

# 52 Avenue Road, London NW8 6HP

## Air Quality Monitoring Report

Report 26019.1

Wednesday 25 January 2023 to Saturday 24 June 2023

**Domvs London (Global Holdings) Ltd**  
22 Wycombe End,  
Beaconsfield,  
Buckinghamshire,  
United Kingdom HP9 1NB

<b>Report 26019.1</b>			
<b>Revision History</b>			
<b>First Issue Date: 03/07/2023</b>			
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B		E	
C		F	
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## Contents

EXECUTIVE SUMMARY .....	4
1.0 INTRODUCTION .....	5
2.0 SITE DESCRIPTION .....	5
3.0 SITE WORKING HOURS.....	5
4.0 INSTALLED EQUIPMENT .....	6
5.0 MONITORING POSITIONS .....	6
6.0 METHODOLOGY .....	7
7.0 AIR PARTICULATE (DUST).....	7
7.1 Measured Particulates .....	7
7.2 Project Trigger & Action Levels.....	7
7.3 Air Particulate Monitoring Results.....	8
8.0 DISCUSSION.....	10

### List of Attachments

- Appendix A Glossary of Air Particle Terminology
- Appendix B Monitoring Site Plan

## EXECUTIVE SUMMARY

KP Monitoring Ltd has been commissioned to monitor the air quality levels at the 52 Avenue Road site, 52 Avenue Road, St Johns Wood, London NW8 6HP.

Air quality levels have been measured at 4No. positions around the development site. The measured parameters include PM2.5 particulate and PM10 particulate.

The following dust level exceedances were recorded across the development site during the monitoring period.

Position	Trigger Level Exceedances	Action Level Exceedances	Data Capture Rate
Position 1	N/A	N/A	94%
Position 2	N/A	N/A	98%
Position 3	N/A	N/A	91%
Position 4	N/A	N/A	97%

**Table 1** Recorded exceedance events at the development site

The results are presented herein.

## 1.0 INTRODUCTION

KP Monitoring Ltd have been appointed by Domvs London (Global Holdings) Ltd to monitor the ongoing air quality levels from the site at 52 Avenue Road, and to present the results within a baseline report.

This report details the procedures employed and the data obtained during the monitoring period spanning Wednesday 25 January 2023 to Saturday 24 June 2023.

## 2.0 SITE DESCRIPTION

The monitoring site is located within the London Borough of Camden's jurisdiction. It is bounded by Elsworthy Road to the north, Elsworthy Road to the west, residential properties to the south, and large residential landscapes to the east.

## 3.0 SITE WORKING HOURS

It is our understanding that no works are currently taking place at the development site. Once work commence, however, we understand that works shall take place between the following hours. These daytime periods shall hereby be referred to as the 'Working Day'.

Day	Start time	End Time
Monday	08:00	18:00
Tuesday	08:00	18:00
Wednesday	08:00	18:00
Thursday	08:00	18:00
Friday	08:00	18:00
Saturday	08:00	13:00
Sunday	No Work	No Work

Table 2 Site working hours referred to as 'Working Day'

#### 4.0 INSTALLED EQUIPMENT

Air quality monitoring equipment was installed at the 52 Avenue Road site, and has been continuously serviced, calibrated, and maintained, since Wednesday, 25 January 2023. The following equipment is currently installed:

Position	Manufacturer	Model	Serial
Position 1	Earthsense	Zephyr	1149
Position 2	Earthsense	Zephyr	1169
Position 3	Earthsense	Zephyr	948
Position 4	Earthsense	Zephyr	1043

**Table 3 Installed sensor details**

Each of the installed air quality monitoring sensors is equipped with a data logger and modem, and is protected from the elements with an environmental kit.

#### 5.0 MONITORING POSITIONS

Air quality monitoring sensors have been installed at 4No. positions around the development site. See site plan in Appendix D. The following table describes these positions.

Position	Monitoring Position
Position 1	The monitor is situated adjacent to Elsworthy Road at an approximate height of 2.5 metres.
Position 2	The monitor is situated adjacent to Elsworthy Road on the north western area of site and is at an approximate height of 2.5 metres.
Position 3	The monitor is situated on the south eastern area of site and is at an approximate height of 1 metre.
Position 4	The monitor is situated on the north eastern area of site and is at an approximate height of 1 metre.

**Table 4 Description of monitoring positions**

The above positions were recommended and approved by Camden Council as demonstrated in the attached email chain.

## 6.0 METHODOLOGY

Fully automated air quality monitoring has been undertaken at the 52 Avenue Road site, from Wednesday 25 January 2023 to Saturday 24 June 2023.

Our dust monitors utilise an Optical Particle Sensor (OPC) to measure particulate matter. The sensor counts and sizes individual particles as they pass through the sensing element. Particle counts are aggregated into particle fractions (PM1, PM2.5 & PM10) and density applied producing a concentration value. A hygroscopy factor is applied which corrects for humidity effects that otherwise produce false readings.

## 7.0 AIR PARTICULATE (DUST)

### 7.1 Measured Particulates

Fully automated dust monitoring has been undertaken to measure PM2.5, and PM10 particulate at the 52 Avenue Road site. The measured dust levels are shown in the associated attached graphs.

### 7.2 Project Trigger & Action Levels

It is our understanding that there are currently no defined air particulate Trigger and Action levels for this project.

Position	Trigger Level (PM10, $\mu\text{g}/\text{m}^3$ , 15min)	Action Level (PM10, $\mu\text{g}/\text{m}^3$ , 15min)
Position 1	N/A	N/A
Position 2	N/A	N/A
Position 3	N/A	N/A
Position 4	N/A	N/A

**Table 5 Defined Trigger and Action levels at the development site**

The following contacts are current recipients of the above alerts by email and/or SMS.

Recipient Name	Organisation
max.obrien@domvslondon.com	Domvs London (Global Holdings) Ltd

**Table 6 Trigger and Action alert recipients**

### 7.3 Air Particulate Monitoring Results

The measured dust levels are shown in Appendix B and the associated graphs. The following dust level exceedances were recorded across the development site during the monitoring period.

Position	Trigger Level Exceedances	Action Level Exceedances	Data Capture Rate
Position 1	N/A	N/A	94%
Position 2	N/A	N/A	98%
Position 3	N/A	N/A	91%
Position 4	N/A	N/A	97%

**Table 7 Recorded exceedance events at the development site**

During the monitoring period of Wednesday 25 January 2023 to Saturday 24 June 2023, there were 7No. days when PM10 particulate matter levels exceeded  $50\mu\text{g}/\text{m}^3$  over a 15-minute period at Position 1.

During the monitoring period of Wednesday 25 January 2023 to Saturday 24 June 2023, there were 9No. days when PM10 particulate matter levels exceeded  $50\mu\text{g}/\text{m}^3$  over a 15-minute period at Position 2.

During the monitoring period of Wednesday 25 January 2023 to Saturday 24 June 2023, there were 3No. days when PM10 particulate matter levels exceeded  $50\mu\text{g}/\text{m}^3$  over a 15-minute period at Position 3.

During the monitoring period of Wednesday 25 January 2023 to Saturday 24 June 2023, there were 3No. days when PM10 particulate matter levels exceeded  $50\mu\text{g}/\text{m}^3$  over a 15-minute period at Position 4.



Using the data collected from the beginning of the project on 25 January 2023, we have estimated the Annual Mean PM10 particulate matter for each monitoring location. This Annual Mean has been seasonally corrected to allow for the short-term monitoring period, and is presented below.

Background Site	Annual Mean 2022 (Am)	Period Mean 2023 (Pm)	Ratio (Am/Pm)
London Bloomsbury	17.3	15.1	1.1
Euston Road, Camden	20.6	16.4	1.6
Coopers Lane, Camden	16.5	15.1	1.1
<b>Average (Ra)</b>			1.3

**Table 9 Annualised Continuous Monitoring Data for 25 May 2023 to 24 June 2023**

The Period Mean PM 10 particulate matter at Position 1 was 10.22µg/m<sup>3</sup>. The best estimate of the Annual Mean at Position 1 for 2023 is 13.28µg/m<sup>3</sup>. The total data capture rate at this location was 94% for the monitoring period of 25 January 2023 to 24 June 2023.

The Period Mean PM 10 particulate matter at Position 2 was 14.53µg/m<sup>3</sup>. The best estimate of the Annual Mean at Position 1 for 2023 is 18.59µg/m<sup>3</sup>. The total data capture rate at this location was 98% for the monitoring period of 25 January 2023 to 24 June 2023.

The Period Mean PM 10 particulate matter at Position 3 was 11.05µg/m<sup>3</sup>. The best estimate of the Annual Mean at Position 1 for 2023 is 14.36µg/m<sup>3</sup>. The total data capture rate at this location was 91% for the monitoring period of 25 January 2023 to 24 June 2023.

The Period Mean PM 10 particulate matter at Position 4 was 10.69µg/m<sup>3</sup>. The best estimate of the Annual Mean at Position 1 for 2023 is 13.89µg/m<sup>3</sup>. The total data capture rate at this location was 97% for the monitoring period of 25 January 2023 to 24 June 2023.

## **8.0 DISCUSSION**

Environmental air quality monitoring has been undertaken at the 52 Avenue Road site, during the period spanning Wednesday 25 January 2023 to Saturday 24 June 2023.

The results are presented herein.

## **APPENDIX A – AIR QUALITY TERMINOLOGY**

### **PM<sub>x</sub> Particulate Matter**

Used as a measurement of air particles where x is the size of the particle measured in micrometres (or  $\mu\text{m}$ ). PM<sub>10</sub> describes inhalable particles, with diameters that are 10 micrometres and smaller. Sources include crushing or grinding operations and dust stirred up by vehicles on roads. PM<sub>2.5</sub> describes fine particles that are 2.5 micrometres or smaller in diameter and can only be seen with an electron microscope and are able to penetrate to the lungs. Typical sources include all types of combustion, including motor vehicles, power plants and agricultural burning. PM<sub>1</sub> describes particles that are 1 micrometre or smaller in diameter.

### **TSP Total Suspended Particles**

Used as a measure of the mass concentration of particulate matter in the air. TSP covers the full range of particle sizes and is commonly measured alongside PM<sub>10</sub> and PM<sub>2.5</sub>.


### **Nephelometer**

Sometimes referred to as a turbidimeter, these devices are used to measure the concentration of particulates suspended in a fluid. Suspended particulates are measured by employing a light beam and a light detector set to one side (often 90°) of the source beam. Particle density is then a function of the light reflected into the detector from the particles.

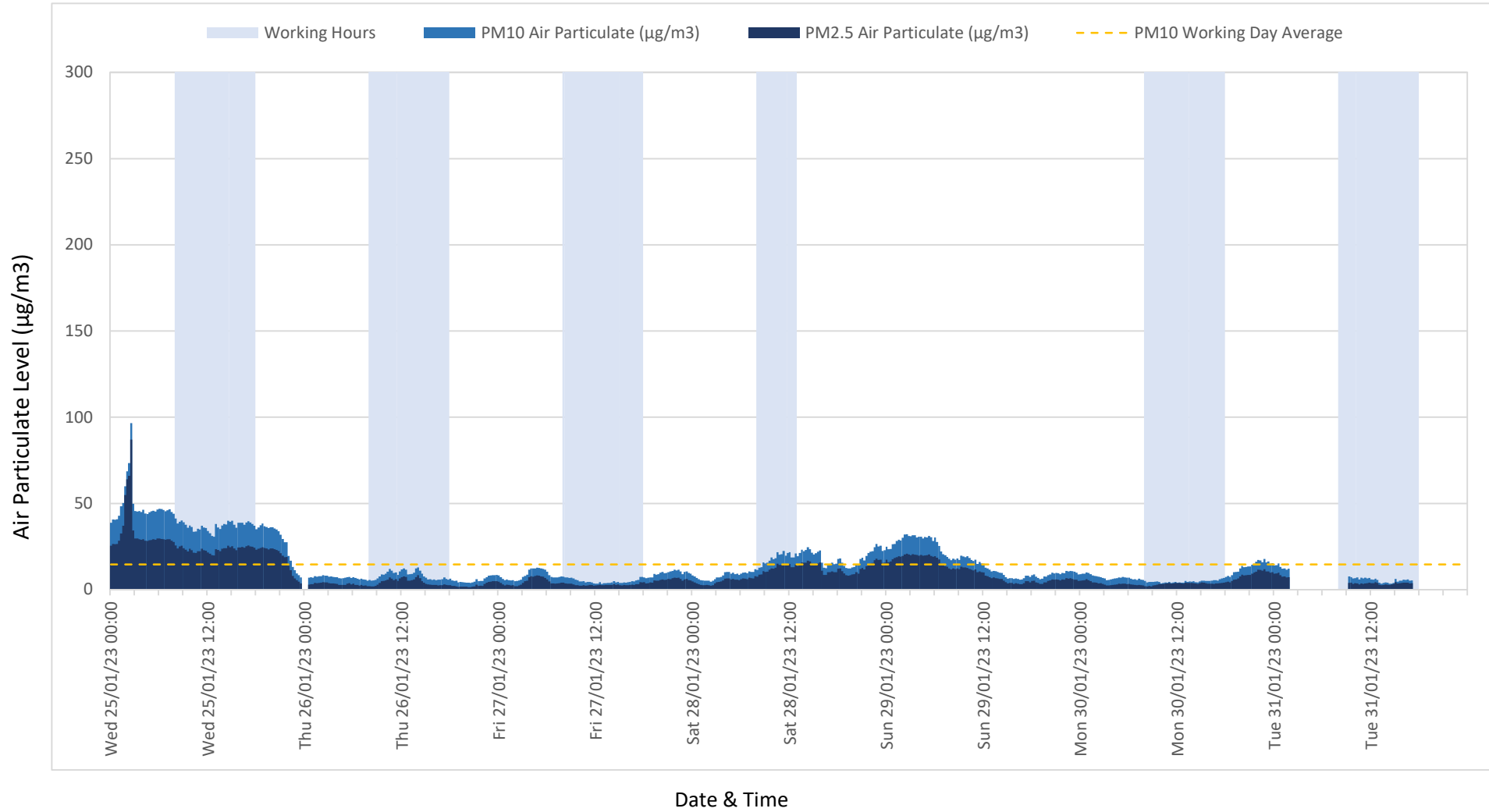
**APPENDIX D – Environmental Monitoring Site Plan**



**D - Dust Measurement Positions**

Environmental Monitoring Positions	52 Avenue Road	Revision: -	Not to Scale	 Part of the KP Acoustics Group
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**52 Avenue Road**  
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Wednesday 25/01/2023 to Tuesday 31/01/2023

