

Air Quality and Dust Monitoring Monthly Report – January 2019

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.

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.

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2019, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2 **OGI** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



Printed in Great Britain on paper containing at least 75% recycled fibre.

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 January 2019.
- 1.1.2 Figures 1,2 and 3 in Appendix A indicate the current worksites together with dust monitoring locations for January 2019.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report 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 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 at this location was decommissioned (monitoring ID: HS21UKM262 and HS2 2UKM265).
- 1.1.5 The current worksites (Washwood Heath, Saltley and Unite), as presented in Figures 1, 2 and 3 respectively in Appendix A, 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, Saltley and Unite, however there will be no works taking place below slab level.
- 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 are 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 January 2019 are presented in Appendix B, Table , together with line charts for January from each dust monitor (Figures 1 to 8 in Appendix B).
- 1.1.8 The trigger levels within this January report are in accordance with the updated guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites (IAQM, 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 During January, the data capture was below 90% for monitors 262, 265, 271, 291, and 297. Problems with power supply at these sites has been the cause of this loss of data. While monitors 274, 277, and 280 showed a data capture of 100%.
- 1.1.10 Monitor 271 at Washwood Heath was unresponsive for 2 days on 15/01/2019. The possible reason for this issue was the potential ongoing telemetry issues. Monitor 297 at the Saltley Network Park site became unresponsive on 1/01/2019 and did not report for 20 days. The monitor was not accessible due to being in the area of demolition (January 2019).
- 1.1.11 There were no complaints received, relating to dust or air quality, during this monitoring period.

