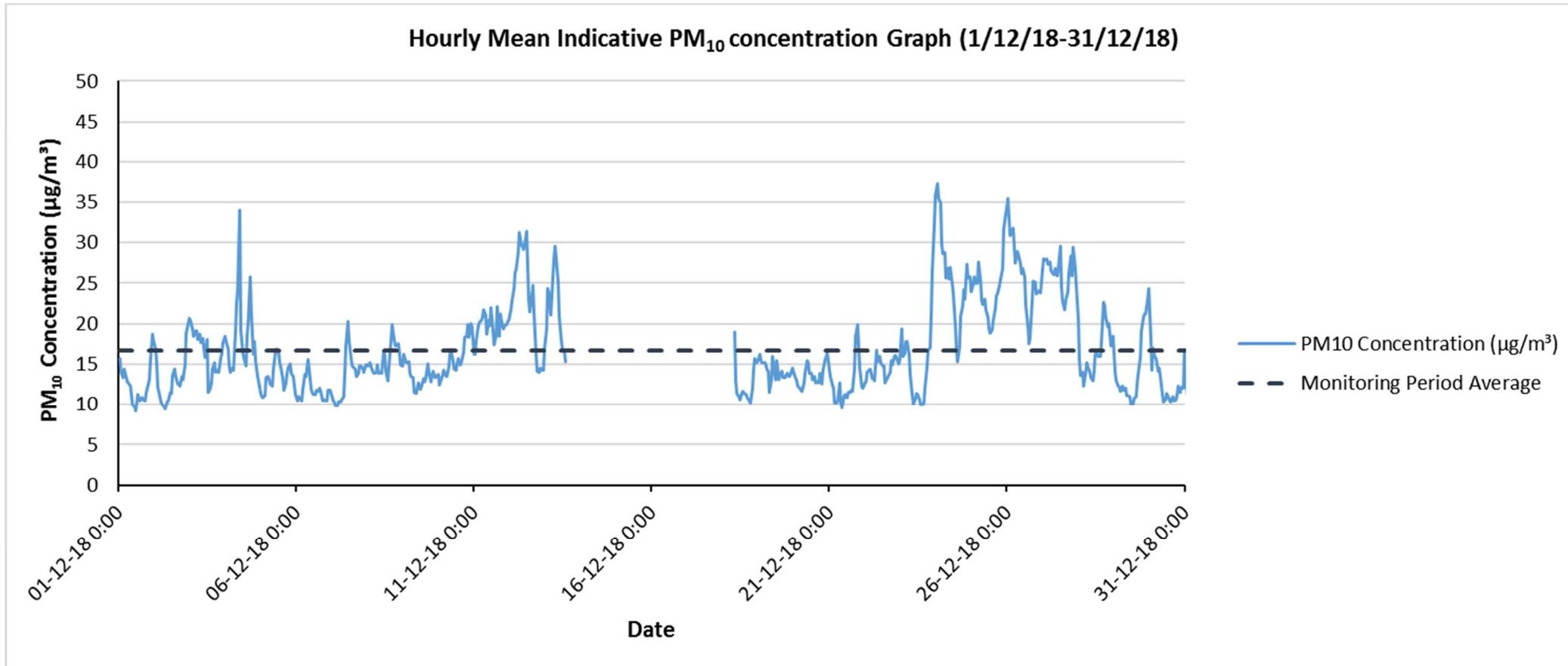


Figure 5: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 1 UNITE 262 (December 2018)