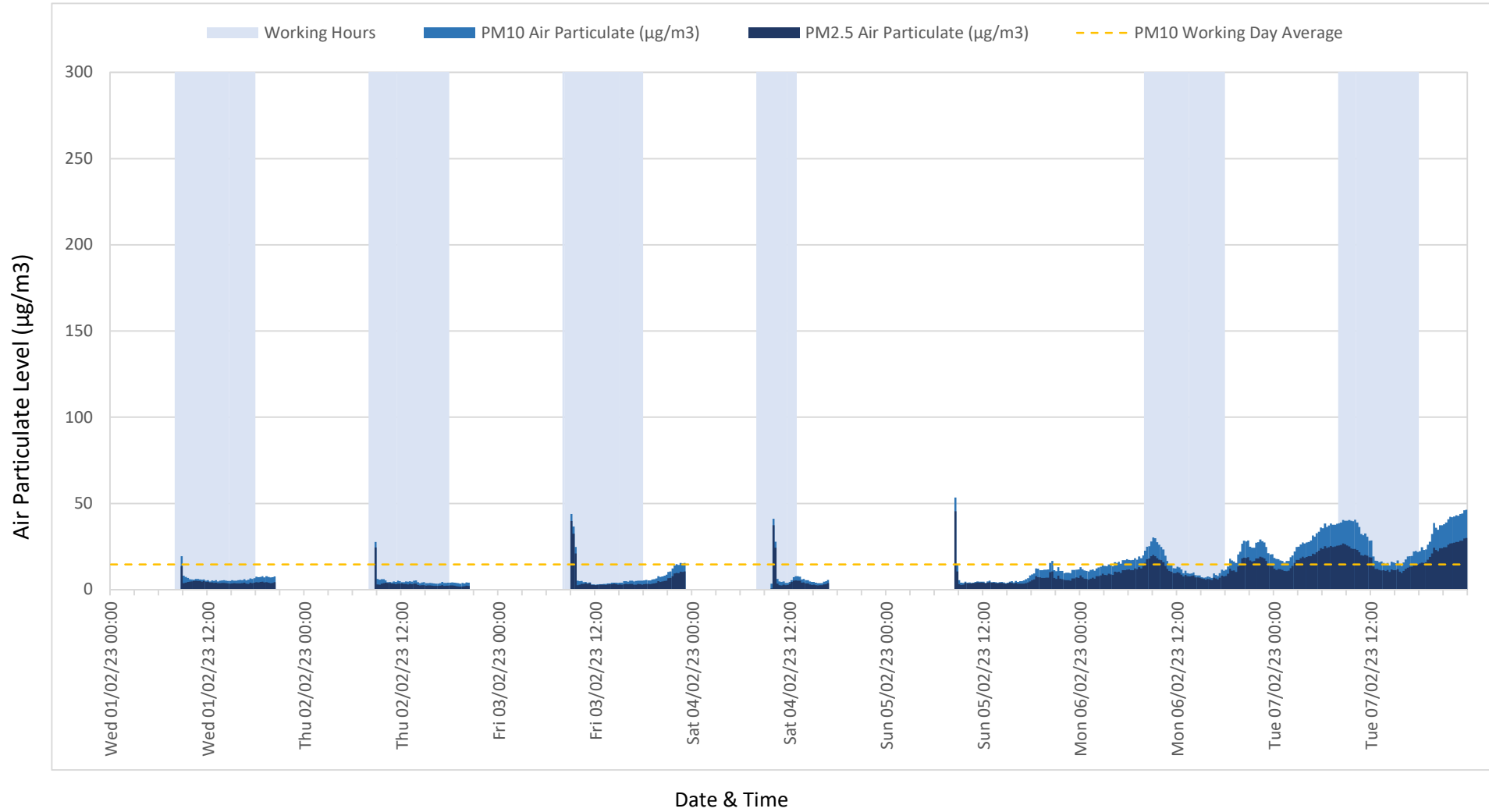




# 52 Avenue Road

Position 1

Wednesday 01/02/2023 to Tuesday 07/02/2023

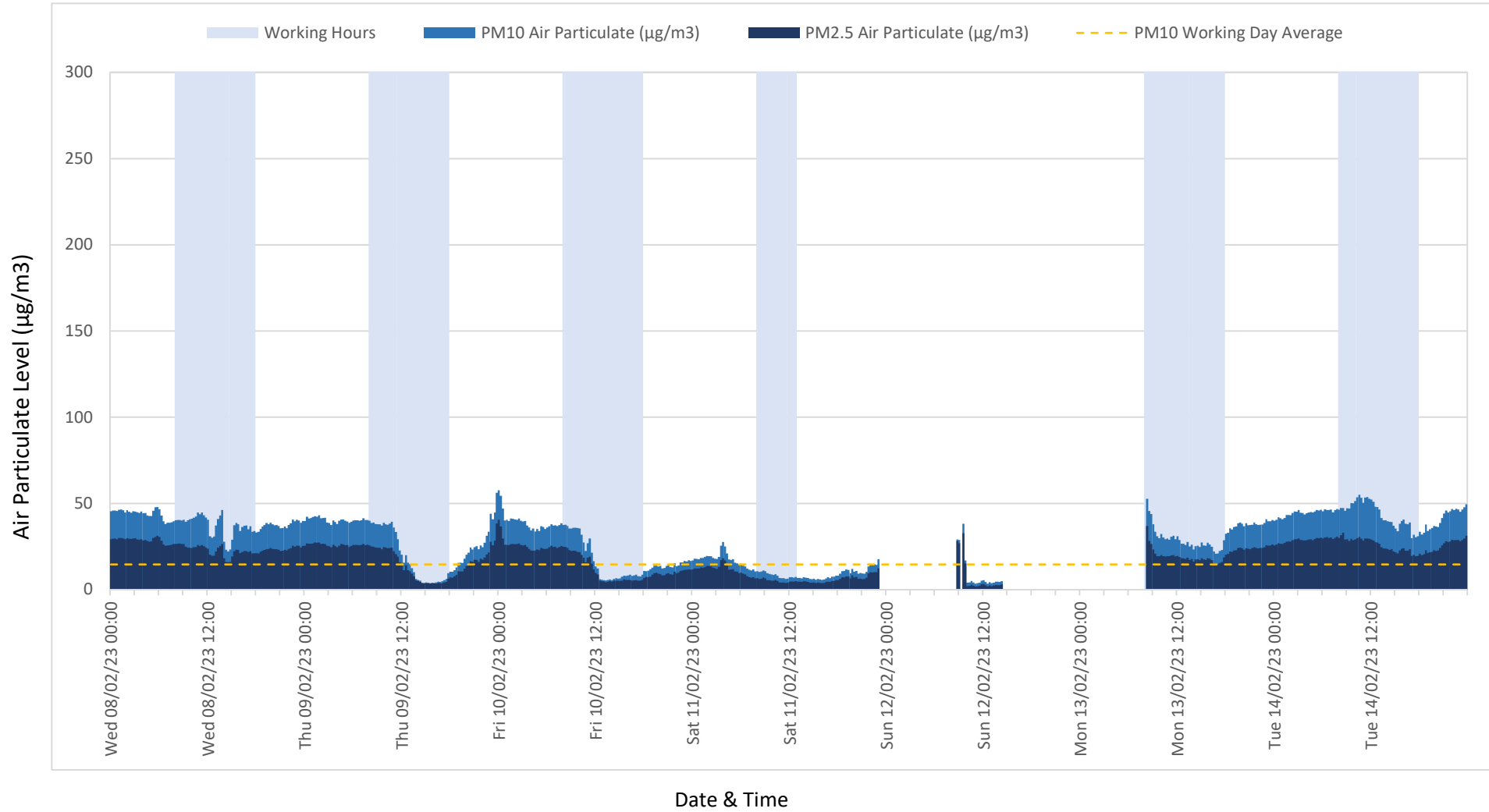




# 52 Avenue Road

Position 1

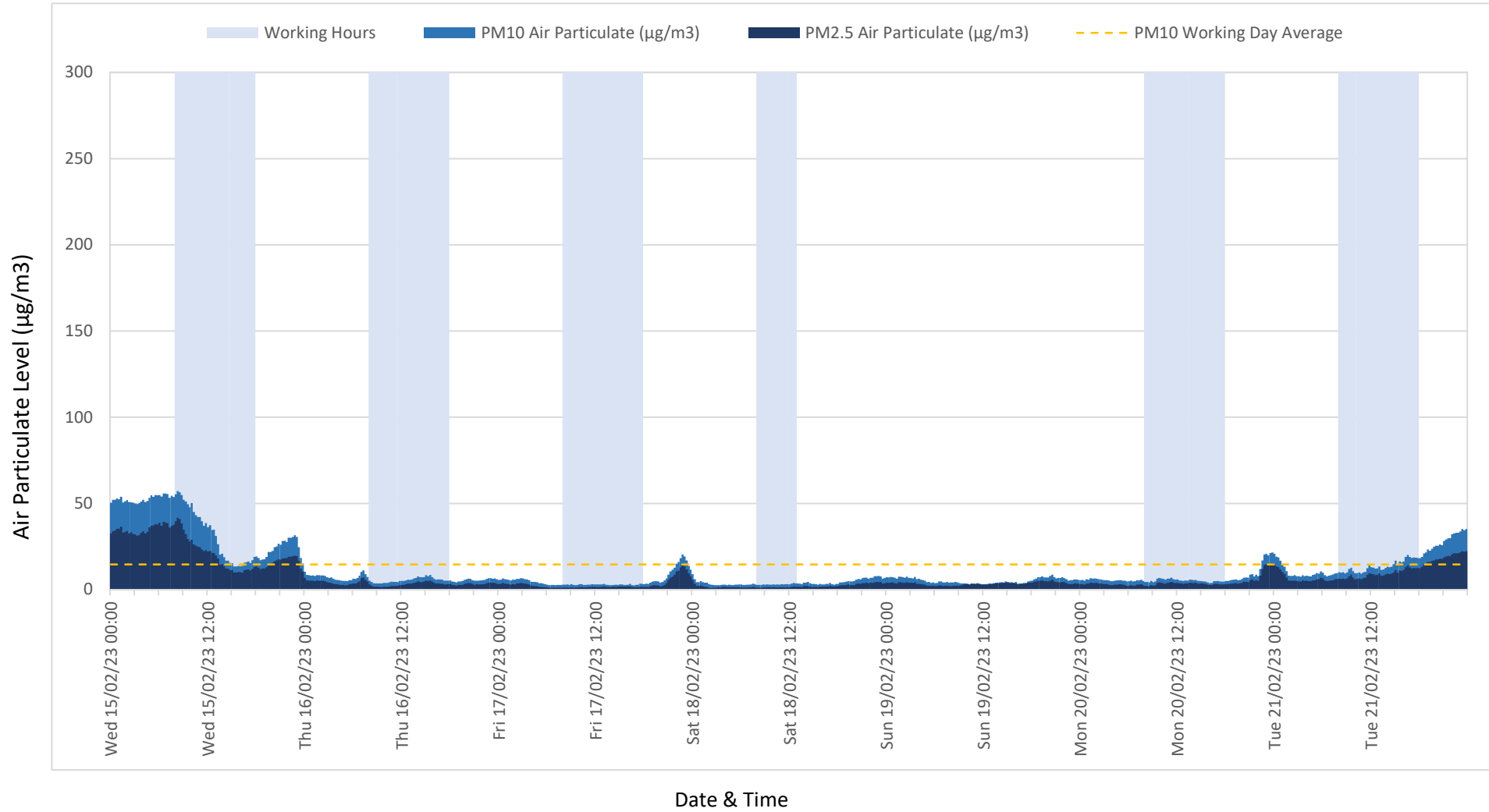
Wednesday 08/02/2023 to Tuesday 14/02/2023



## 52 Avenue Road

Position 1

Wednesday 15/02/2023 to Tuesday 21/02/2023



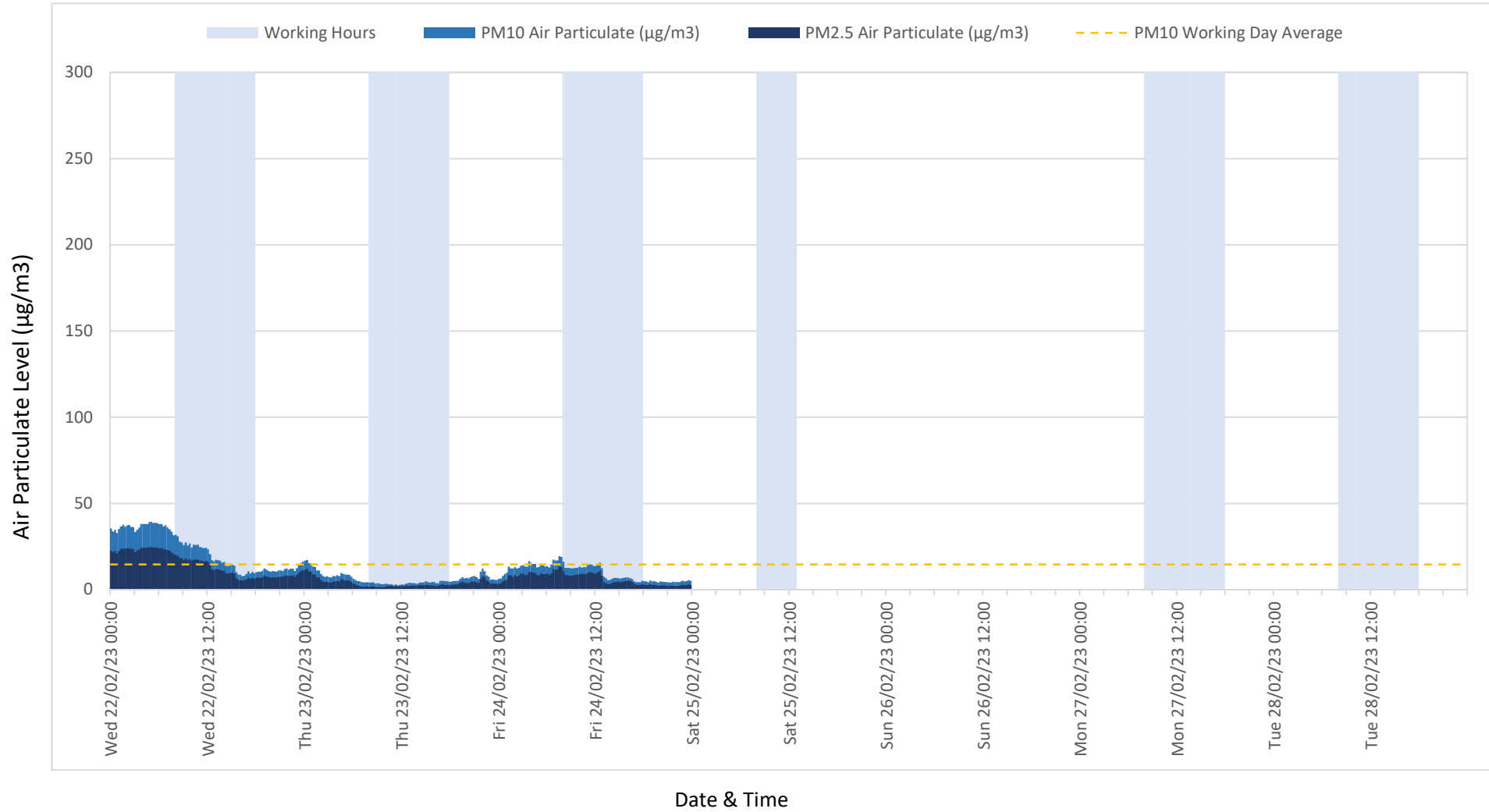




# 52 Avenue Road

Position 1

Wednesday 22/02/2023 to Tuesday 28/02/2023

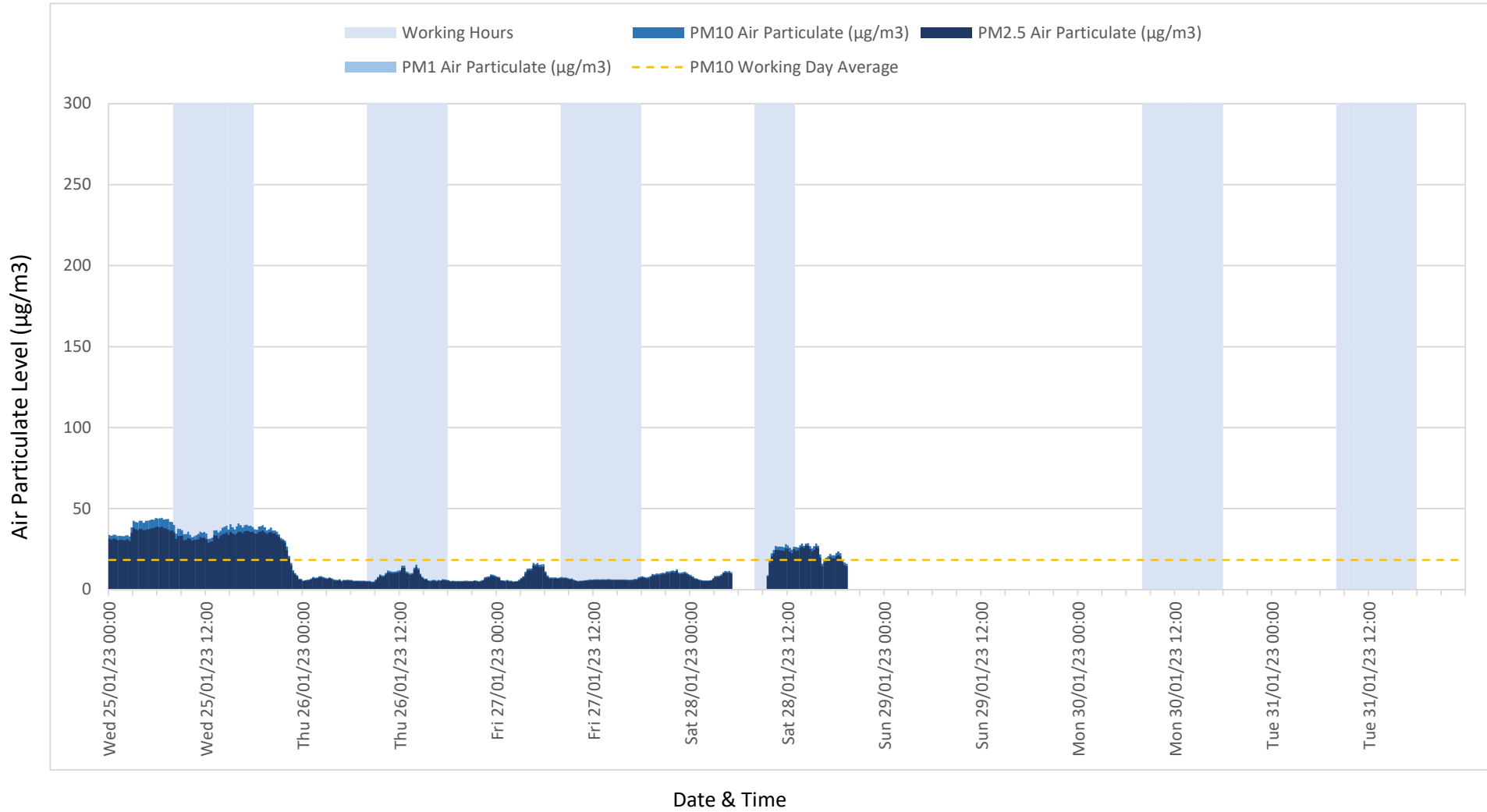




# 52 Avenue Road

Position 2

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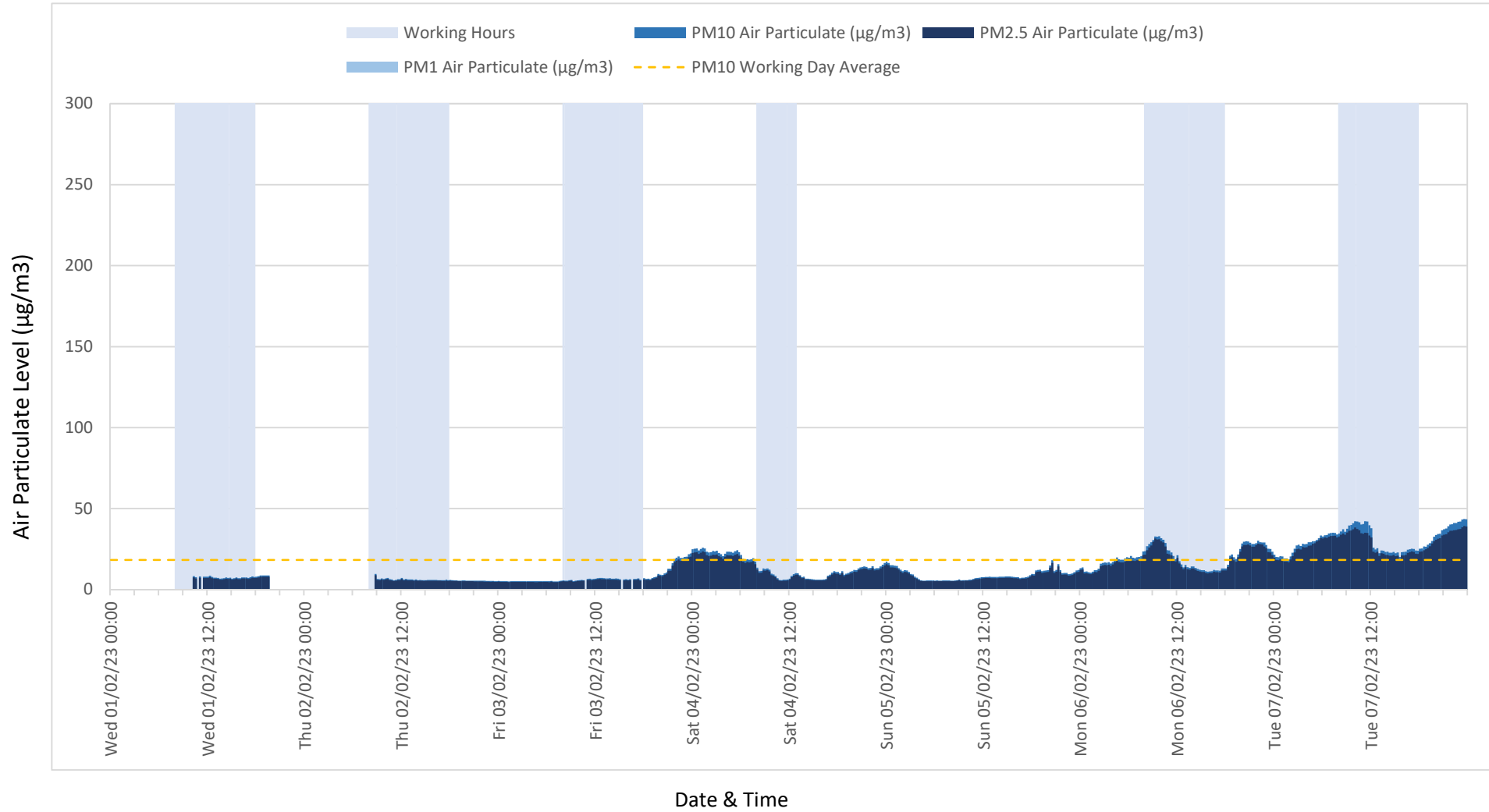




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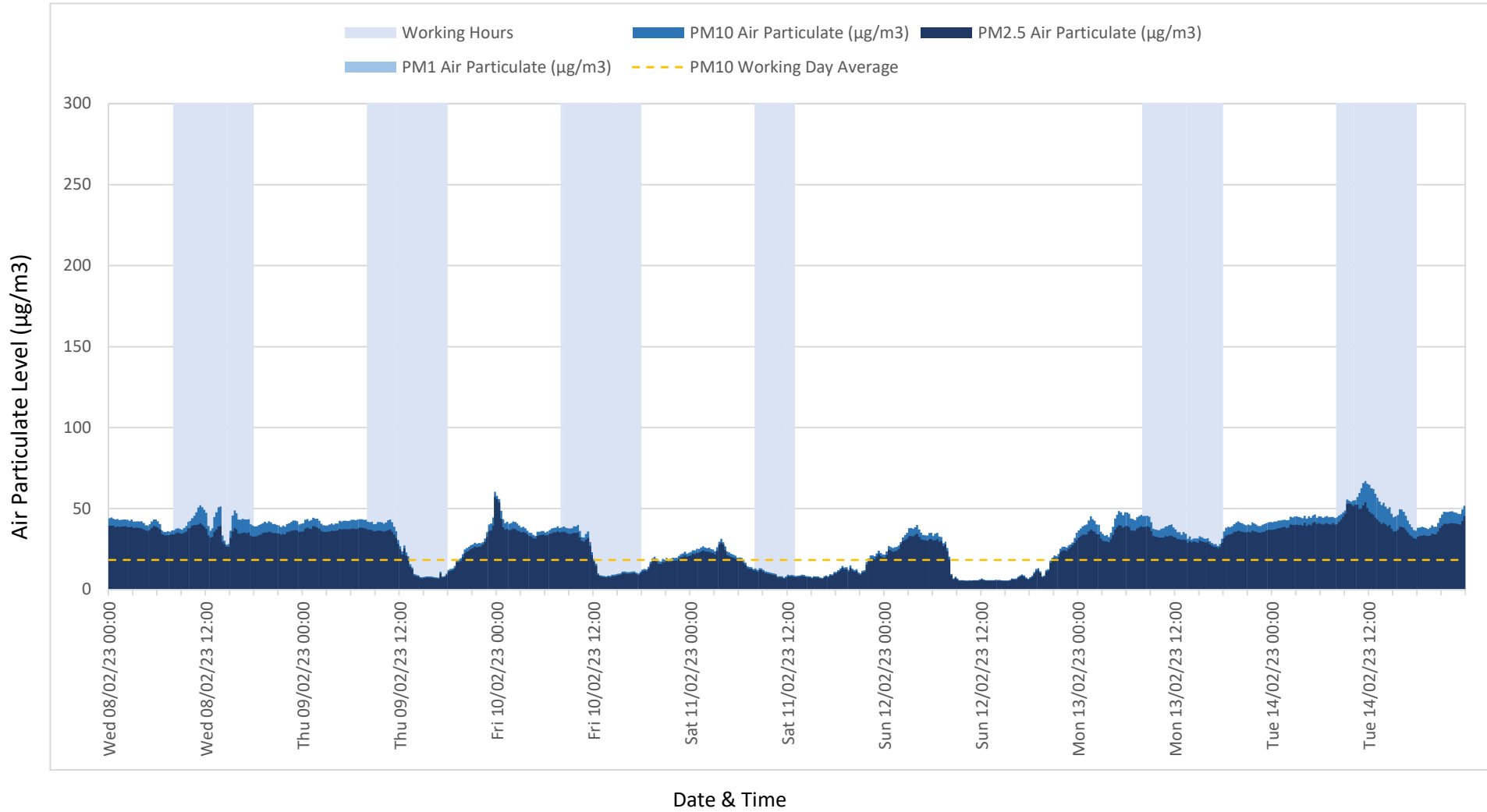