Appendix A – Worksite and Dust Monitoring Locations

Figure 1: Washwood Heath Dust Monitoring locations January 2019 in BCC

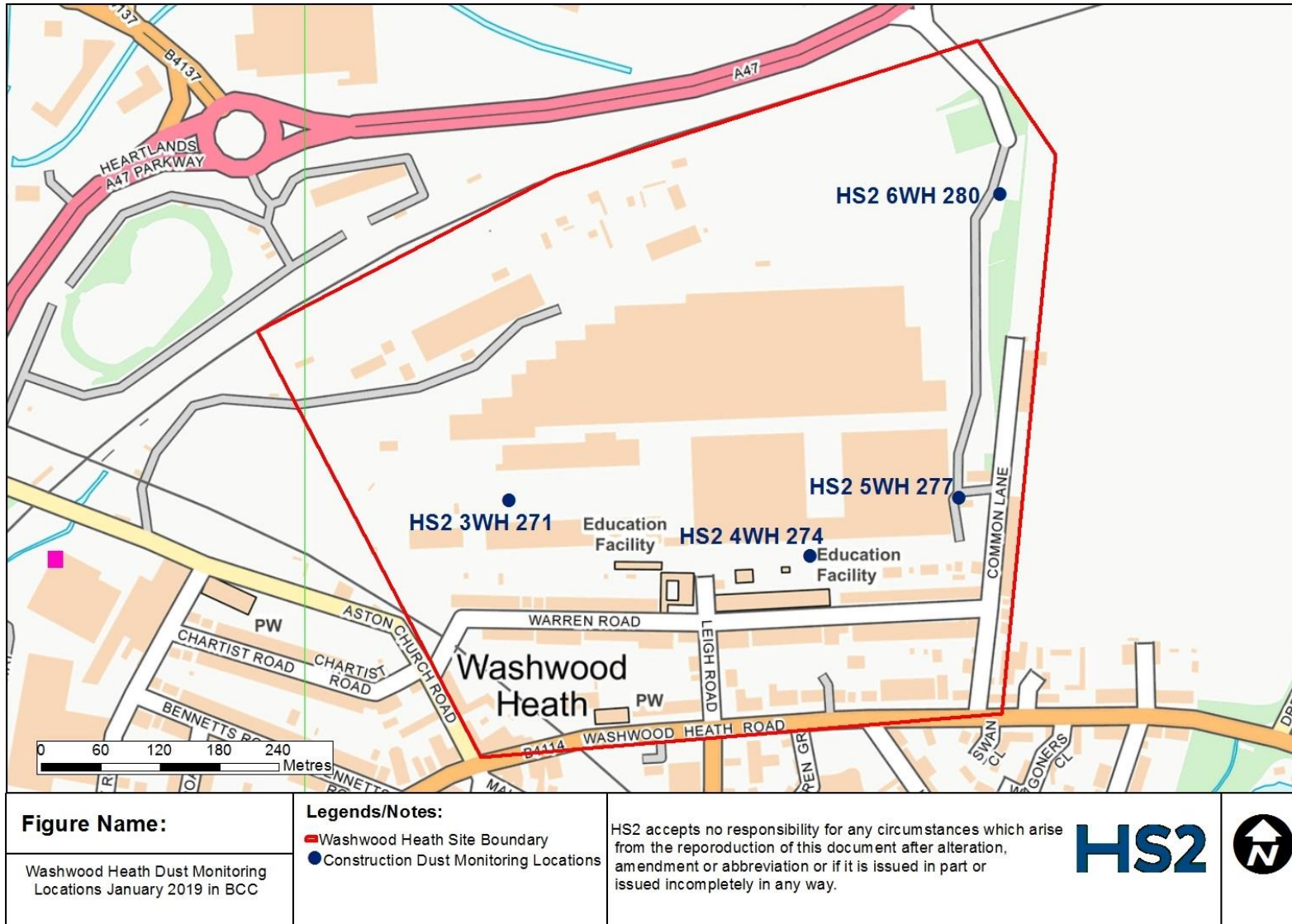


Figure 2: Saltley Network Park Dust Monitoring locations January 2019 in BCC

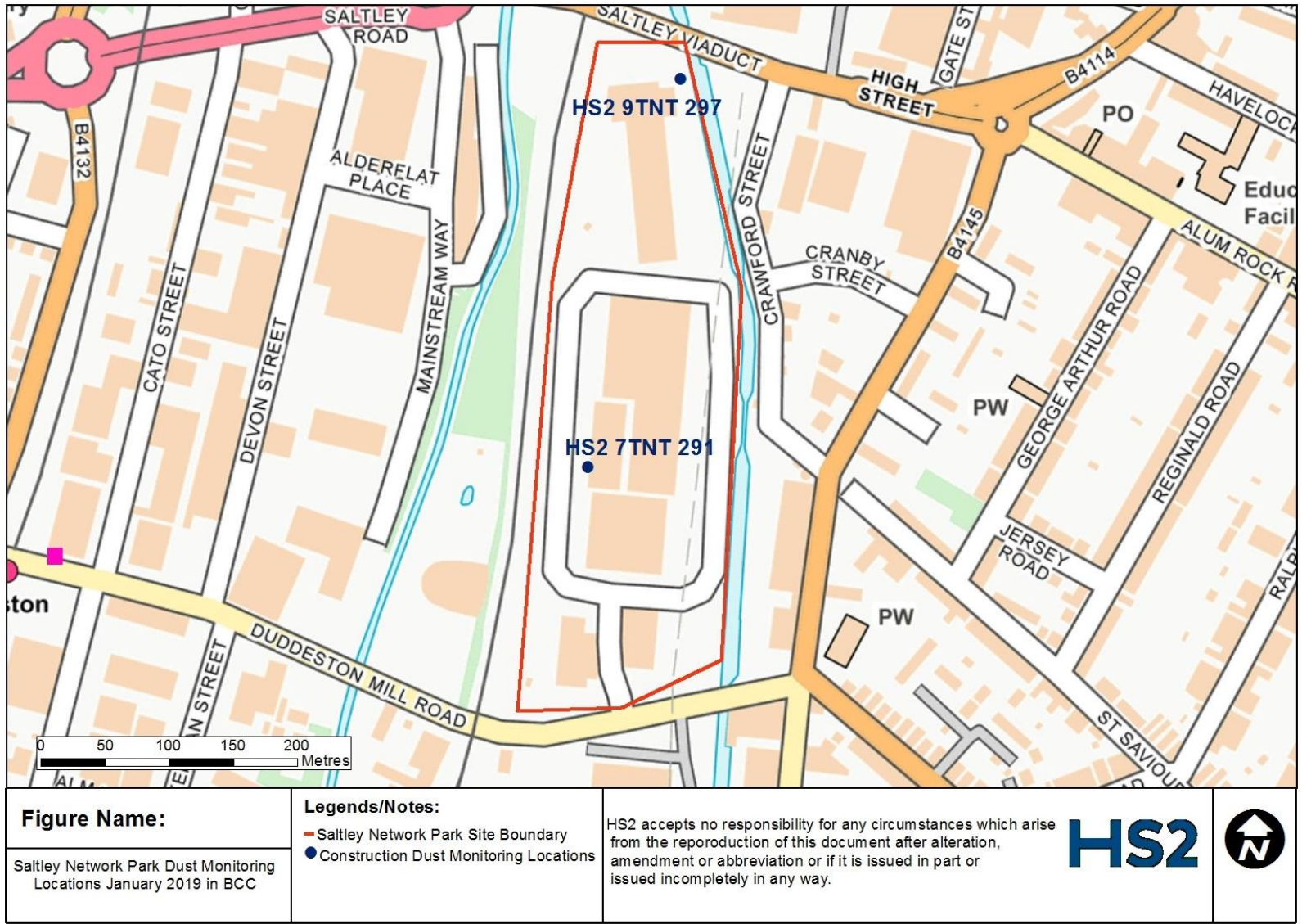
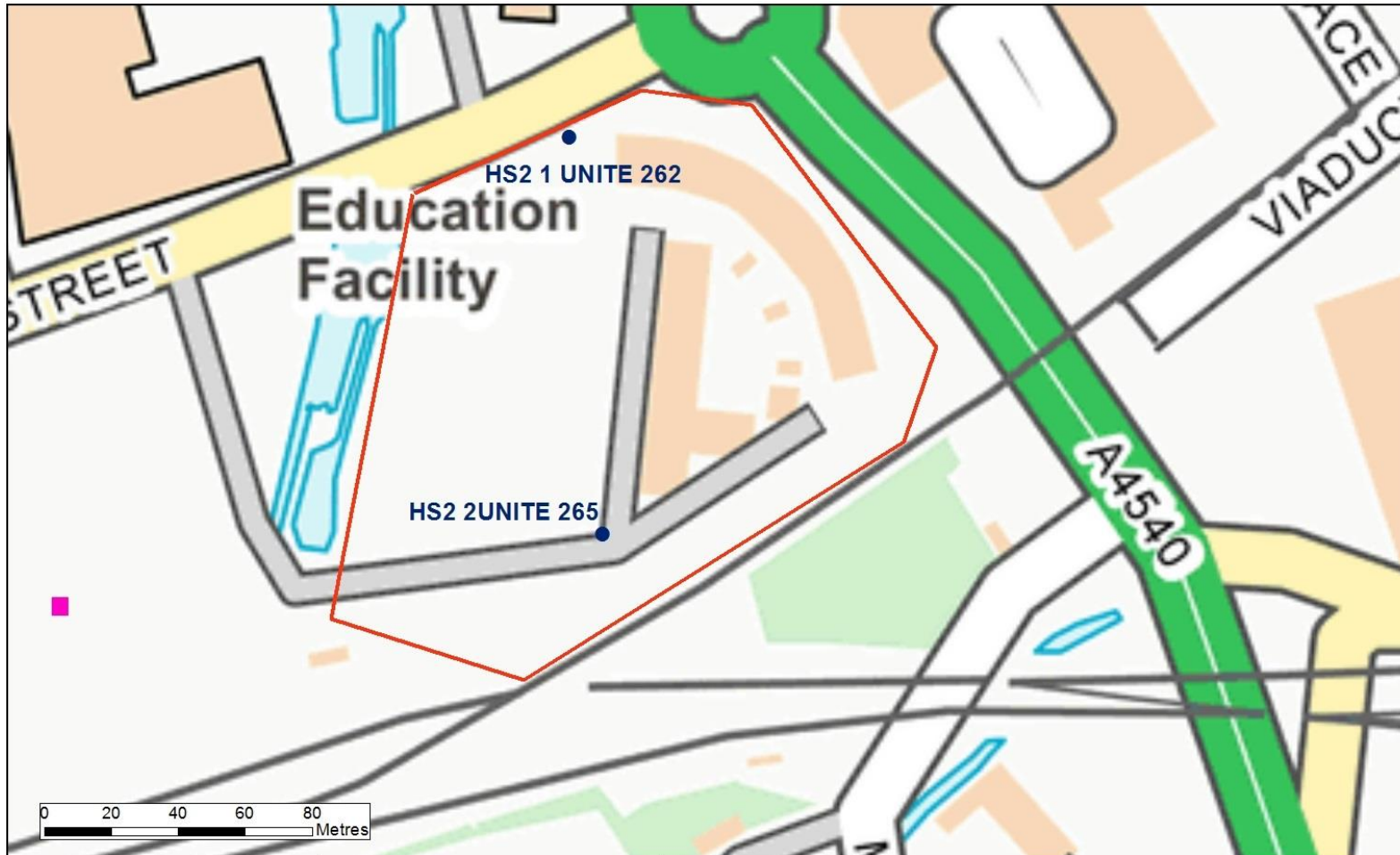