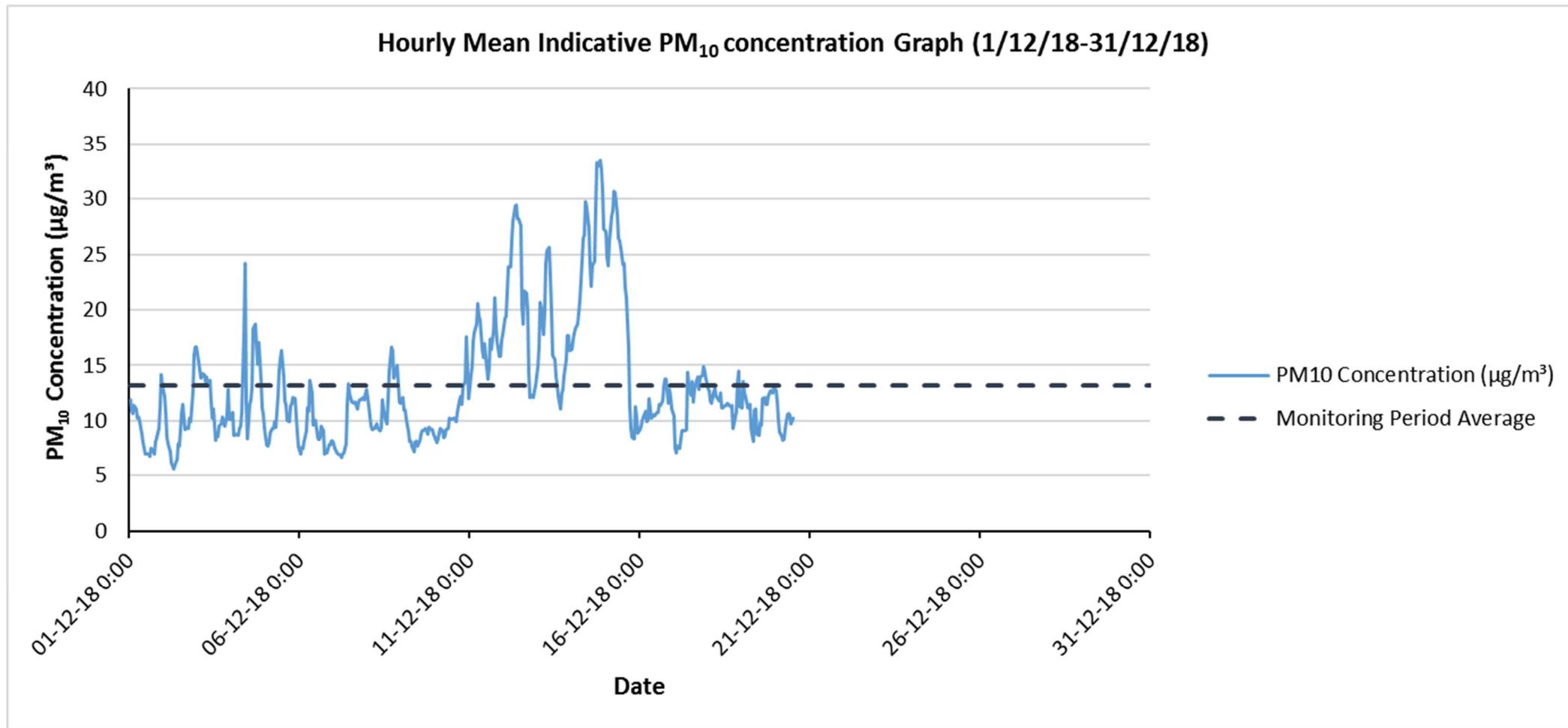


Figure 6: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 2 UNITE 265 (December 2018)