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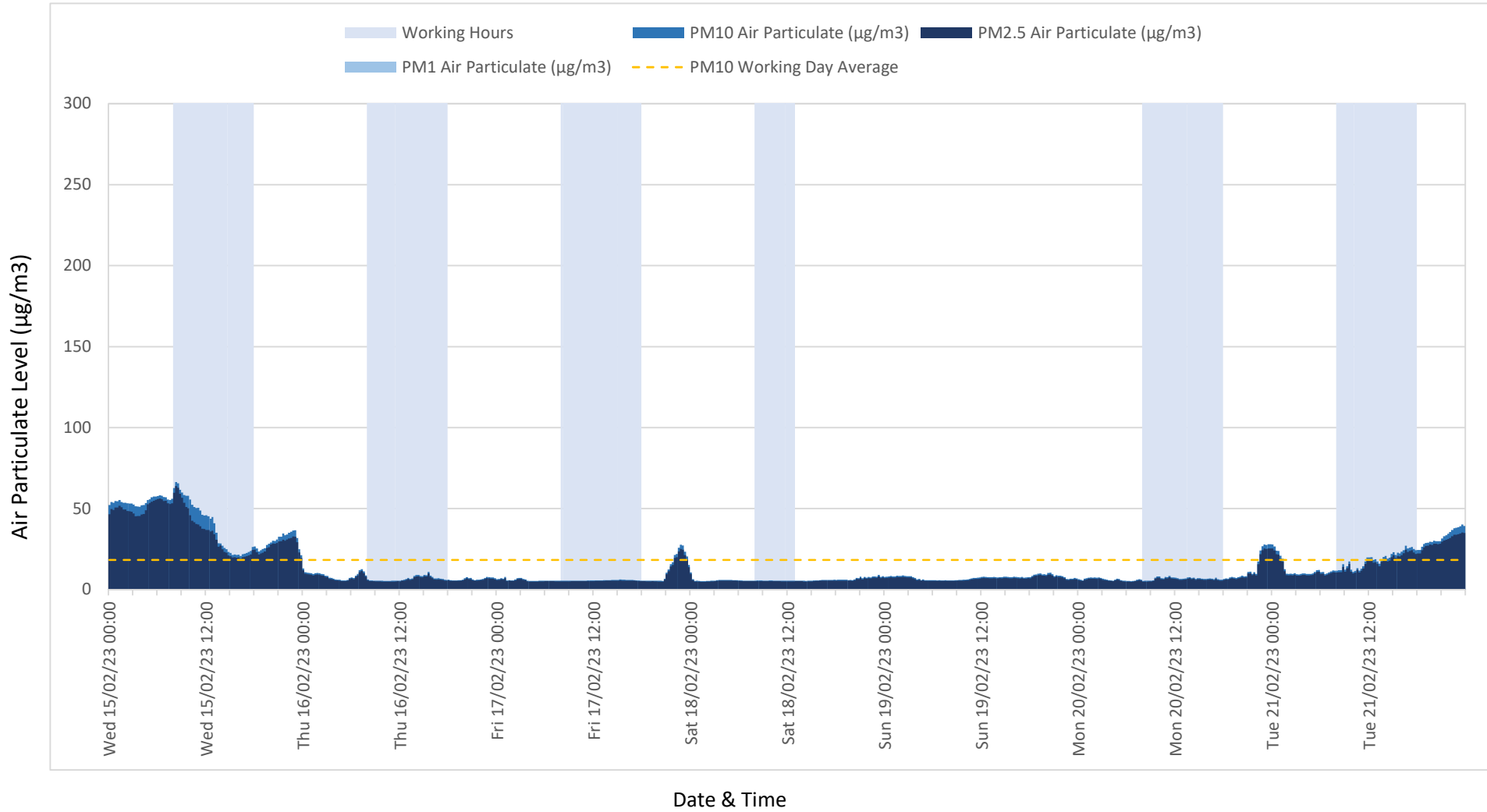




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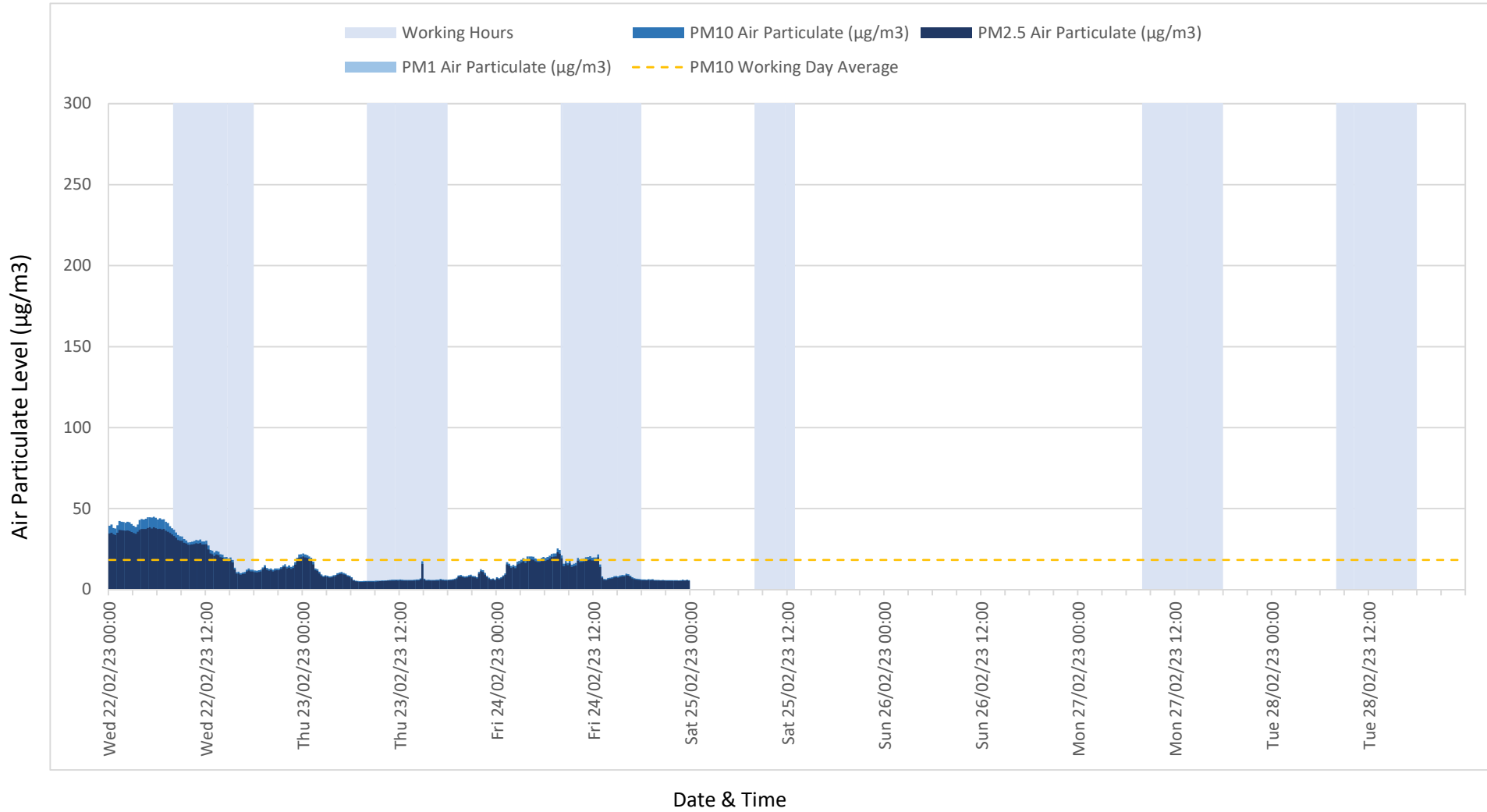




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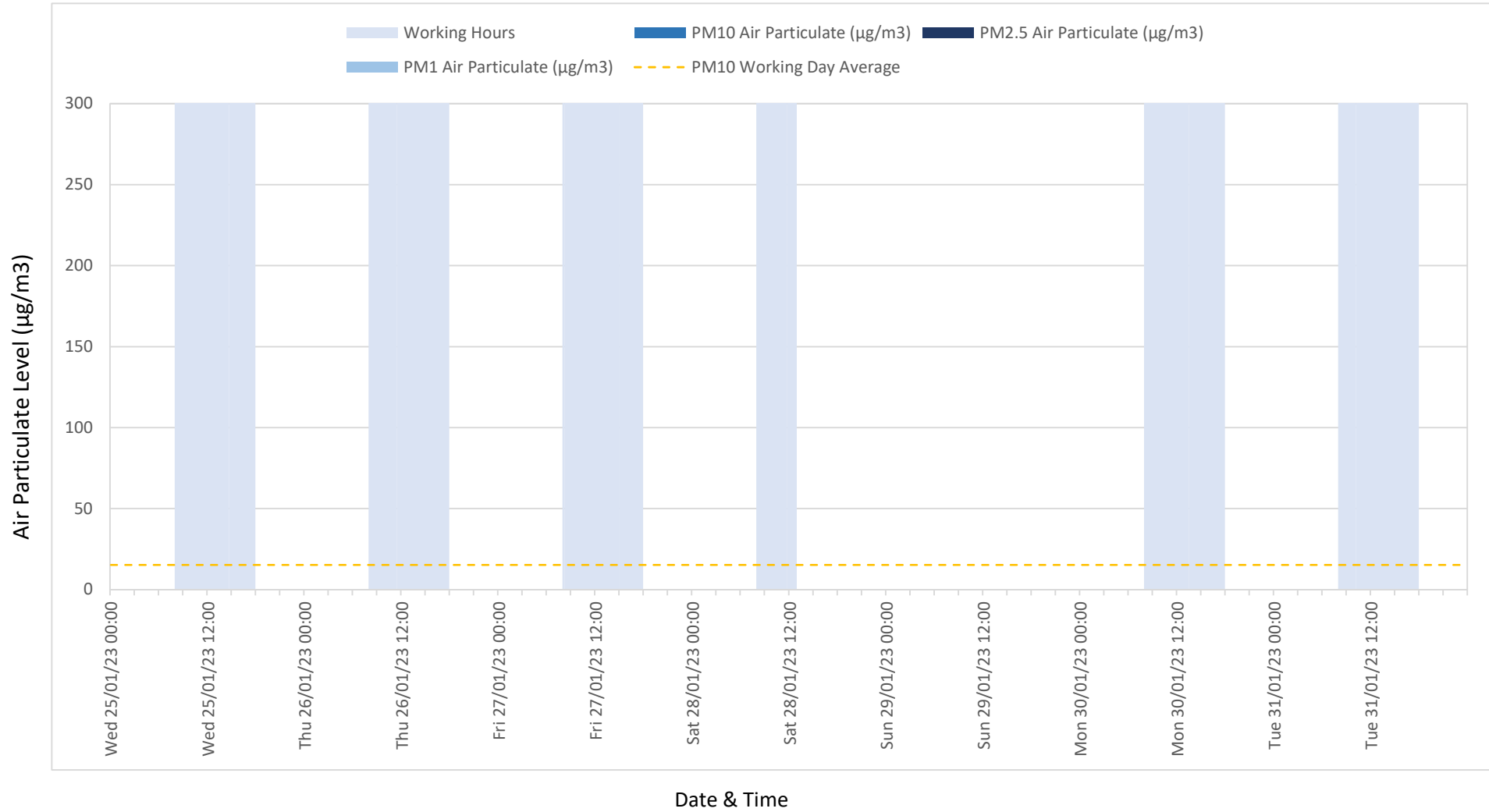




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Position 3

Wednesday 25/01/2023 to Tuesday 31/01/2023

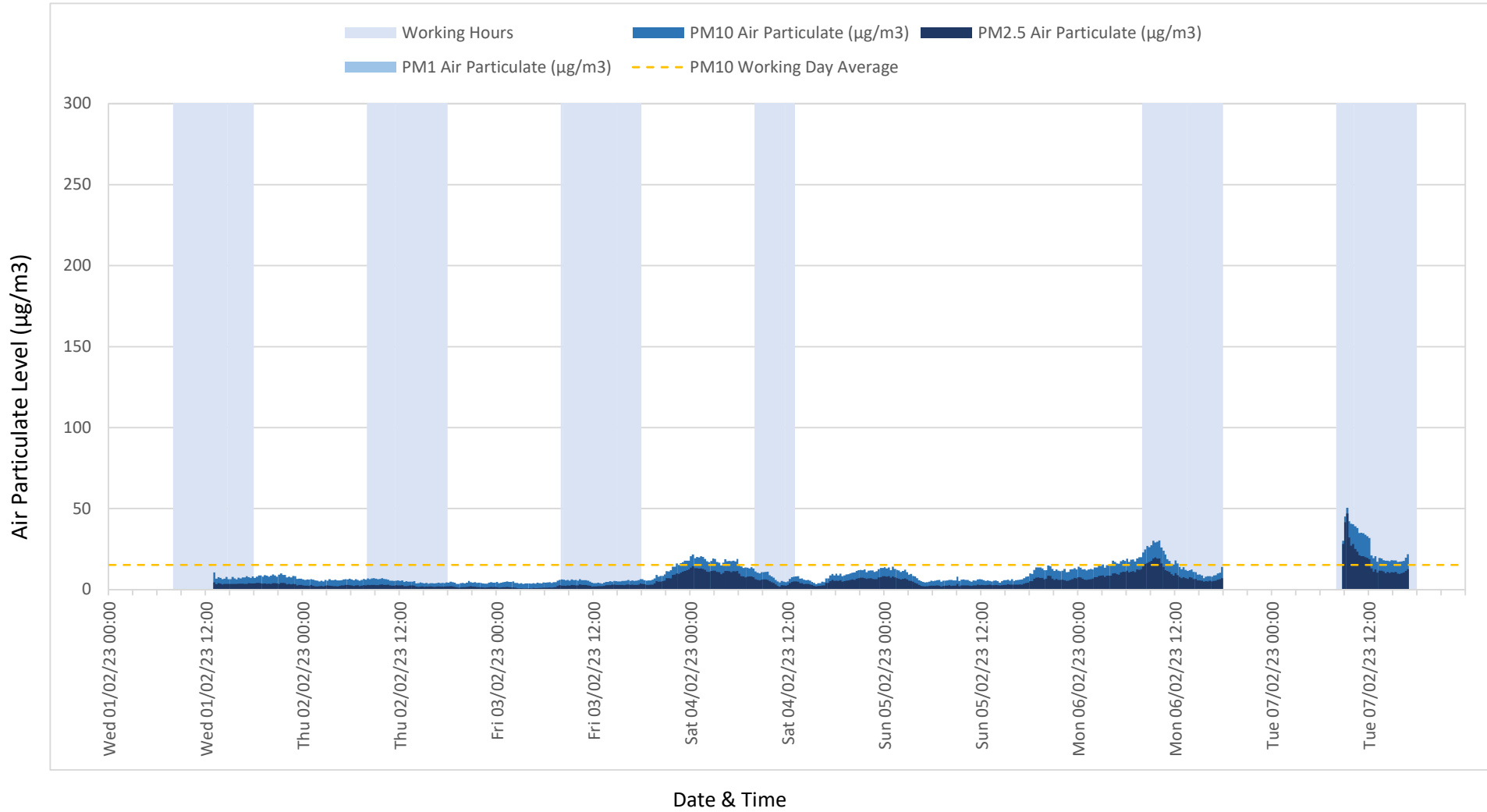




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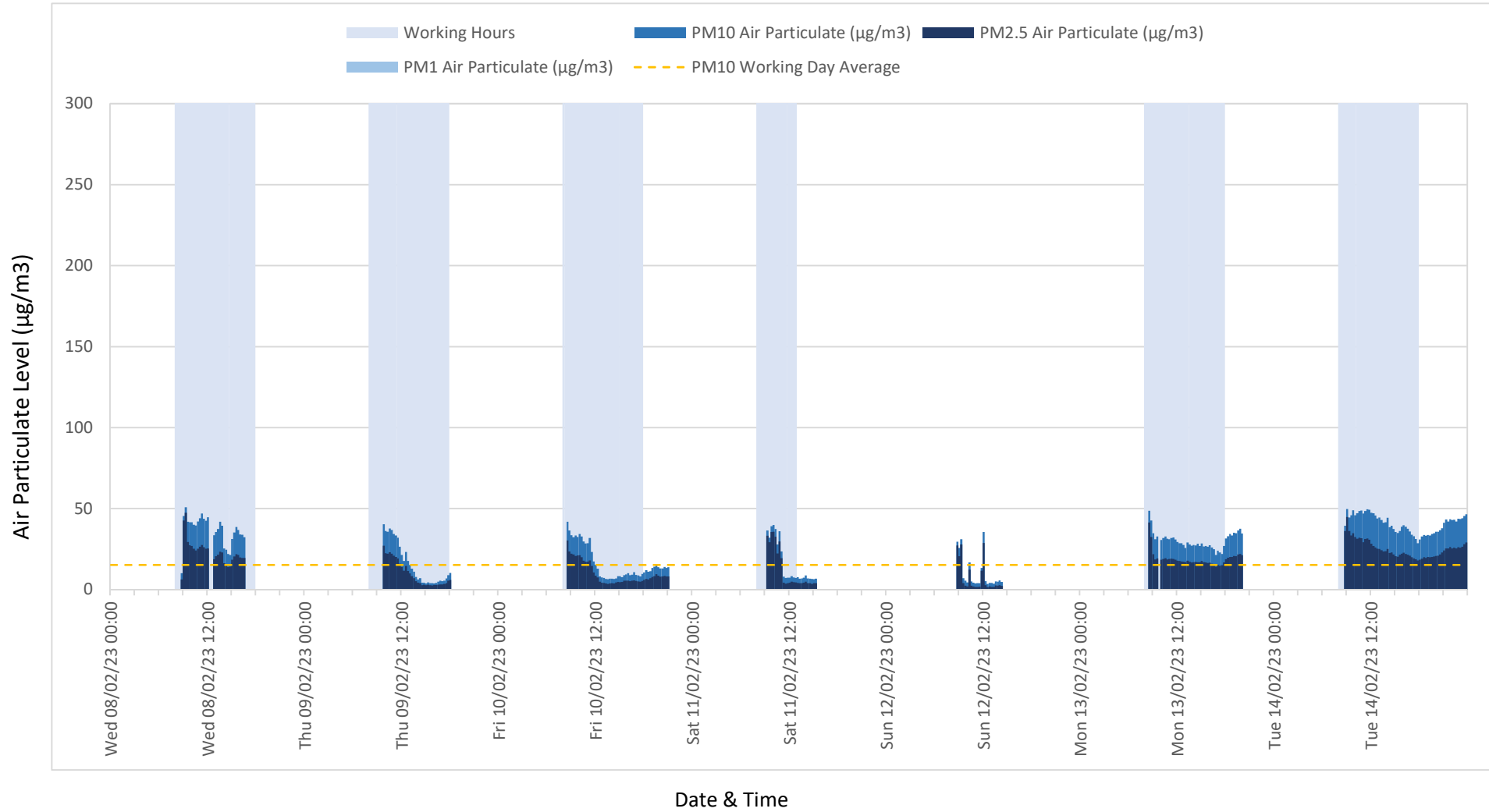