Figure 3: Unite Building Dust Monitoring locations January 2019 in BCC



<p>Figure Name:</p>	<p>Legends/Notes:</p> <ul style="list-style-type: none"> — Unite Building Site Boundary ● Construction Dust Monitoring Locations 	<p>HS2 accepts no responsibility for any circumstances which arise from the reproduction of this document after alteration, amendment or abbreviation or if it is issued in part or issued incompletely in any way.</p>	<p>HS2 </p>
<p>Unite Building Dust Monitoring Locations January 2019 in BCC</p>			

Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and January 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 (%)
HS2 3 WH 271	410698,289273	Monitor secured on a stand	High	Yes	N/A	19.3	9.6	45.8	None	20.3
HS2 4WH 274	410661,288971	Monitor secured on a stand	High	Yes	N/A	16.5	7.0	55.1	None	100.0
HS2 5WH 277	410508,288901	Monitor secured on a stand	High	Yes	N/A	18.8	8.8	66.9	None	100.0
HS2 6WH 280	410214,288965	Monitor secured on a stand	High	Yes	N/A	19.4	9.5	72.0	None	100.0
HS2 1 UNITE 262	408204,287222	Monitor secured on a stand	Medium to High	Yes	N/A	16.3	6.0	59.4	None	46.5
HS2 2 UNITE 265	408203,287119	Monitor secured on a stand	Medium to High	Yes	N/A	16.0	4.4	54.9	None	46.5
HS2 7 TNT 291	409365,288254	Monitor secured on a stand	Medium to High	Yes	N/A	17.8	6.8	64.1	None	44.0
HS2 9 TNT 297	409296,287957	Monitor secured on a stand	Medium to High	Yes	N/A	19.4	5.3	62.3	None	25.7

Figure 1: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 3WH 271 (January 2019)