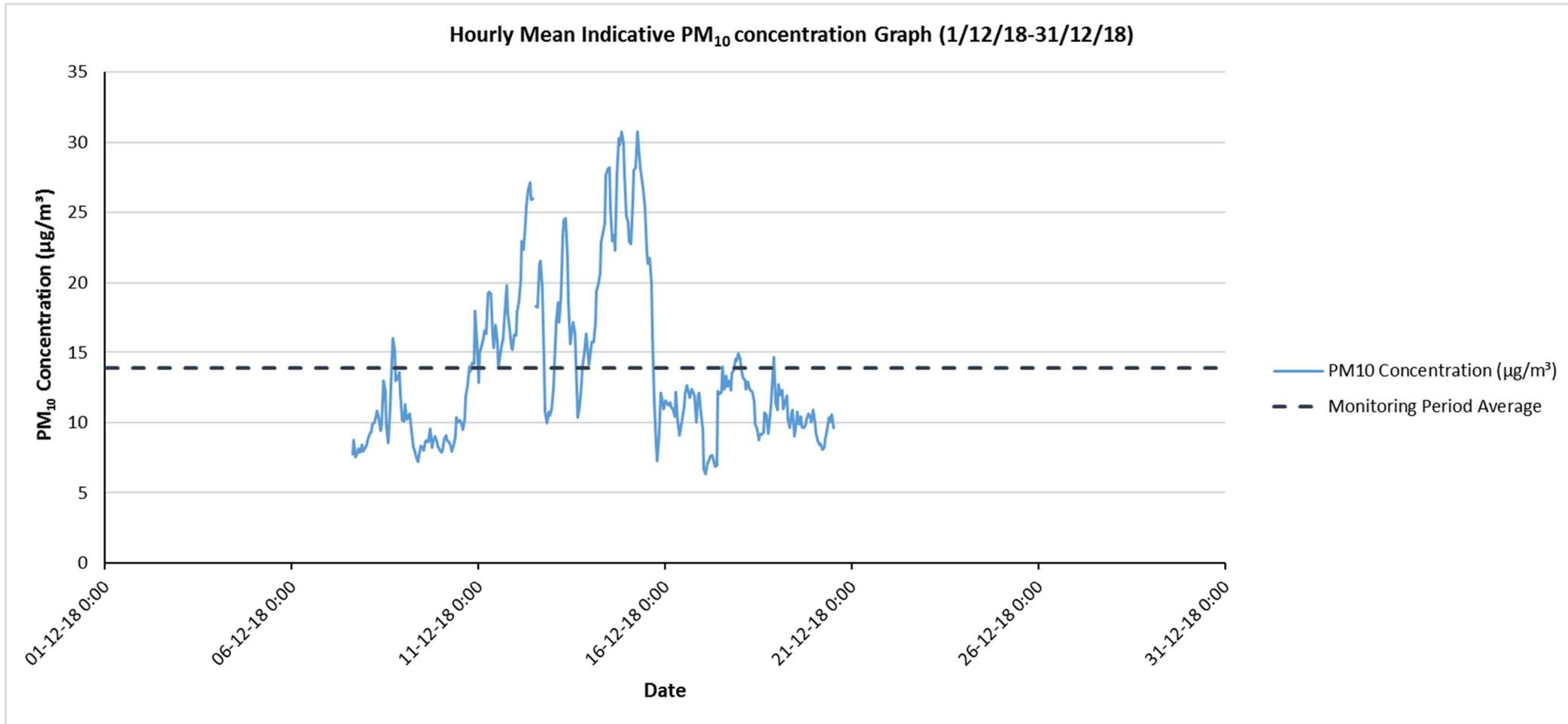


Figure 7: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 7 TNT 291 (December 2018)

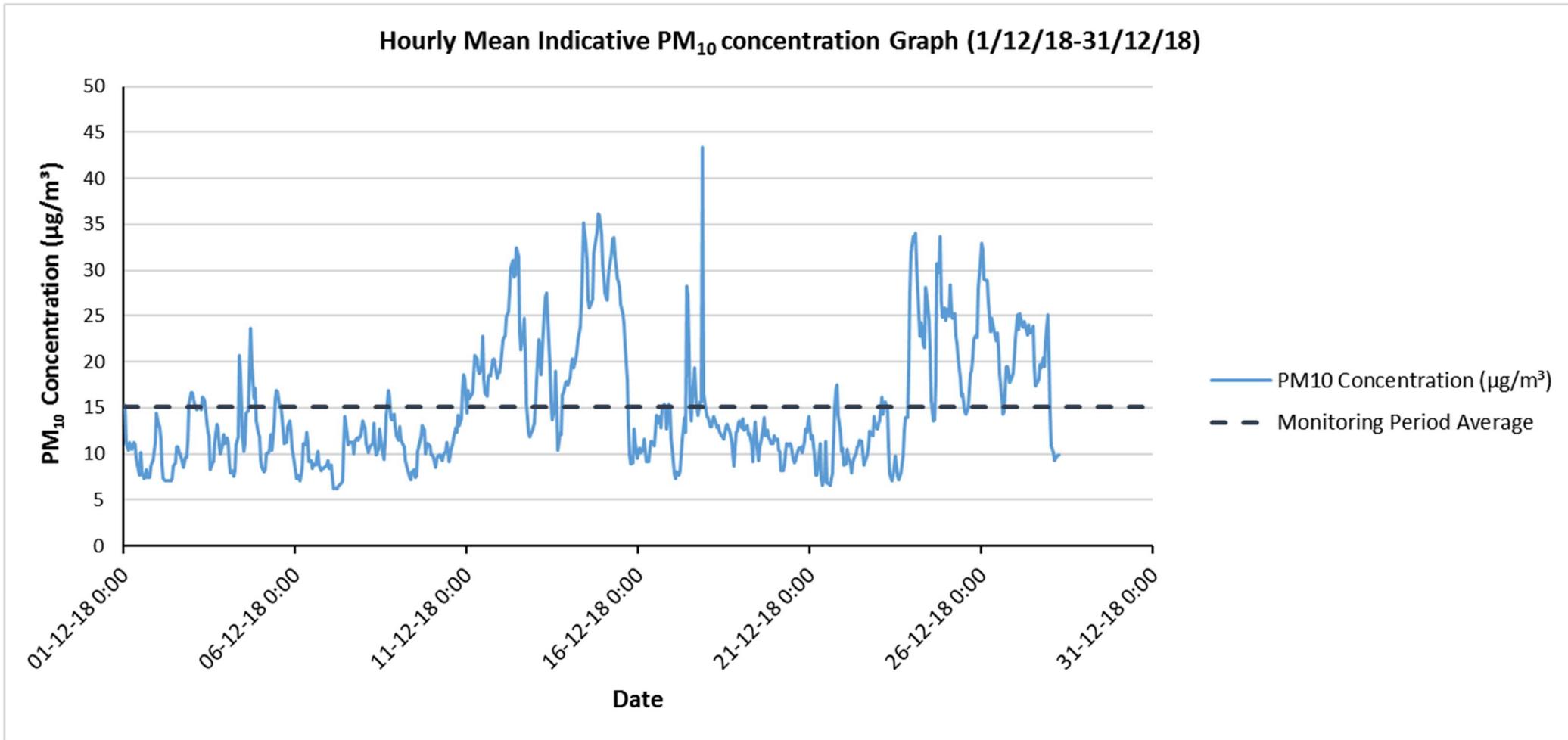


Figure 8: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 9TNT 297 (December 2018)