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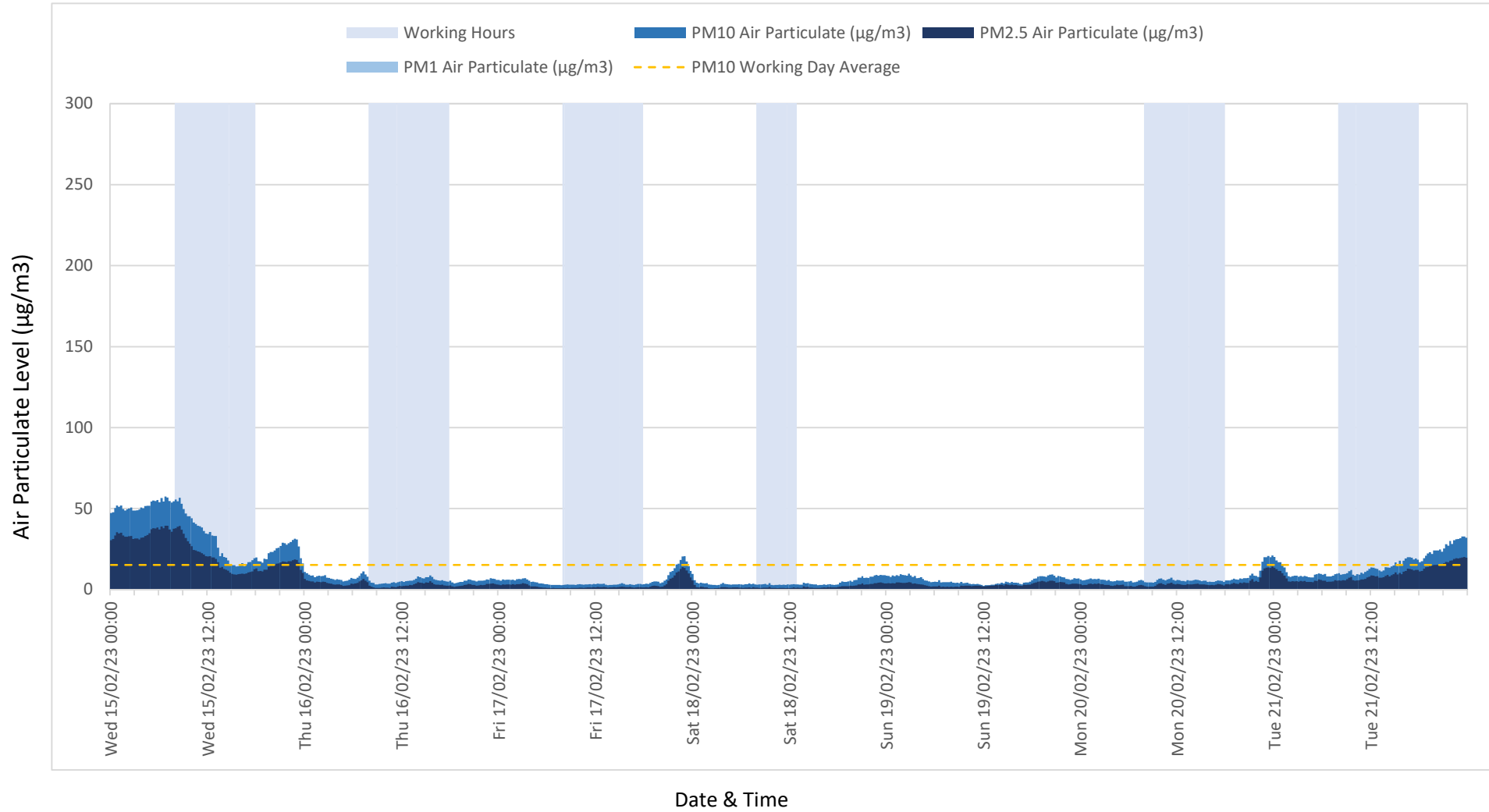




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Position 3

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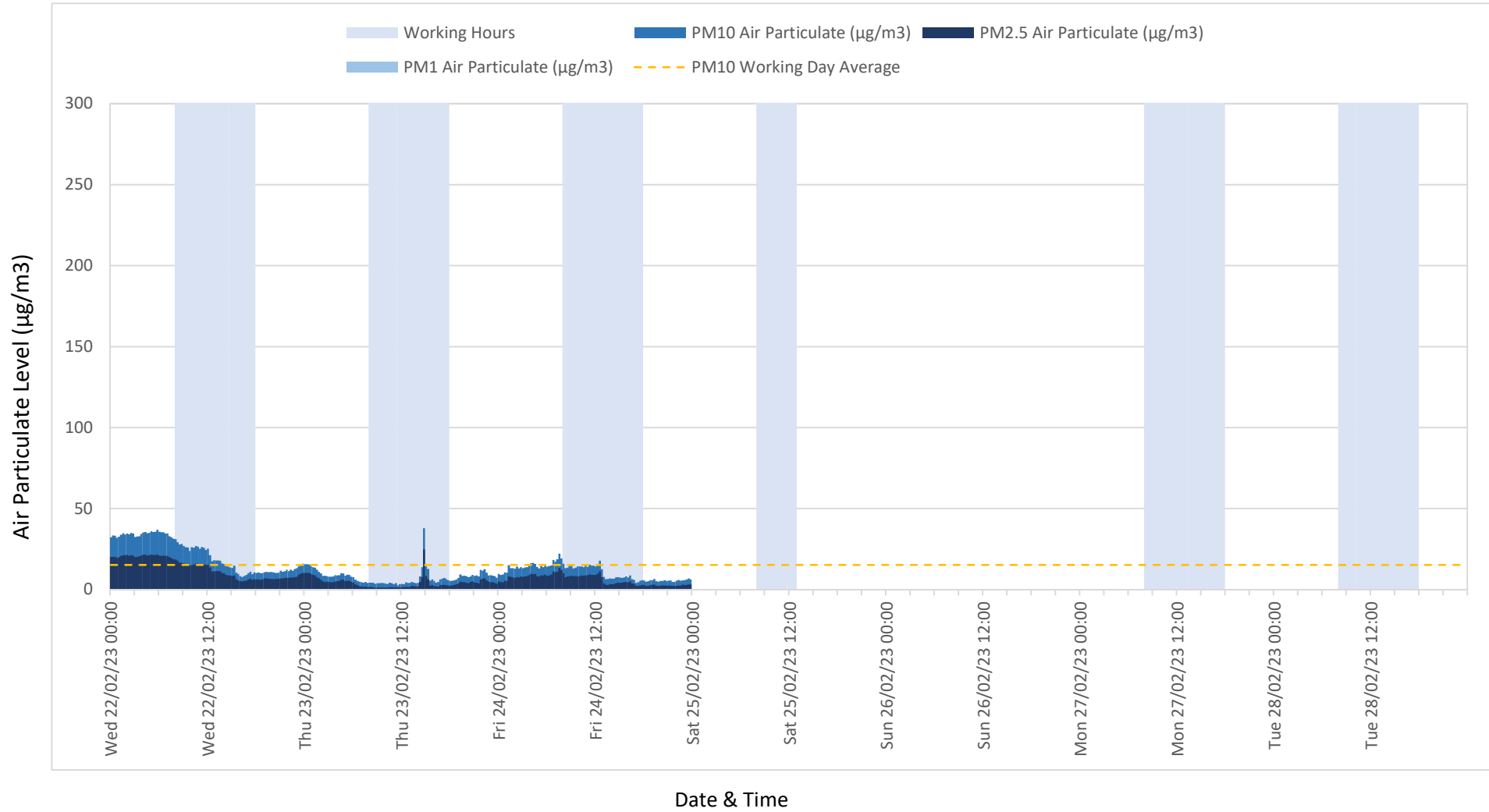




# 52 Avenue Road

Position 3

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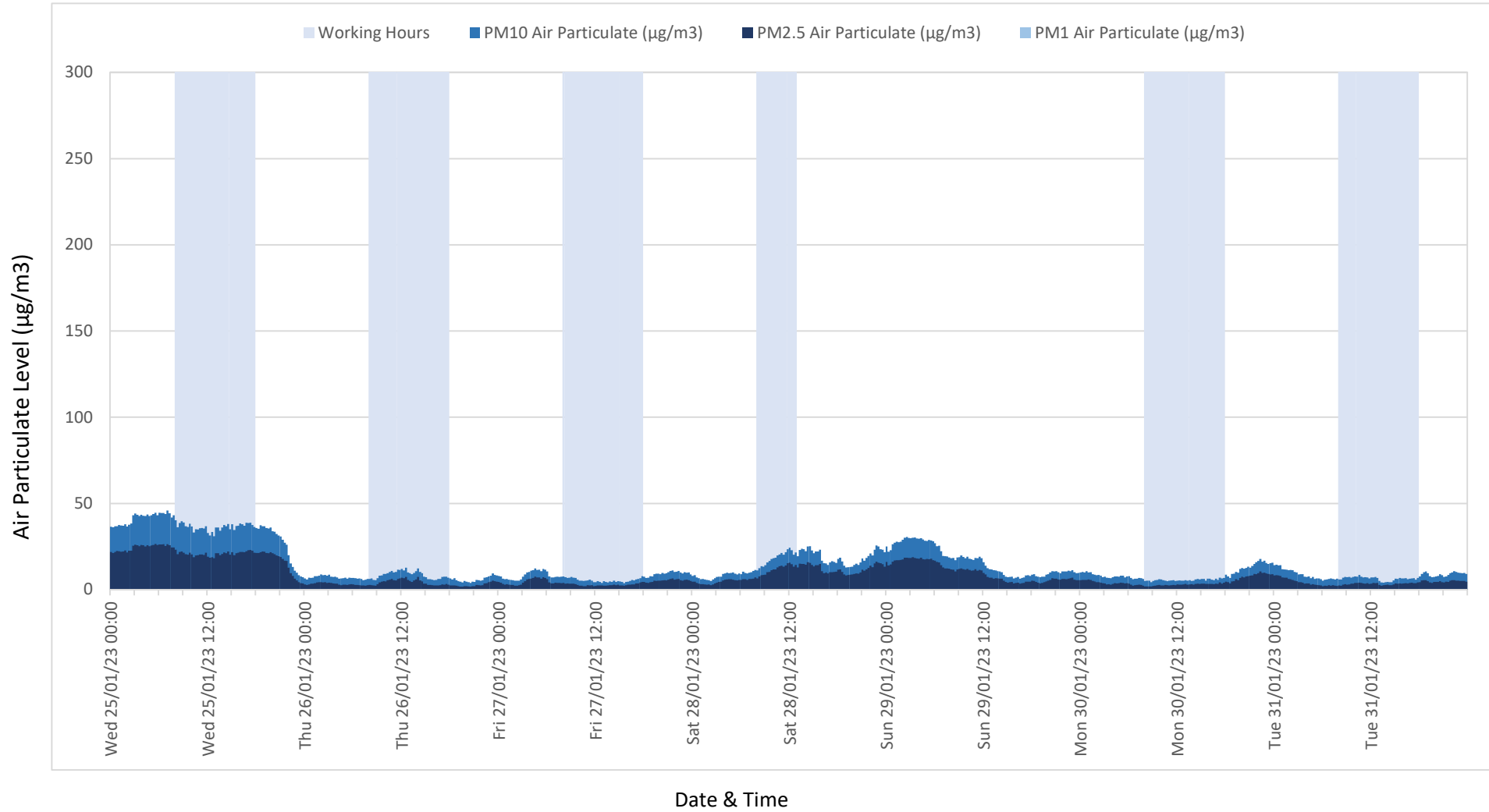




# 52 Avenue Road

Position 4

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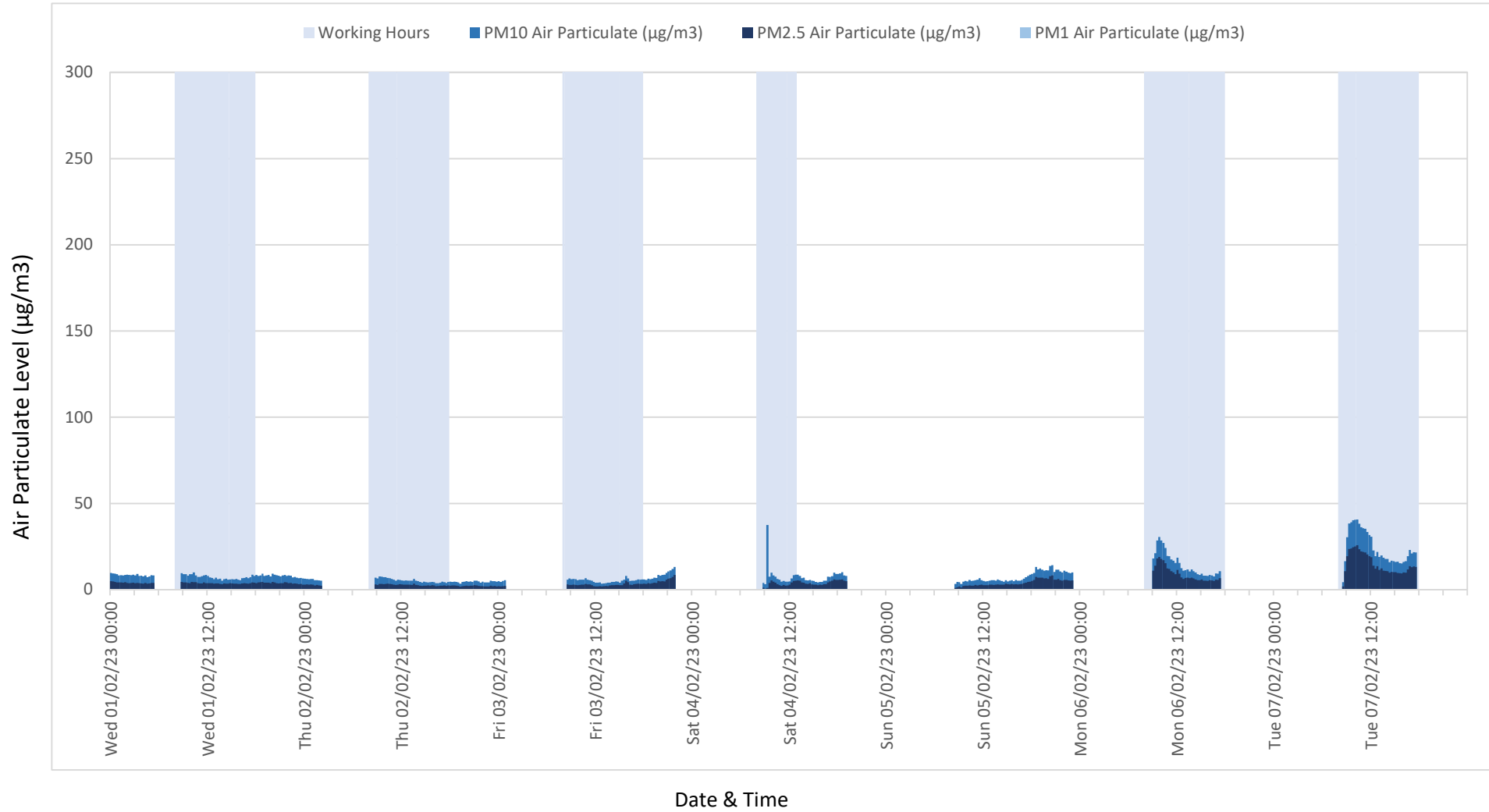




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Position 4

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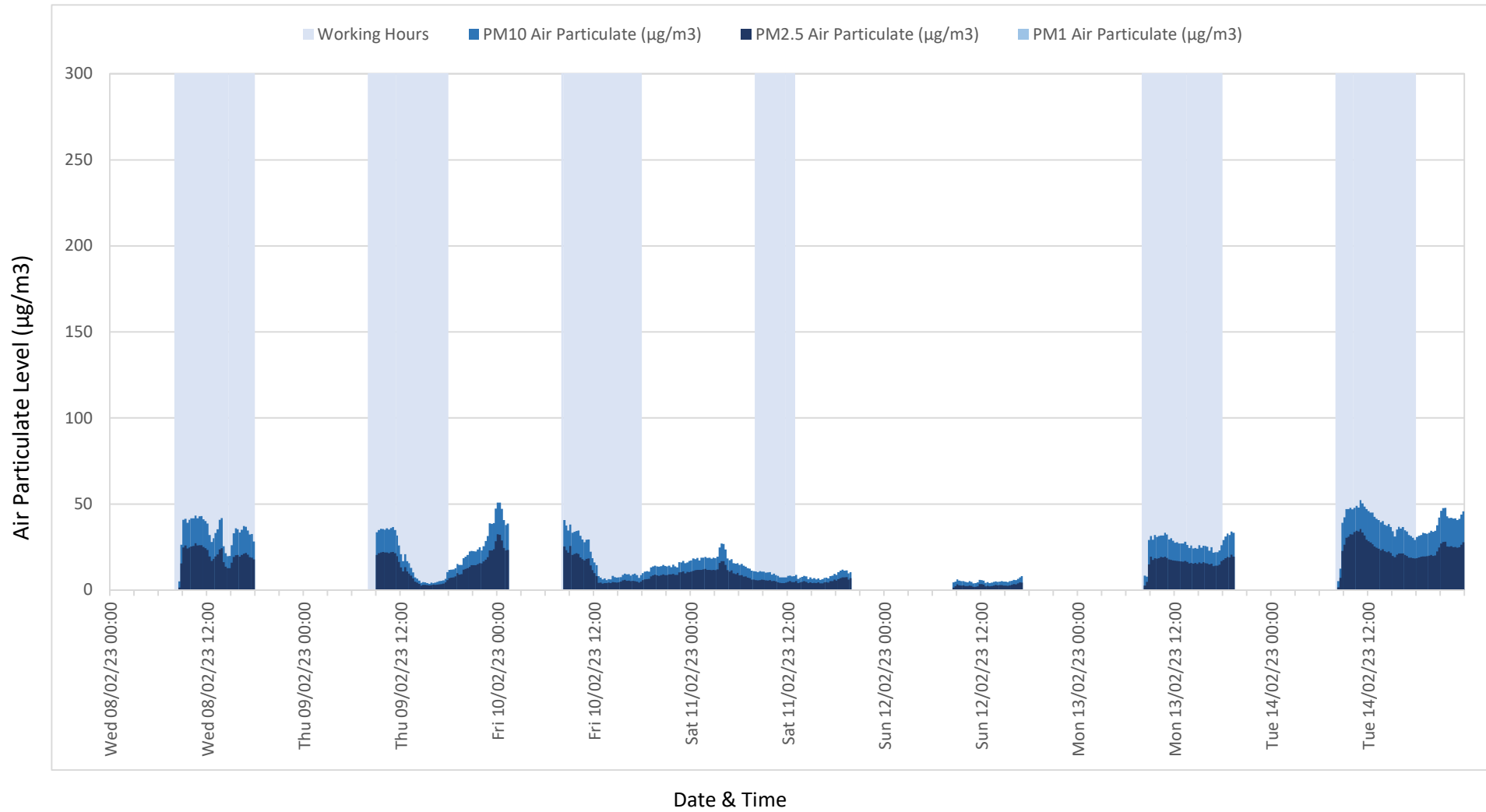