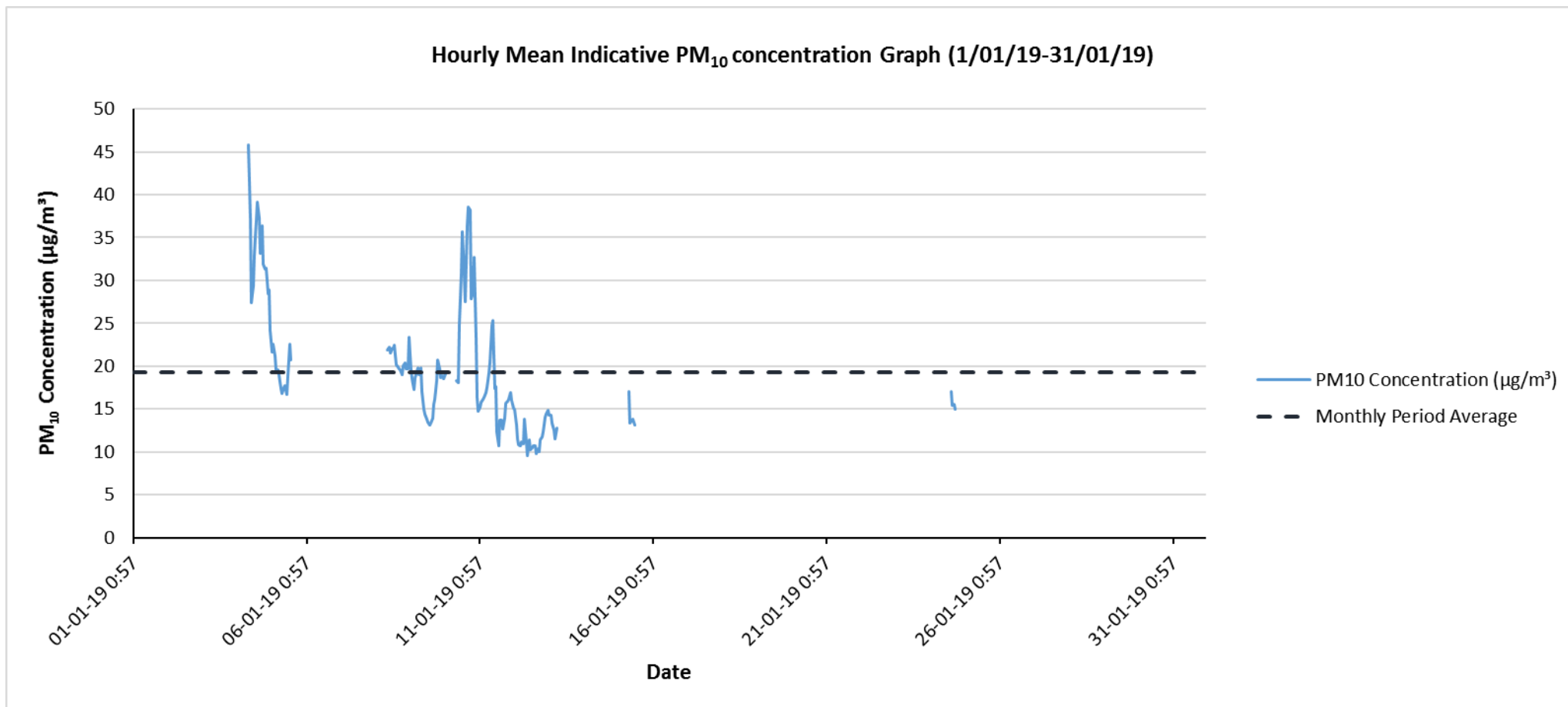


Figure 2: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 4WH 274 (January 2019)