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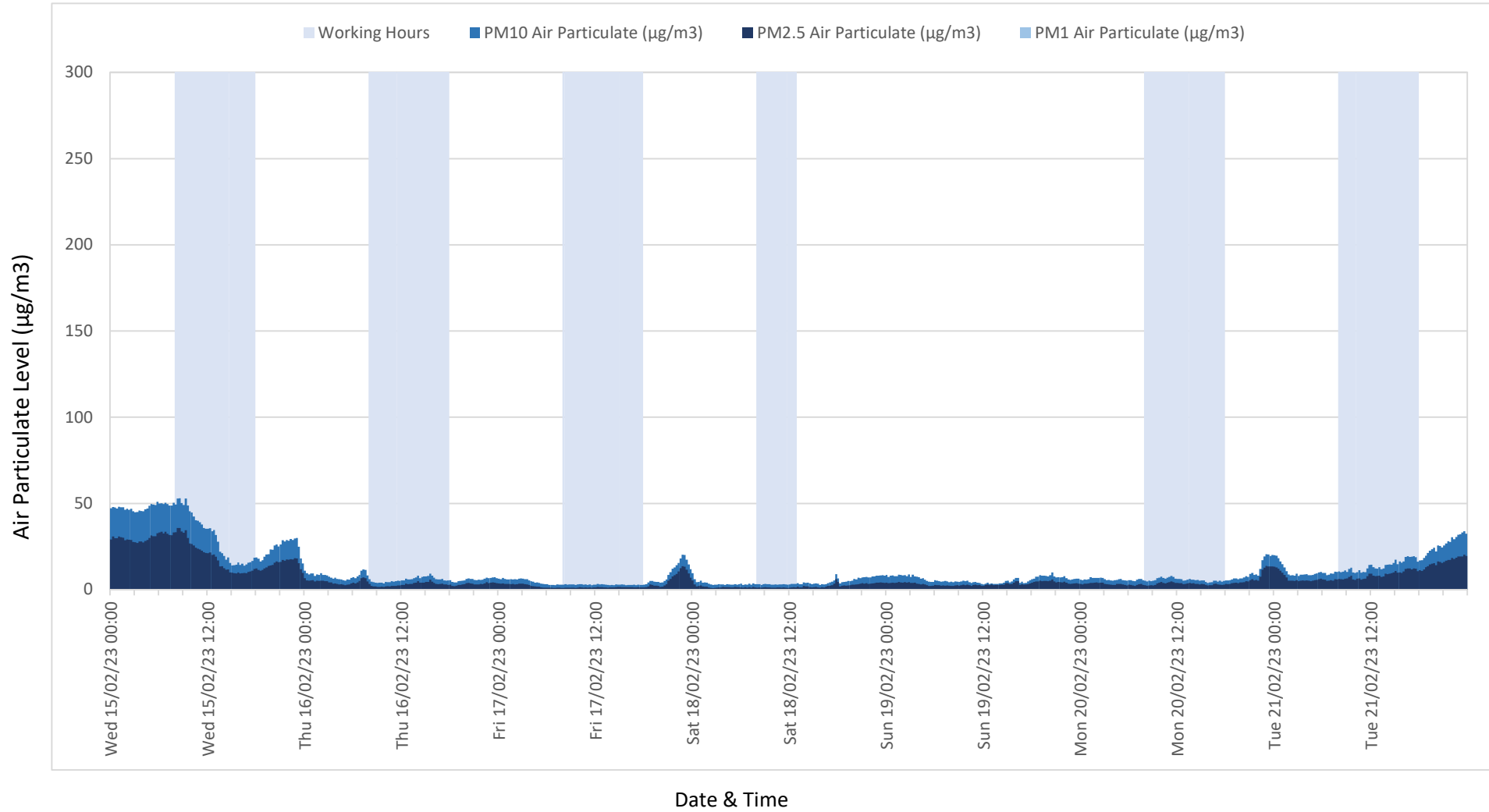




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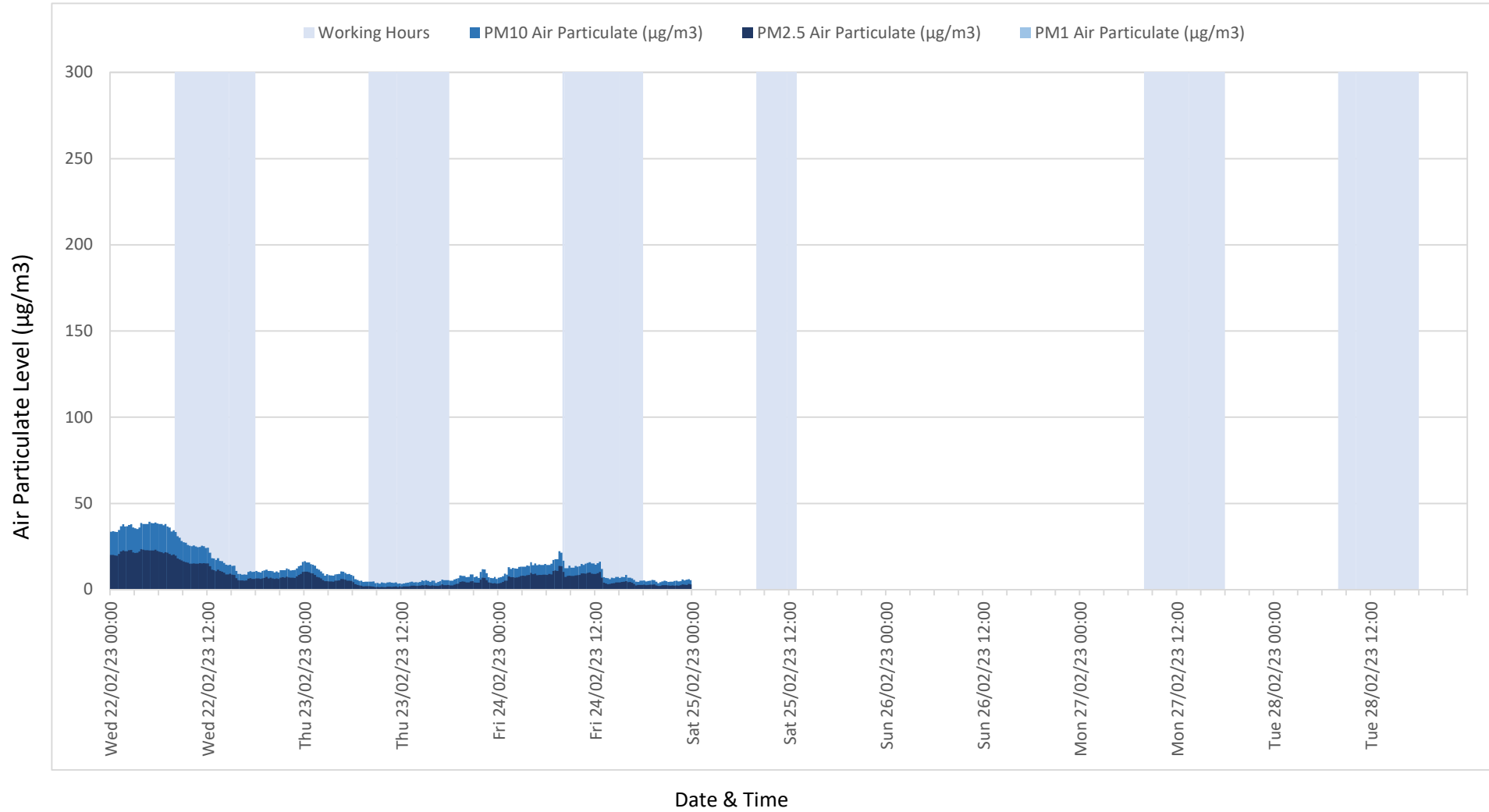




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Position 4

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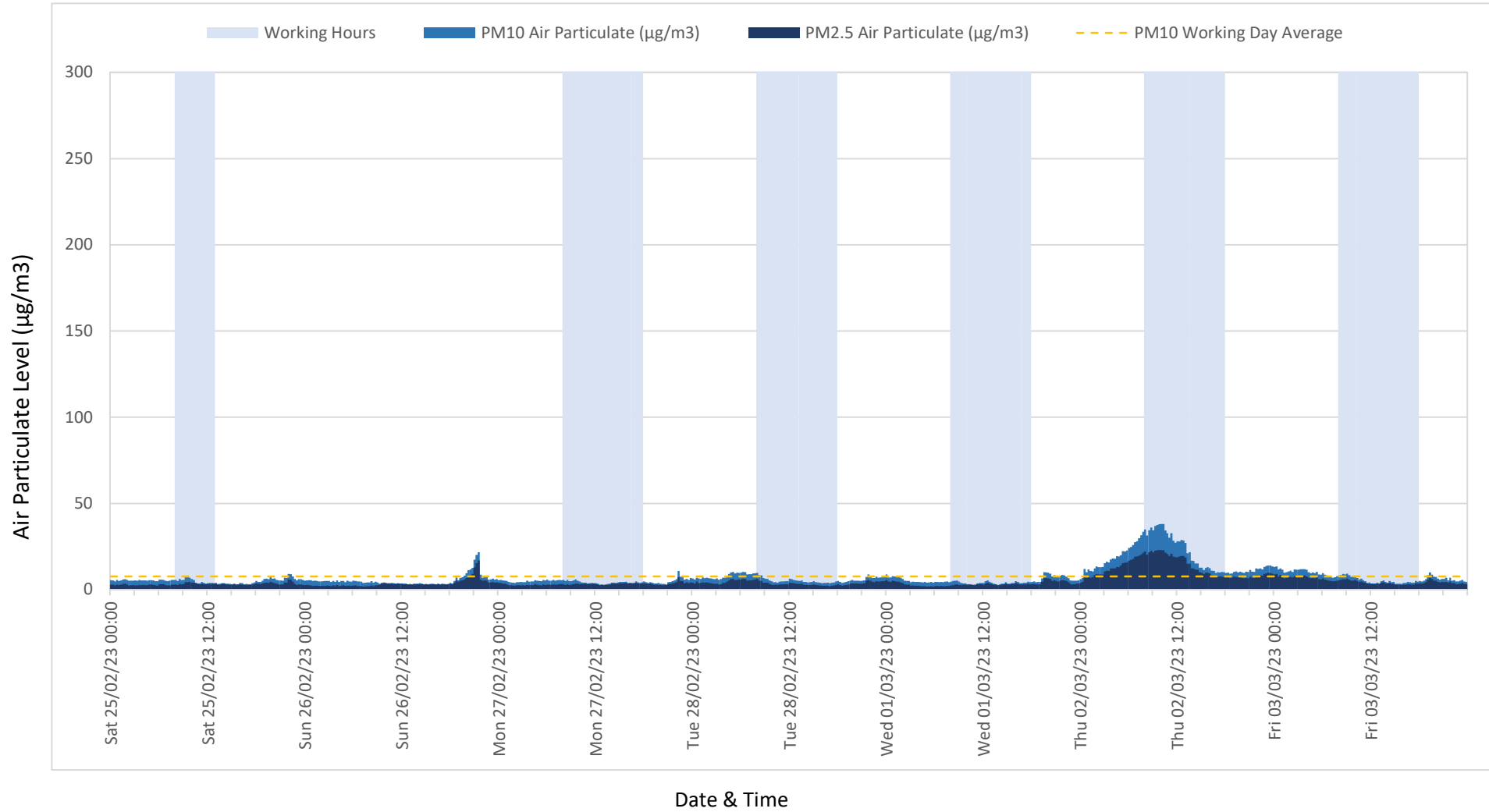




# 52 Avenue Road

Position 1

Saturday 25/02/2023 to Friday 03/03/2023

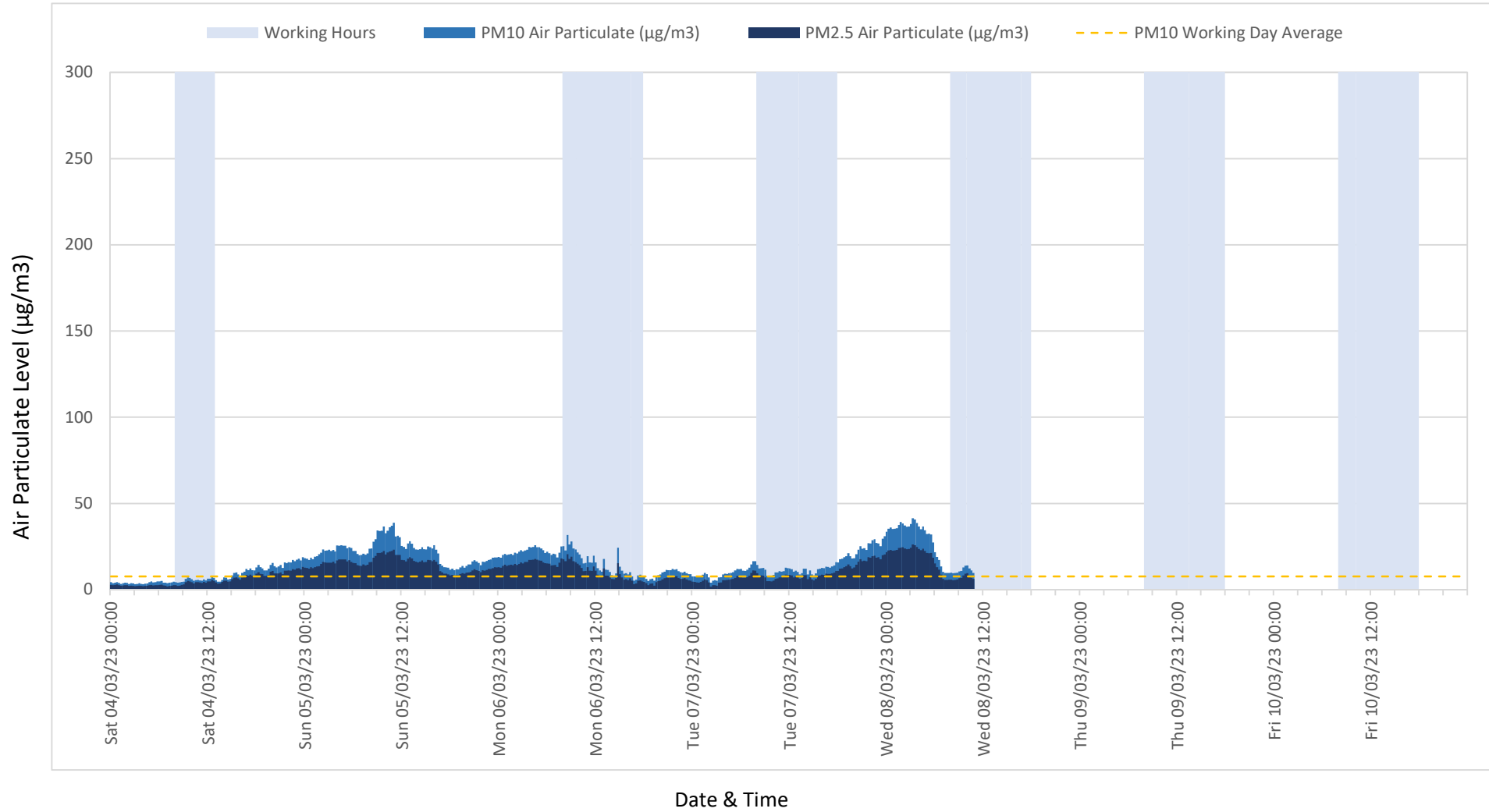




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Position 1

Saturday 04/03/2023 to Friday 10/03/2023

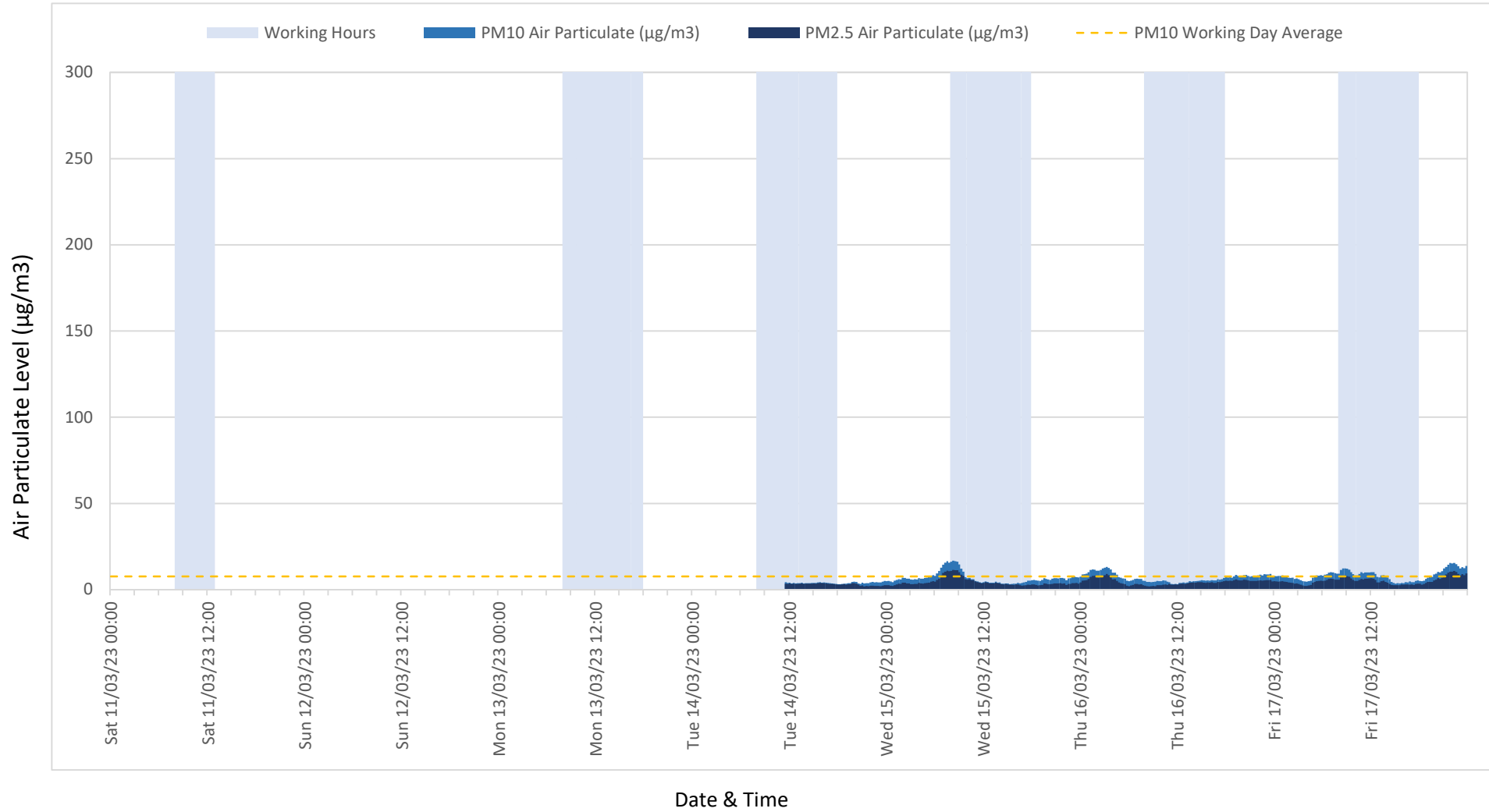




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Position 1

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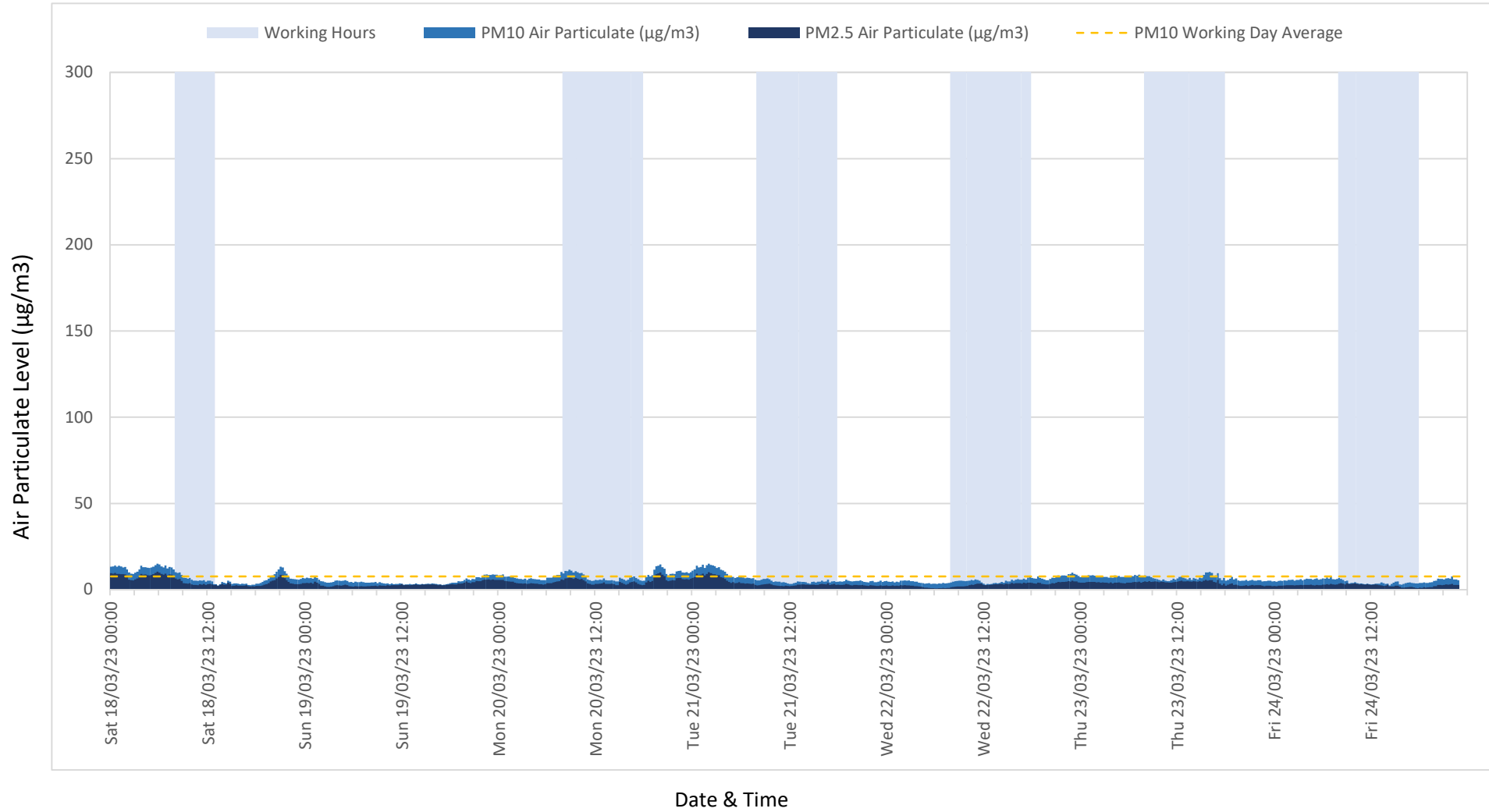




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Position 1

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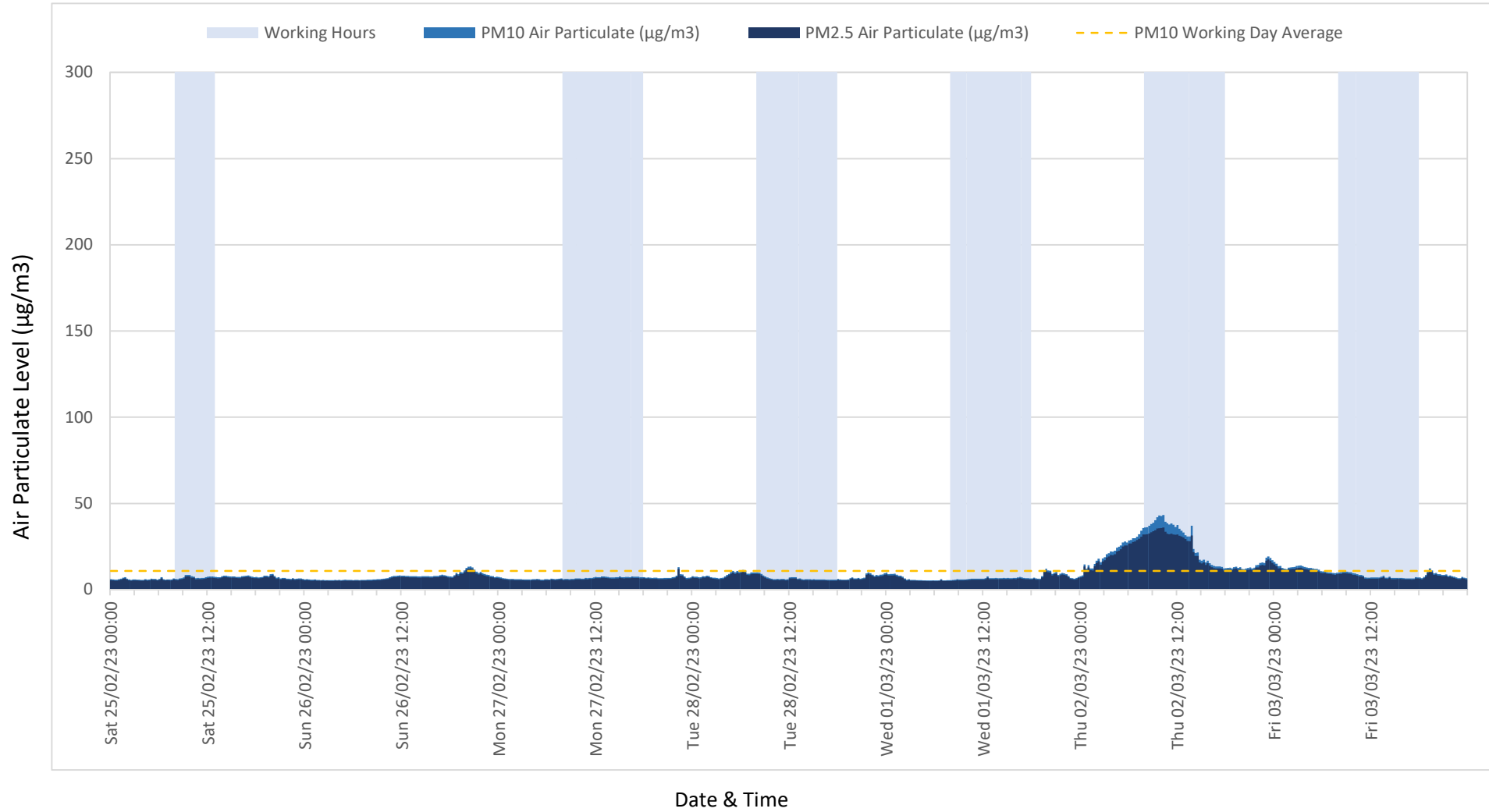




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Position 2

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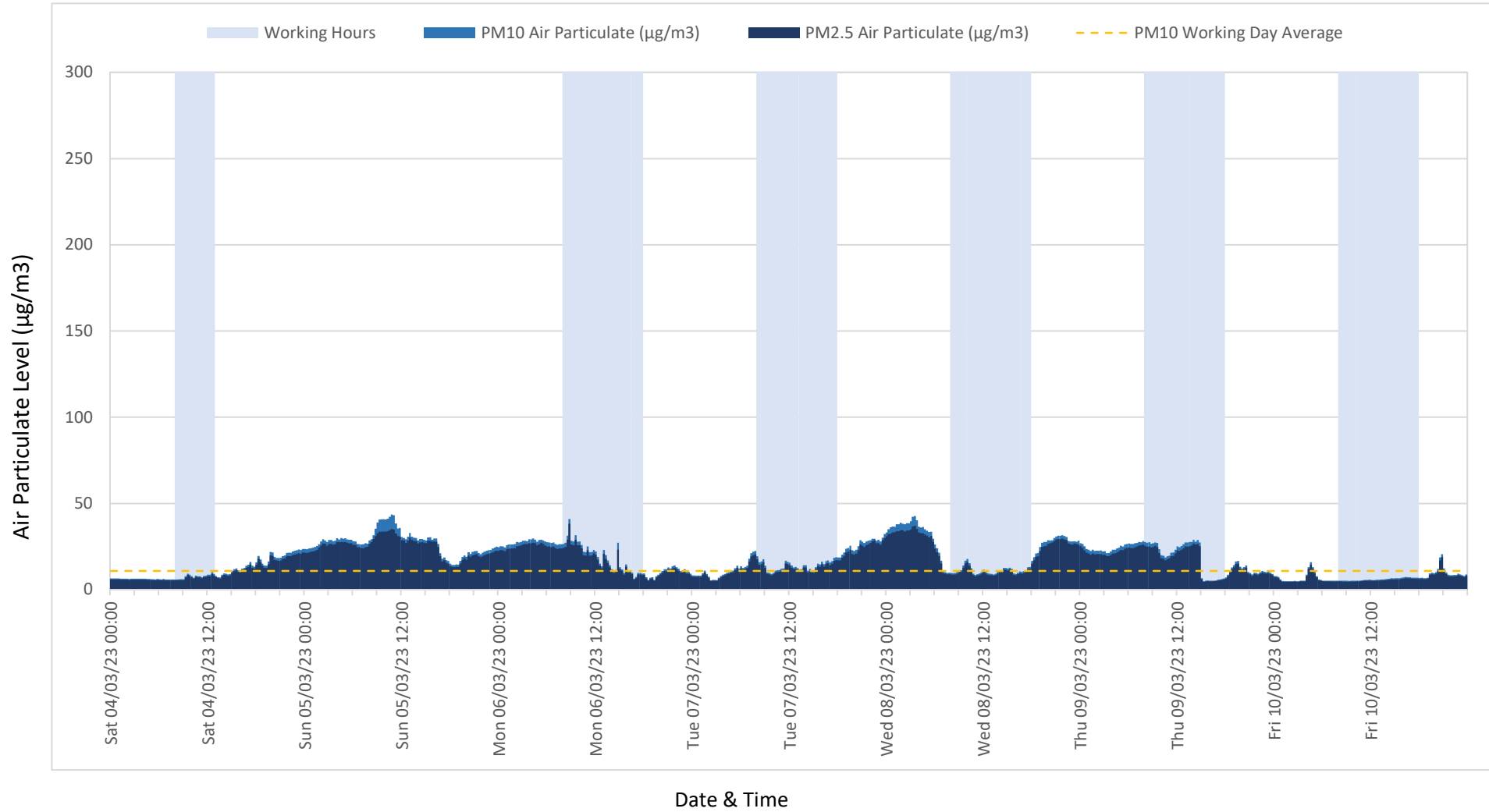




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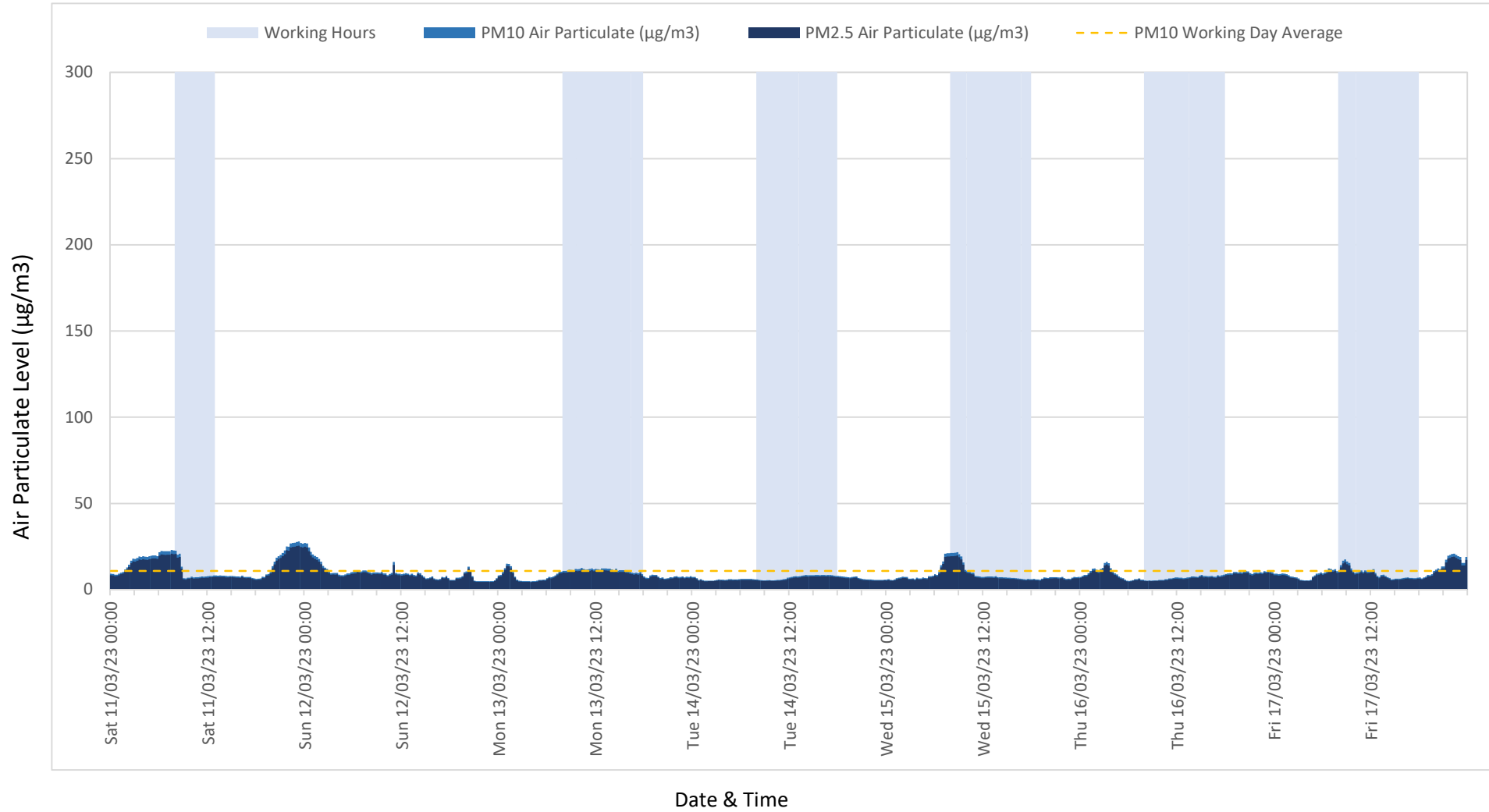




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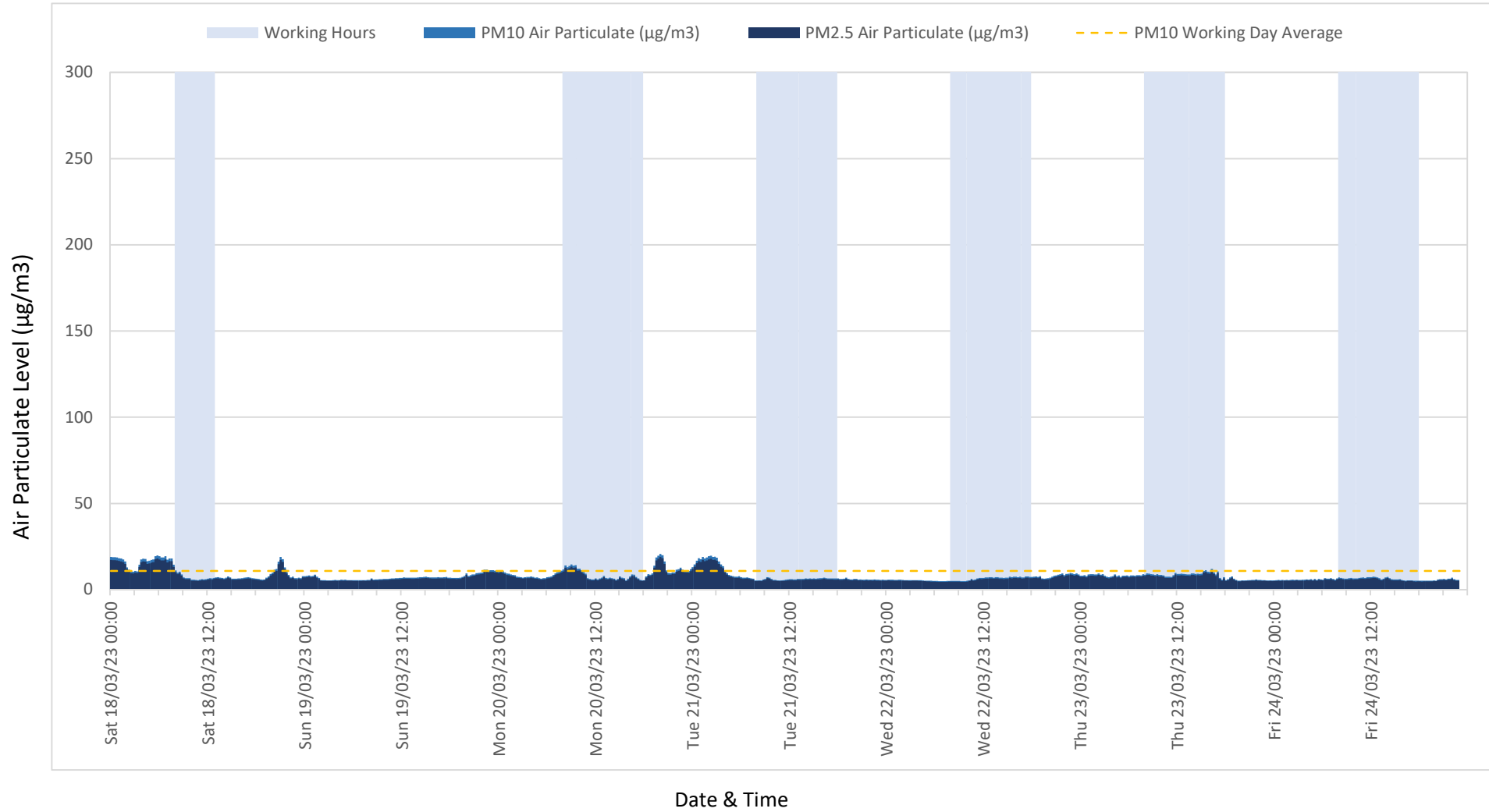




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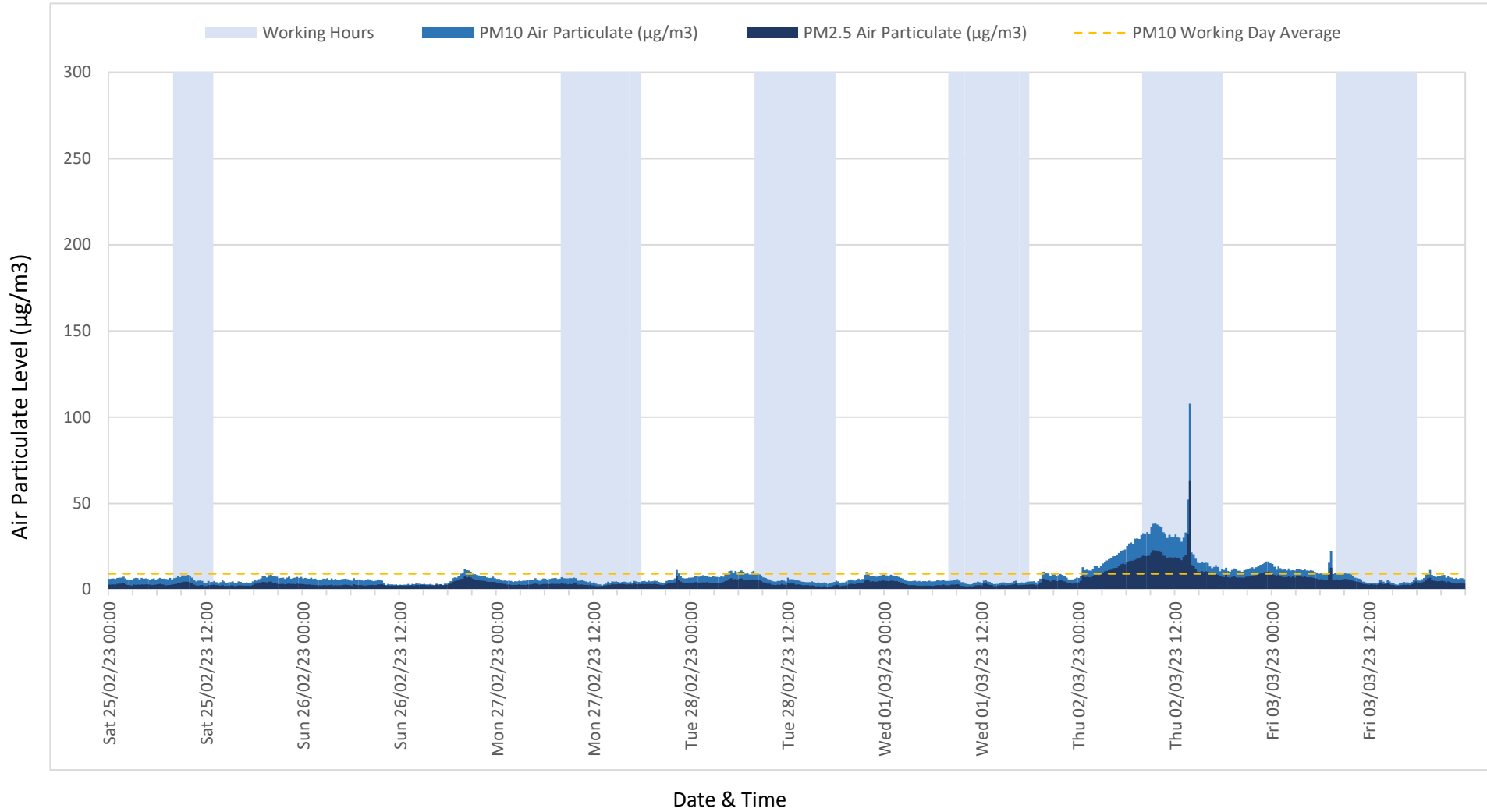