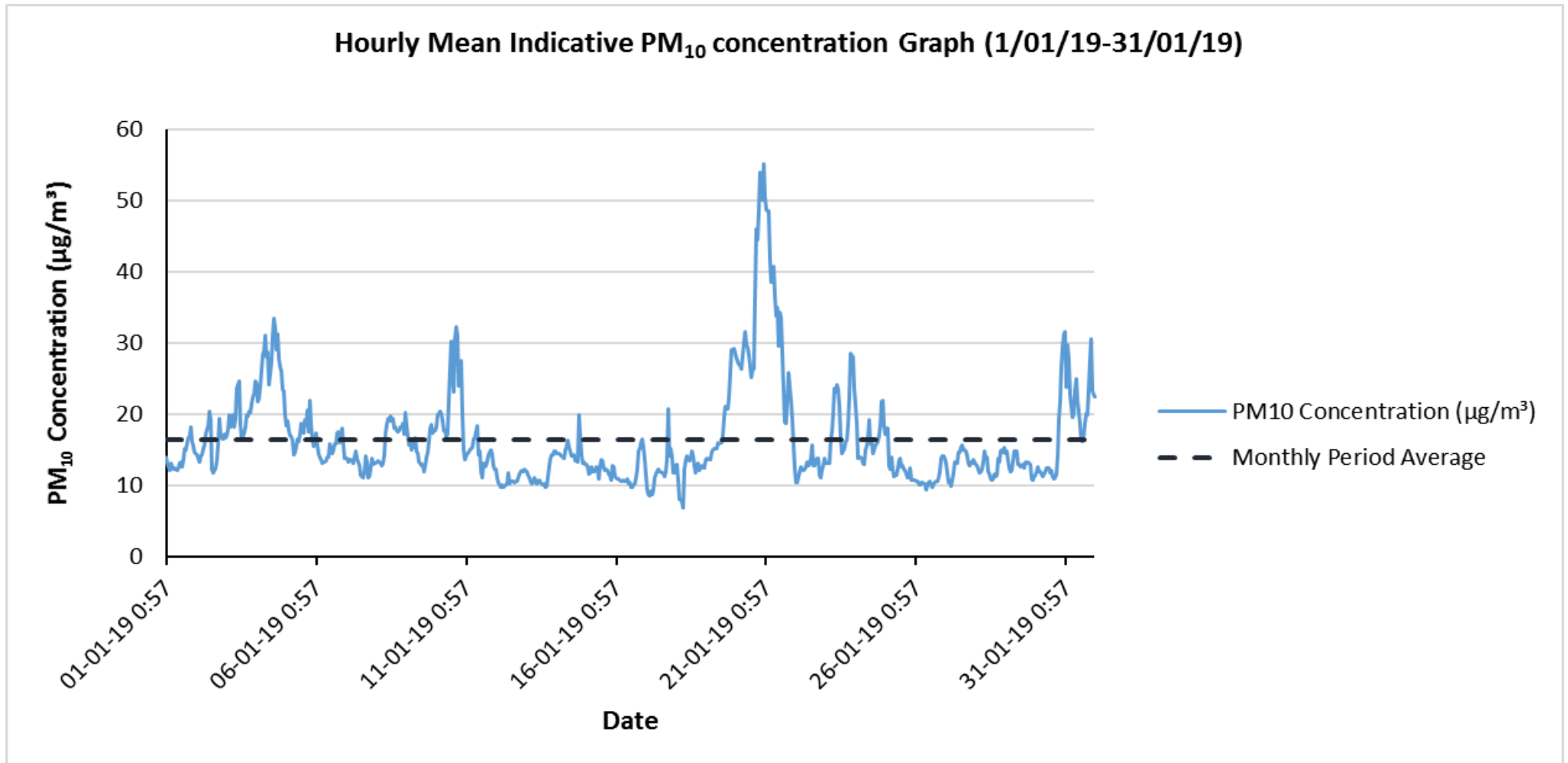


Figure 3: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 5WH 277 (January 2019)

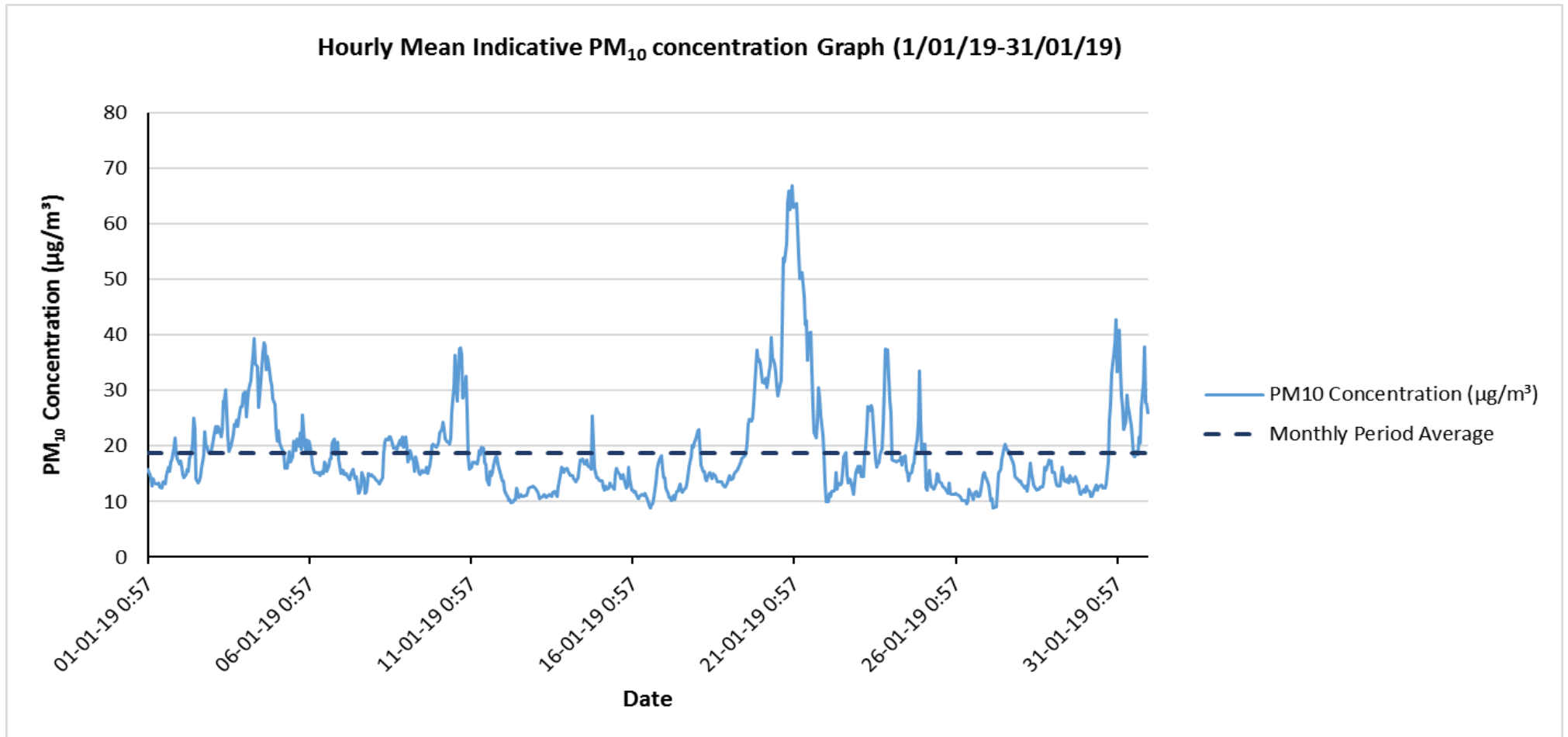


Figure 4: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 6WH 280 (January 2019)

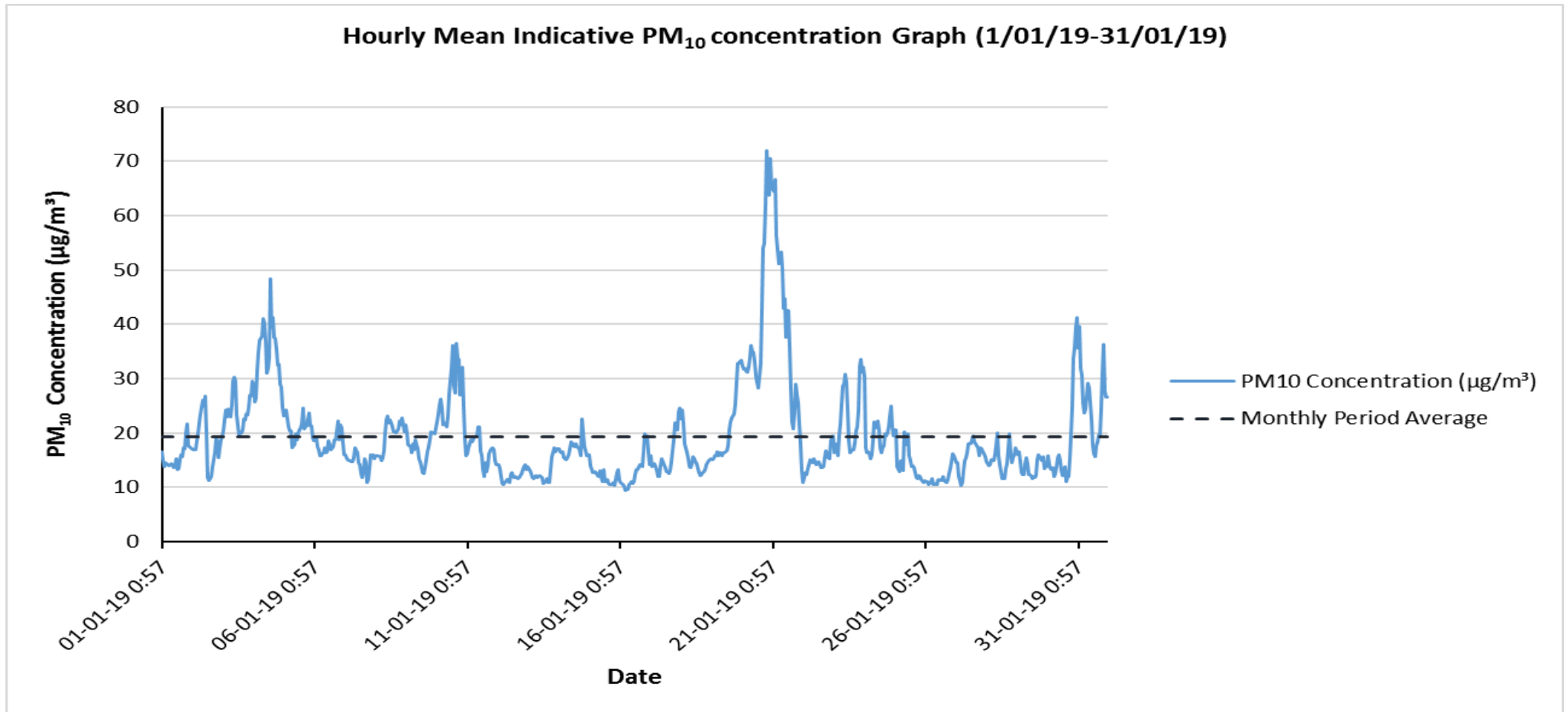


Figure 5: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 1 UNITE 262 (January 2019)