# 52 Avenue Road

Position 3

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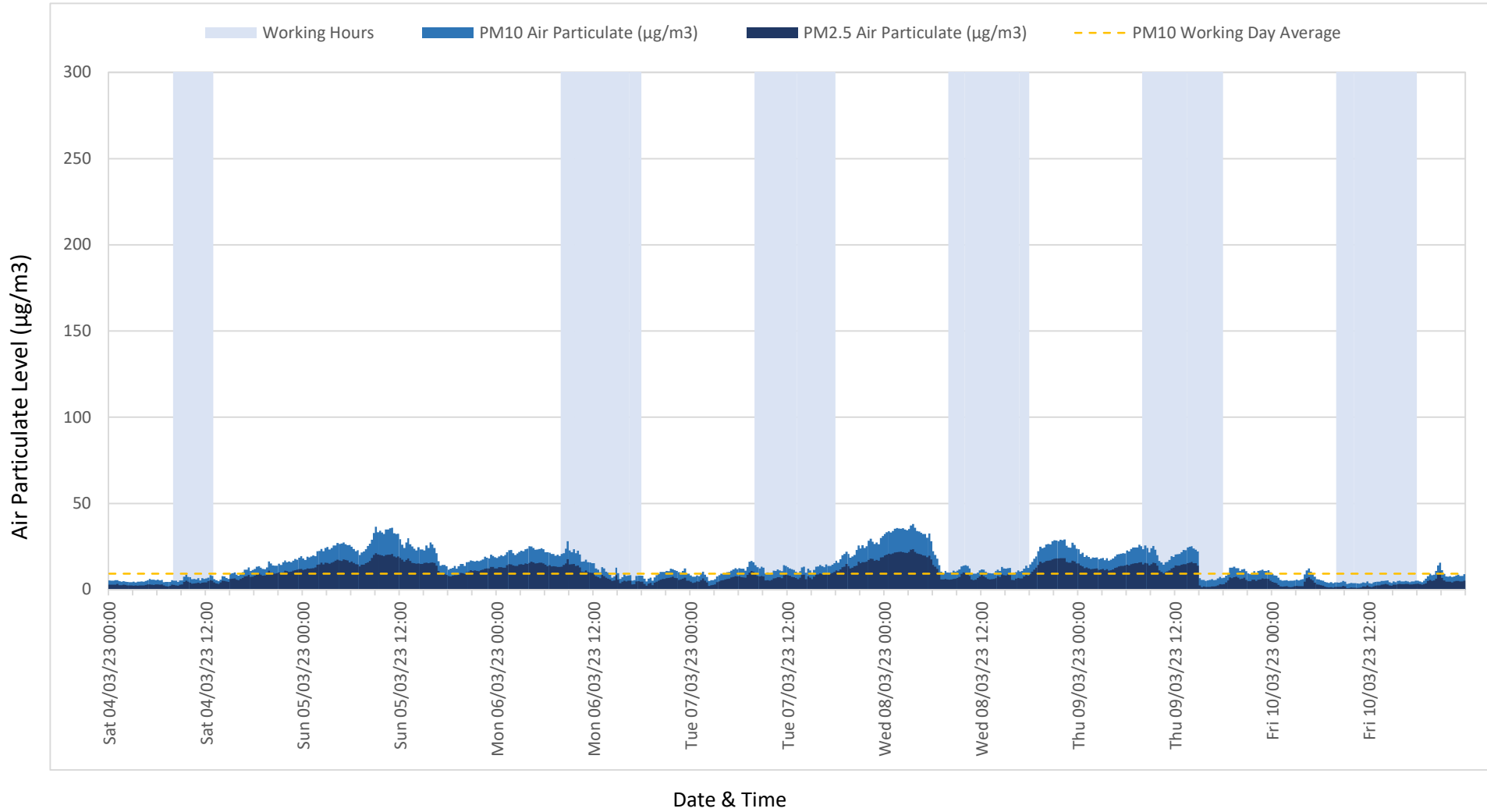




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Position 3

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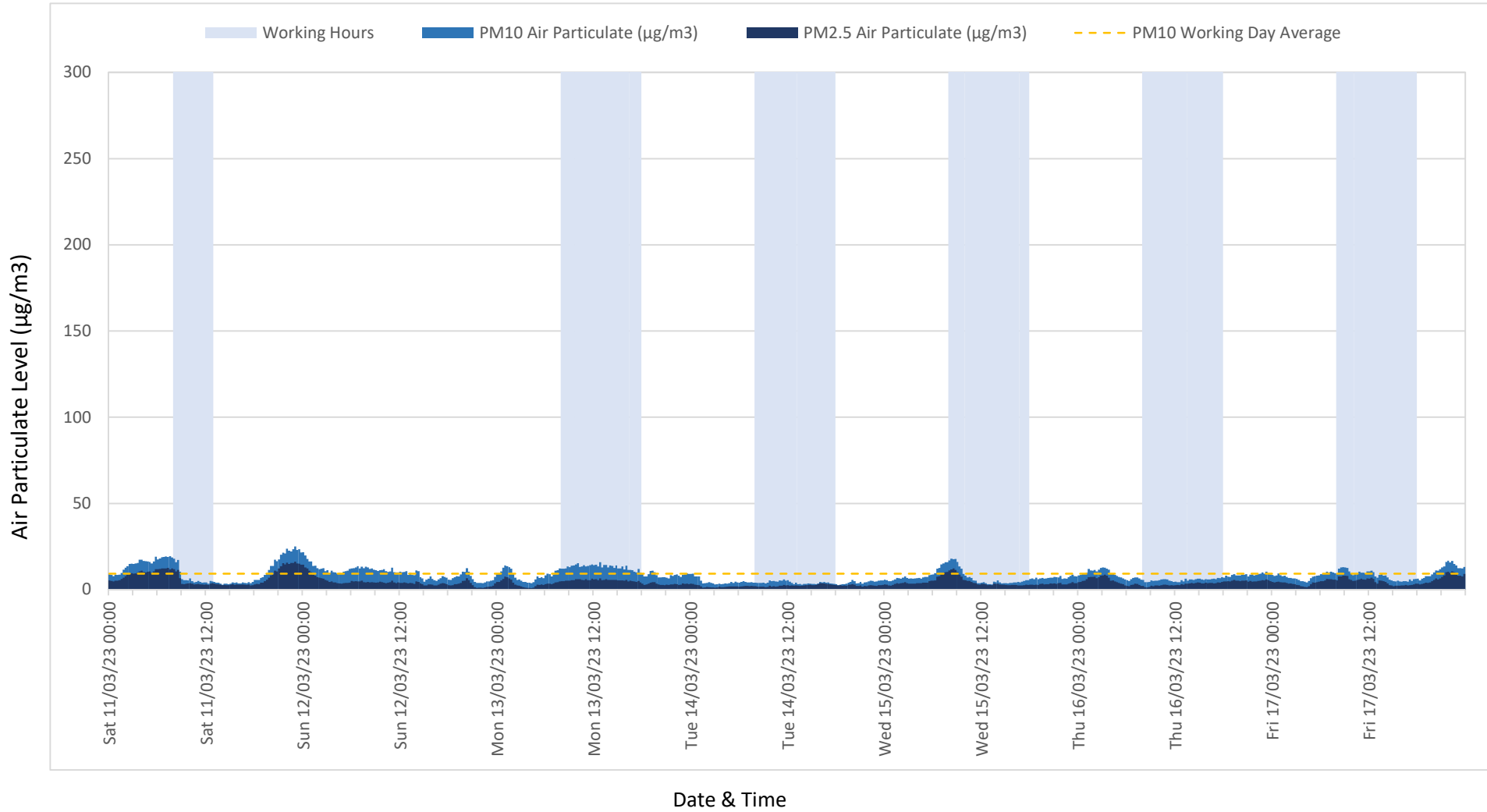




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Position 3

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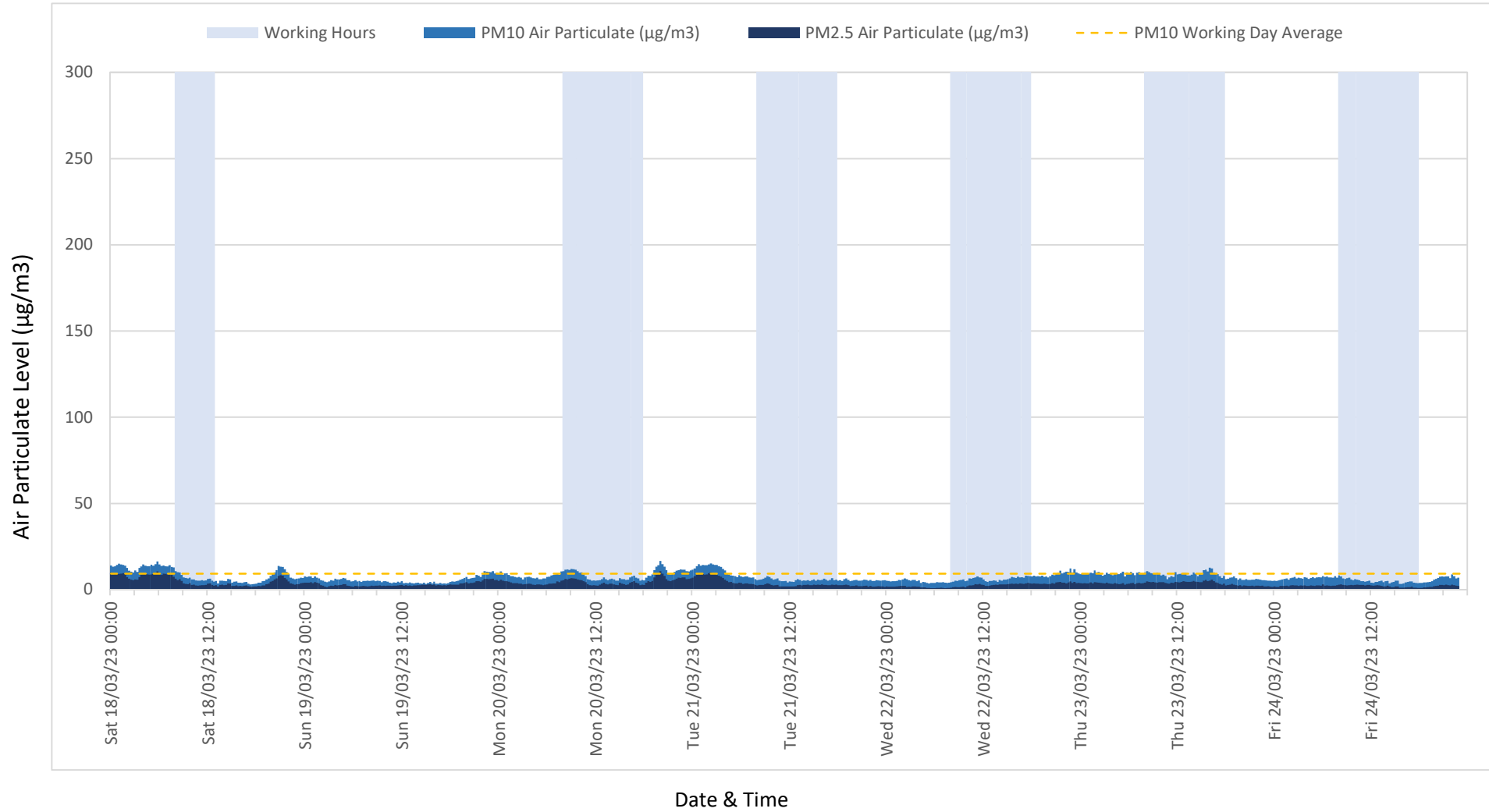




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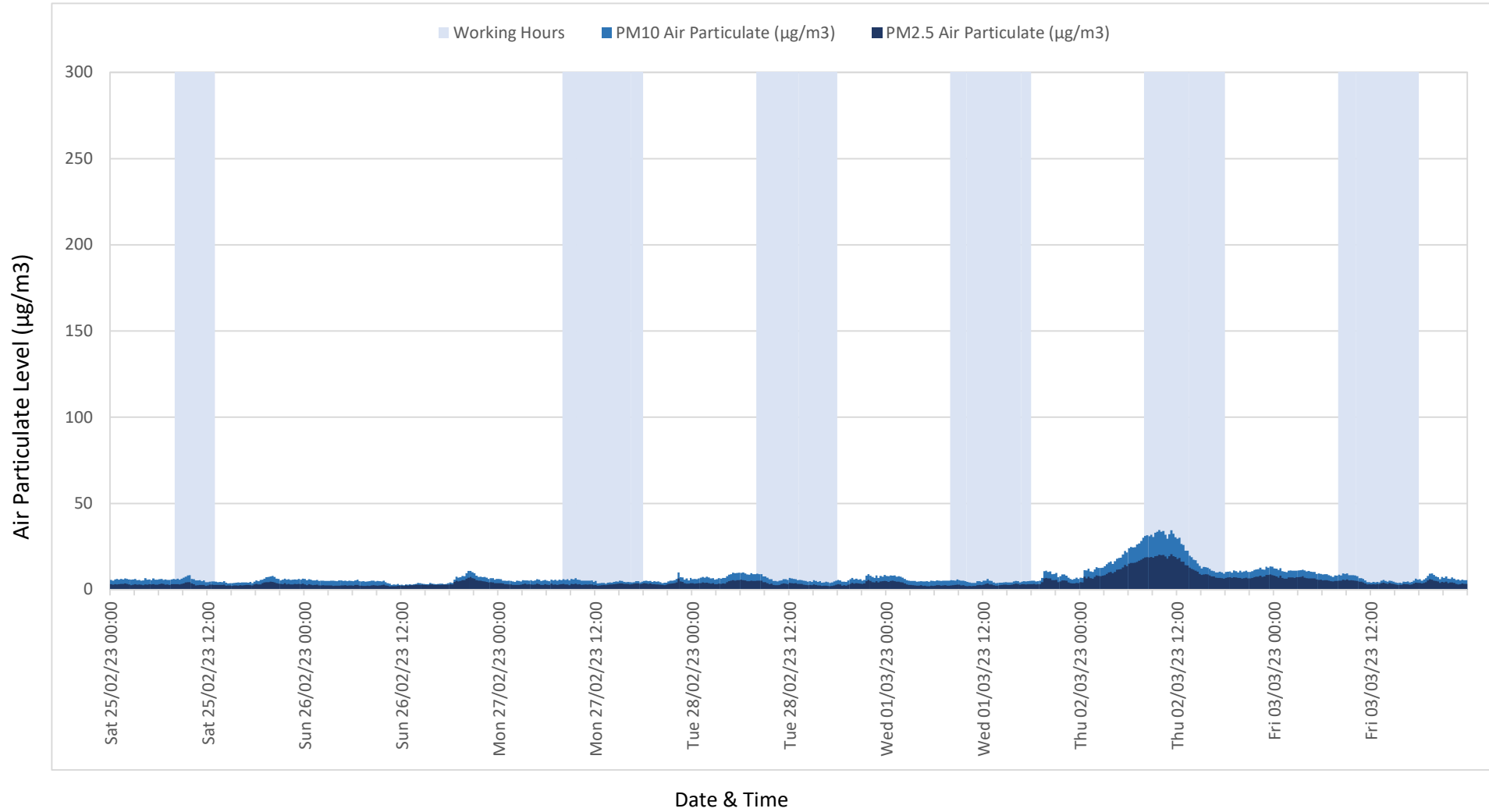




# 52 Avenue Road

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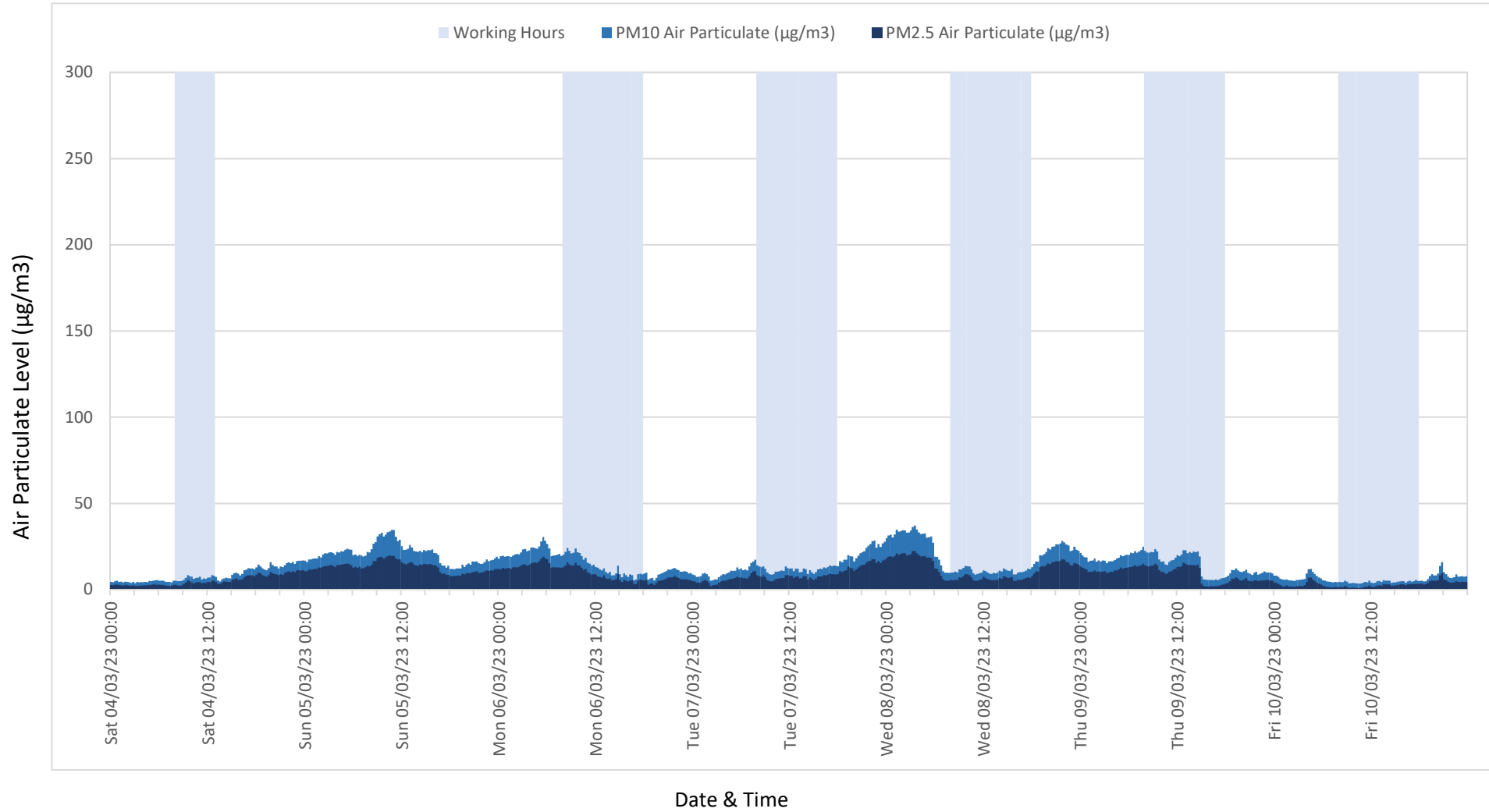