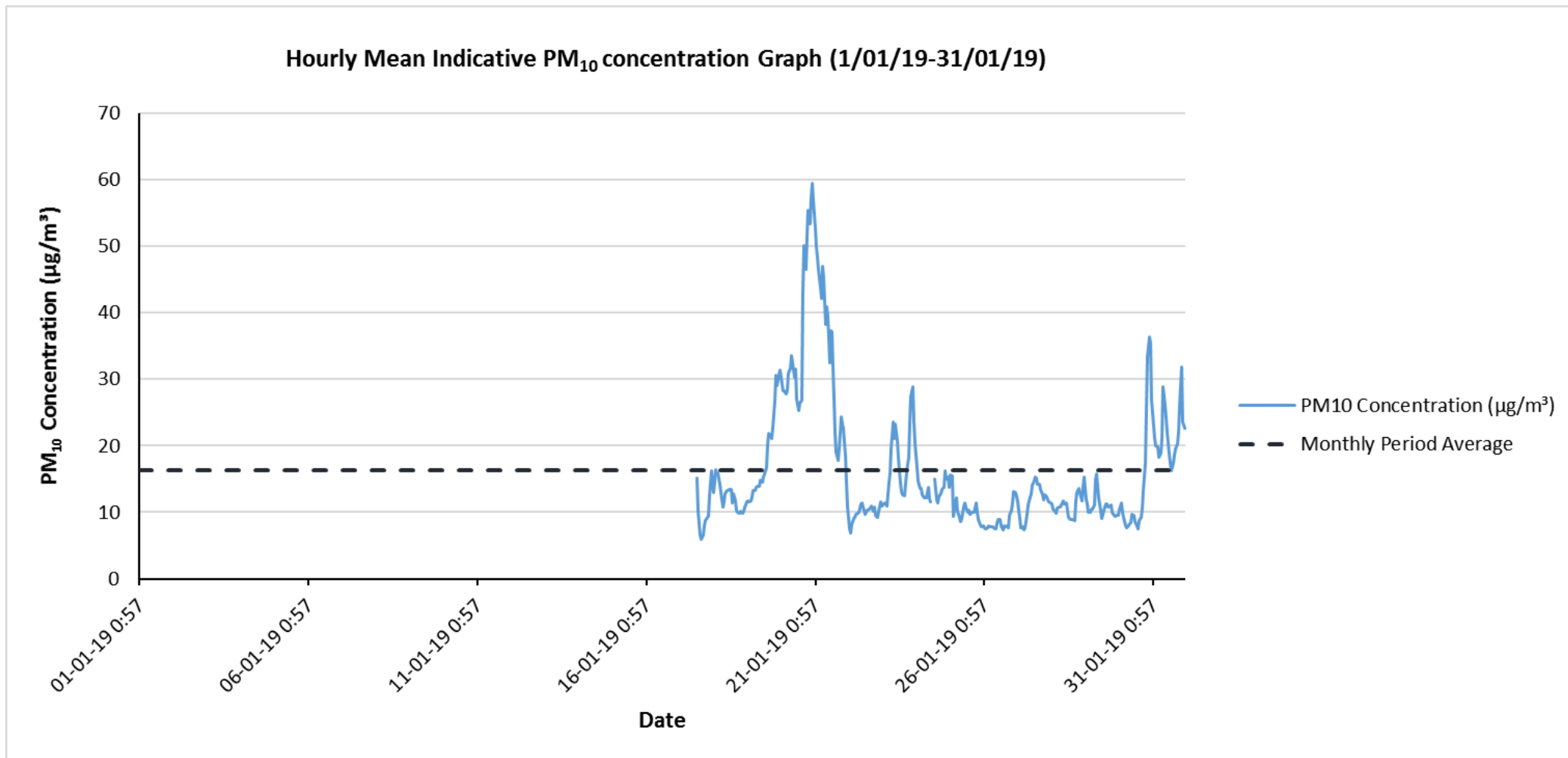


Figure 6: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 2 UNITE 265 (January 2019)

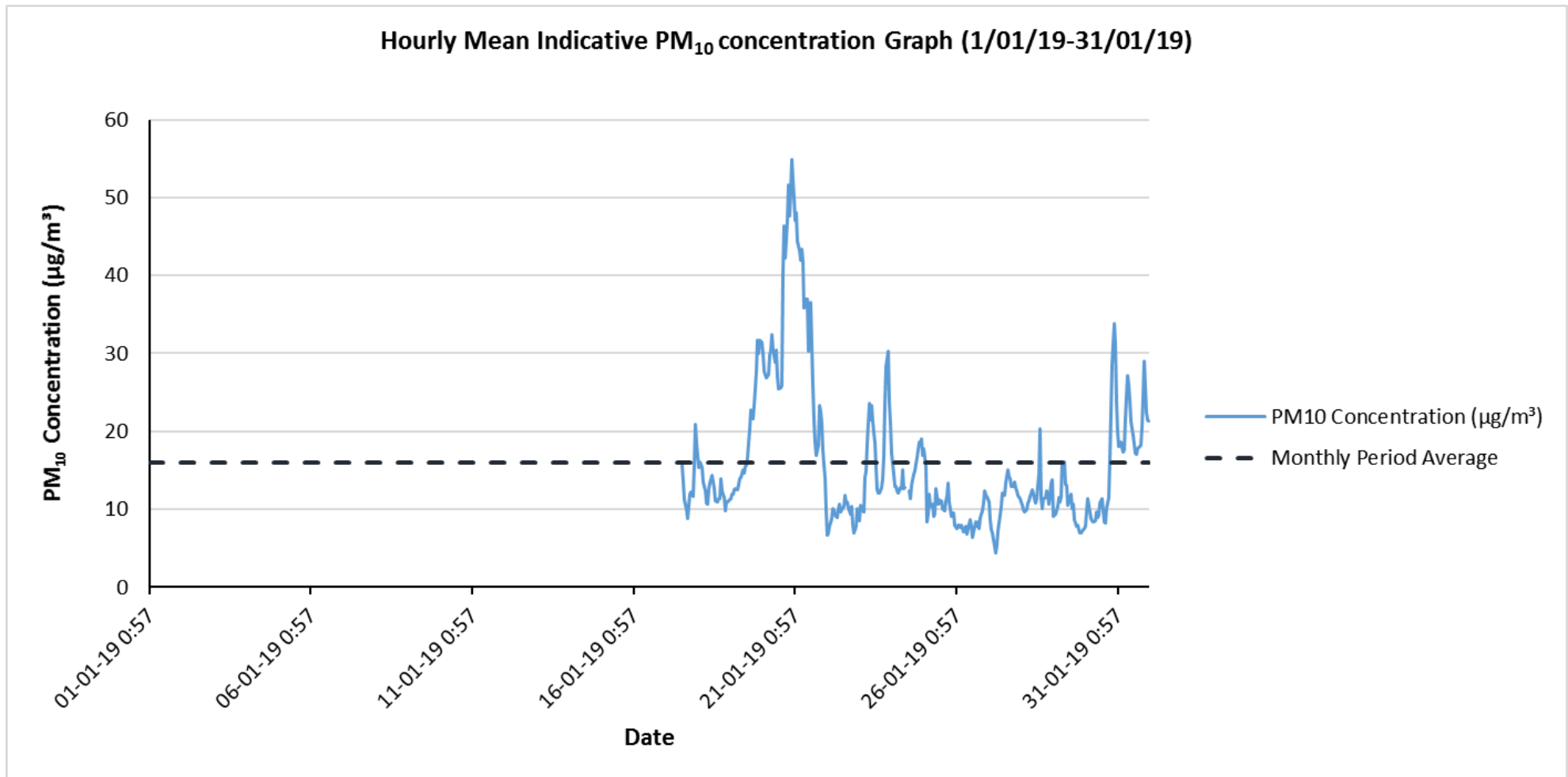


Figure 7: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 7 TNT 291 (January 2019)

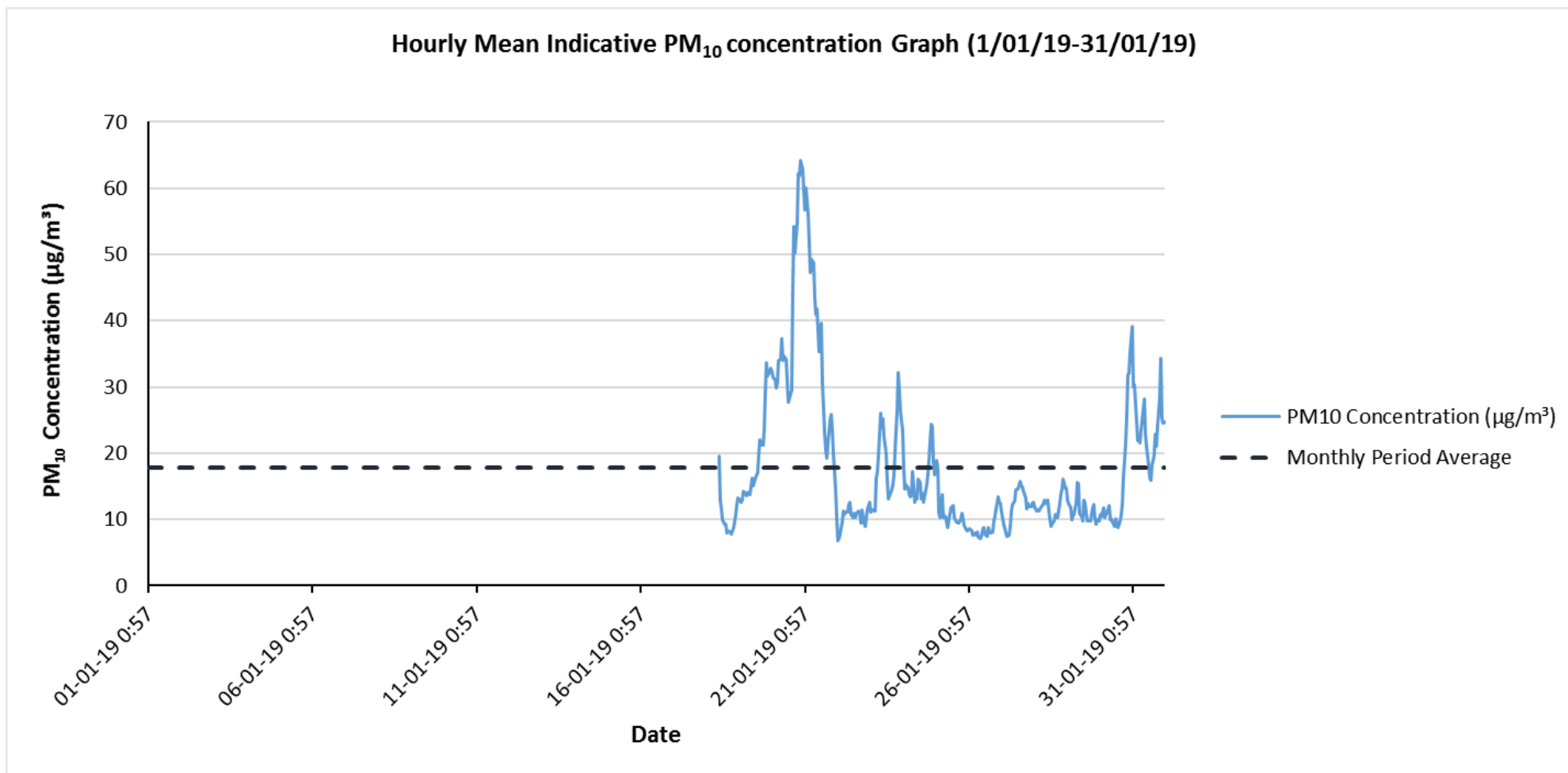


Figure 8: Construction dust hourly mean indicative PM₁₀ concentration for WSP HS2 9TNT 297 (January 2019)