# 52 Avenue Road

Position 4

Saturday 04/03/2023 to Friday 10/03/2023

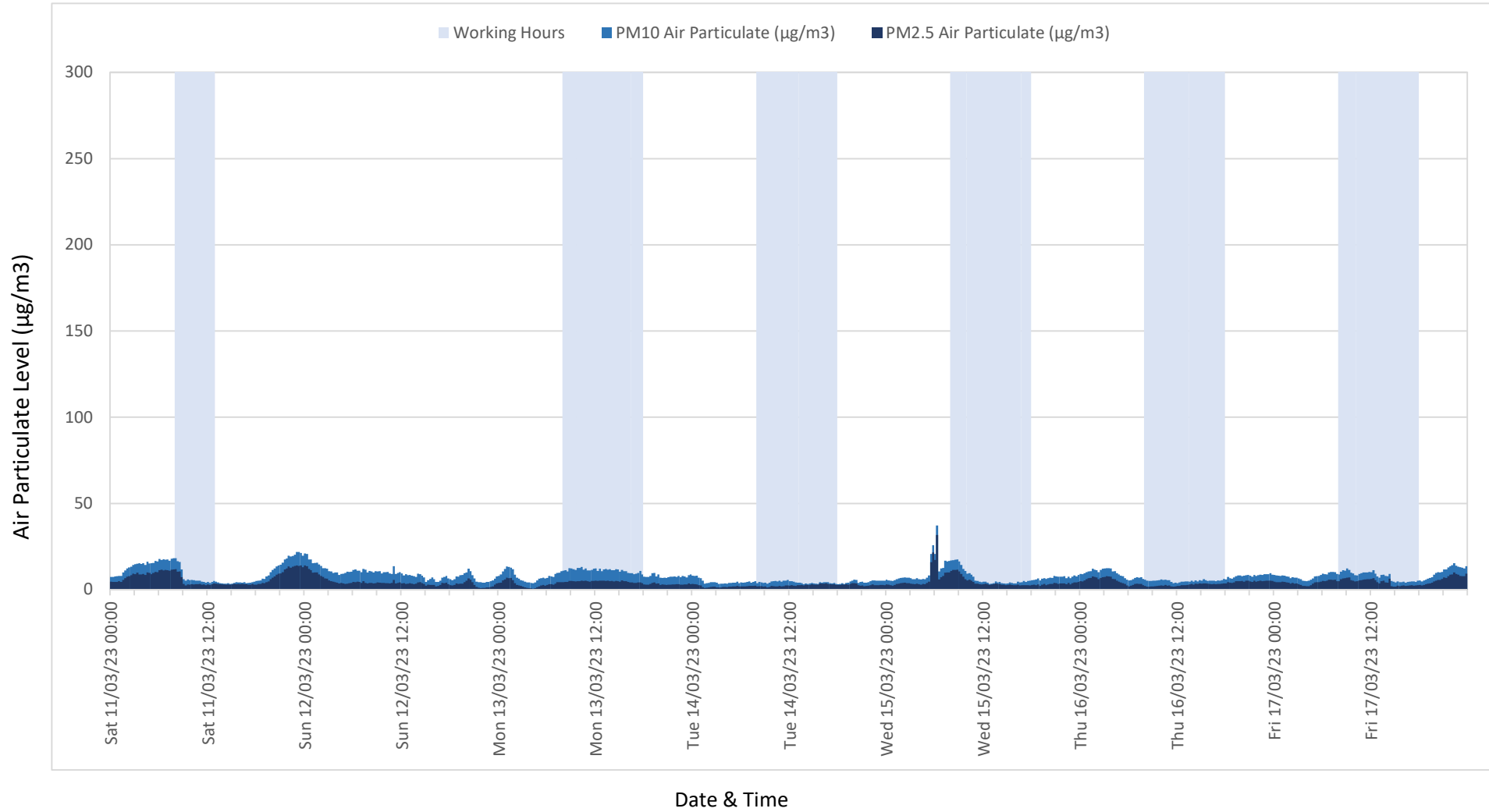




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Position 4

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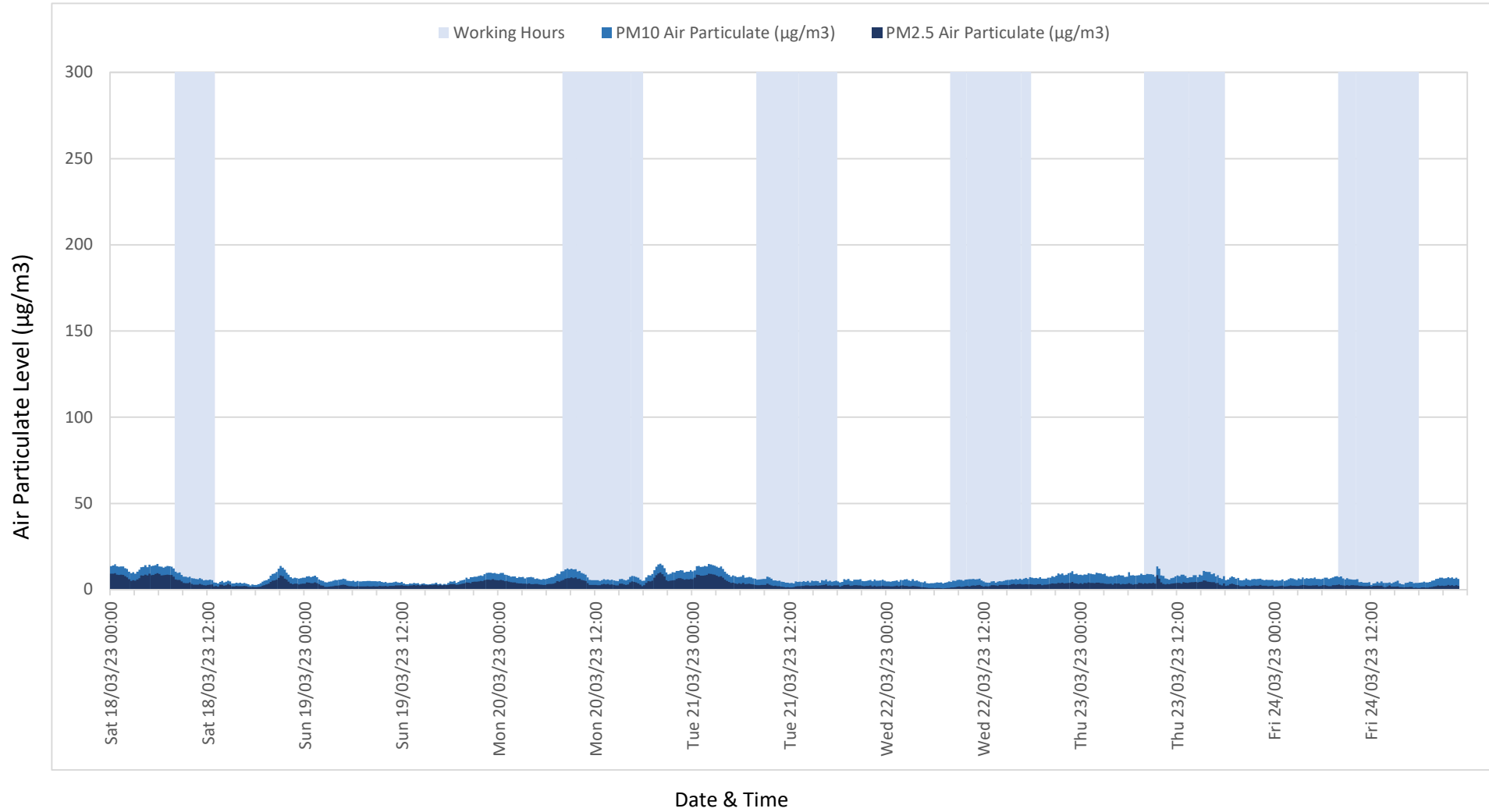




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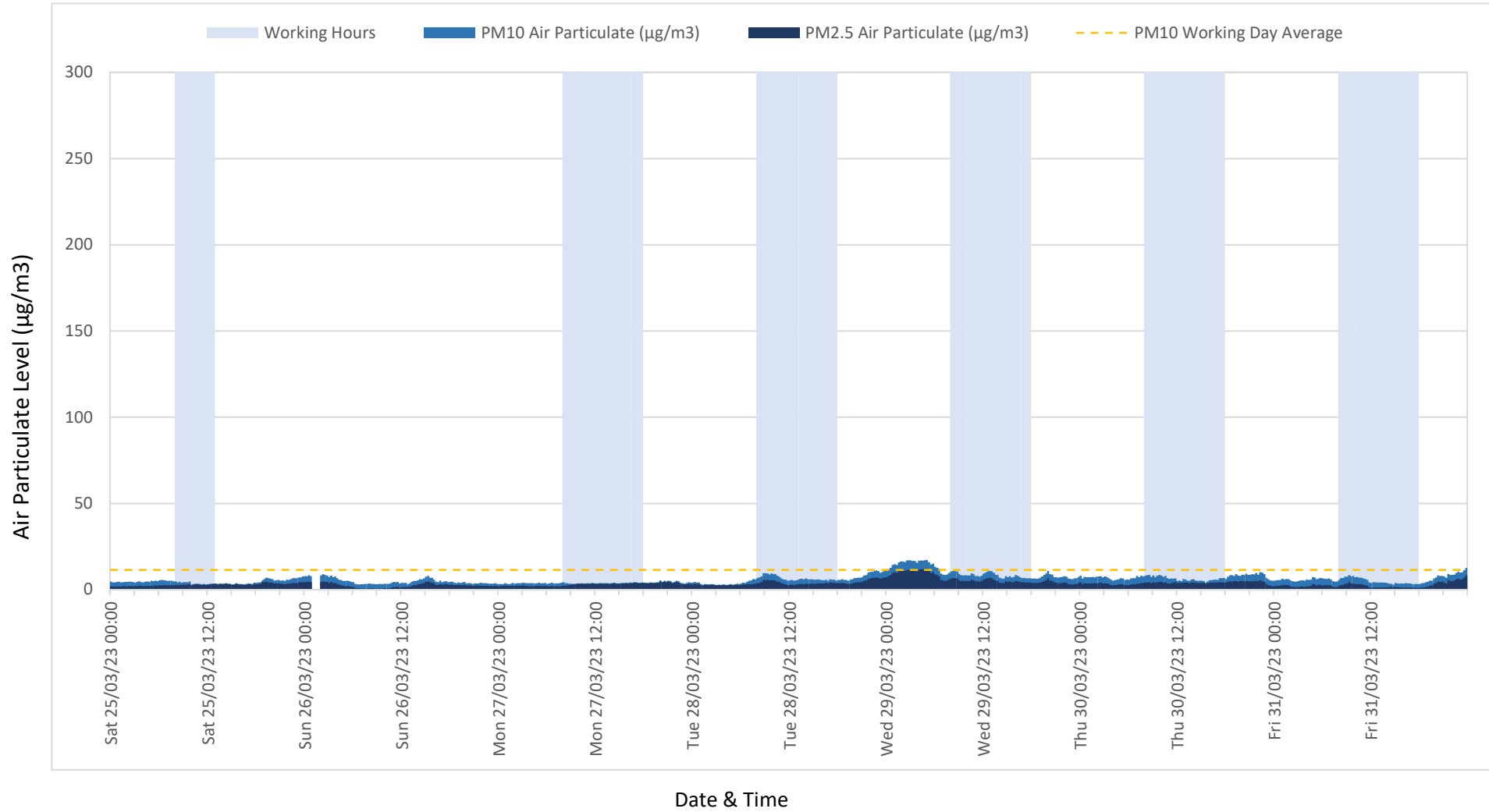
Position 4

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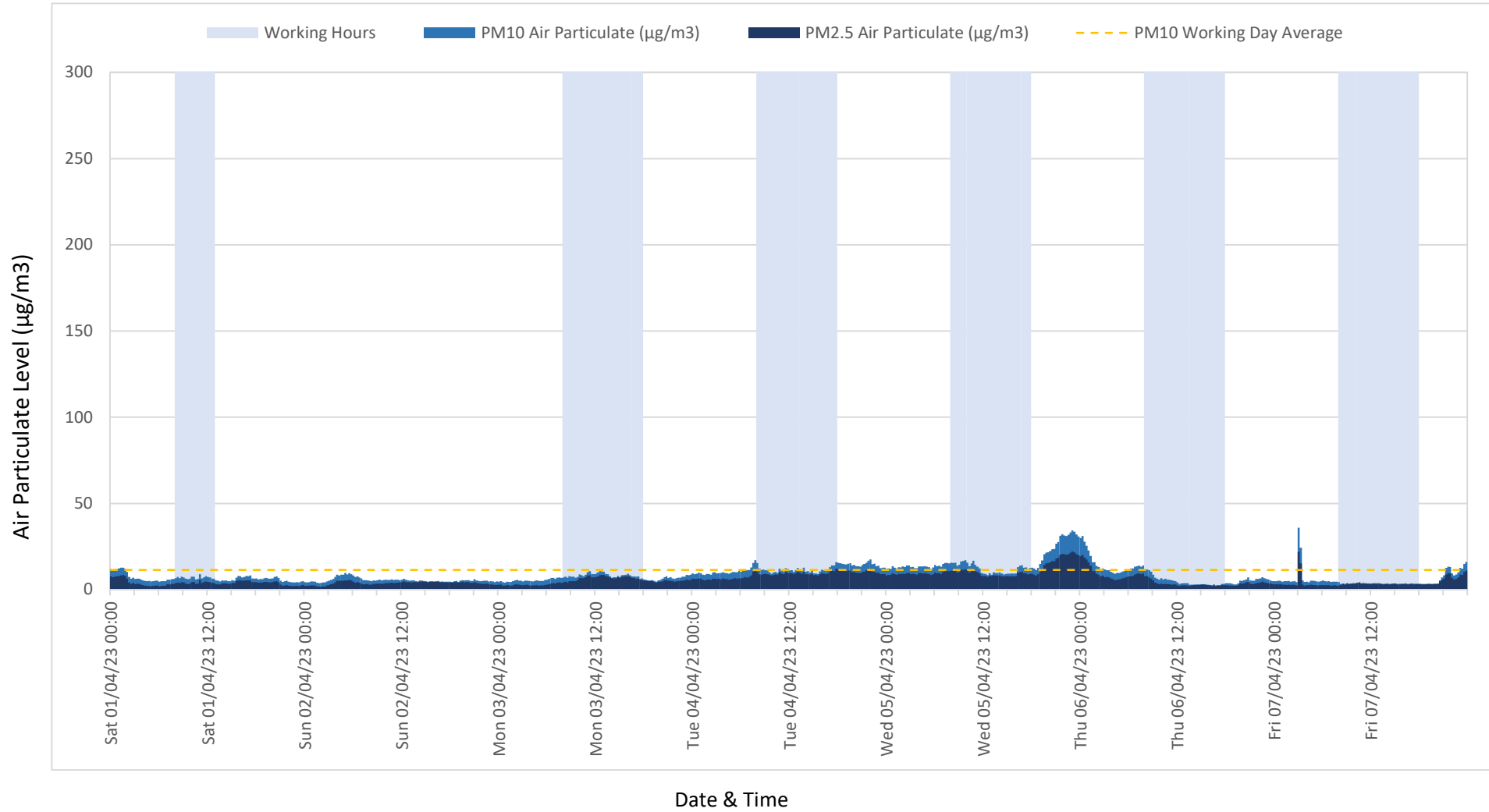


**52 Avenue Road**  
**Position 1**  
 Saturday 25/03/2023 to Friday 31/03/2023





**52 Avenue Road**  
Position 1  
Saturday 01/04/2023 to Friday 07/04/2023

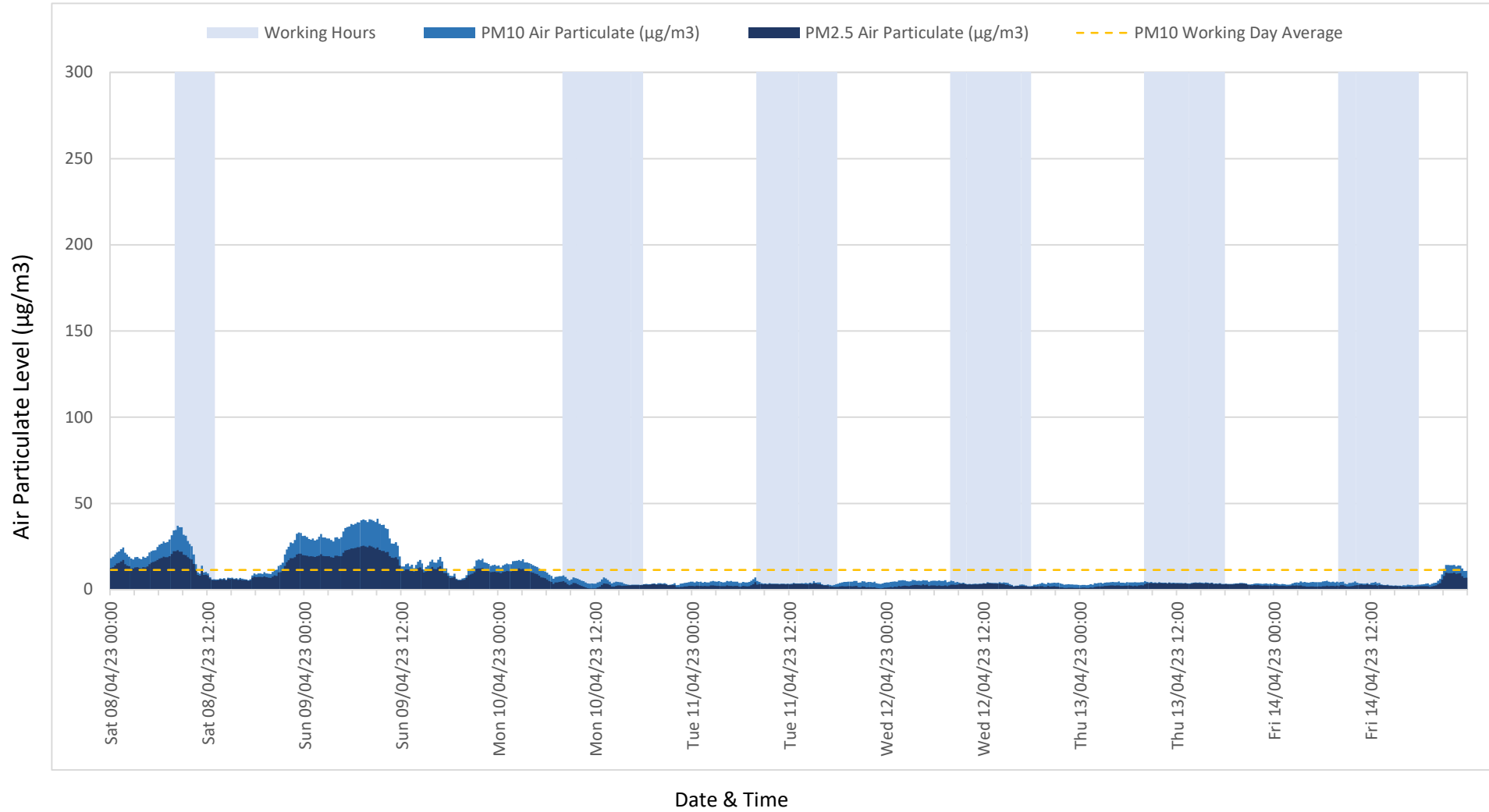




# 52 Avenue Road

Position 1

Saturday 08/04/2023 to Friday 14/04/2023

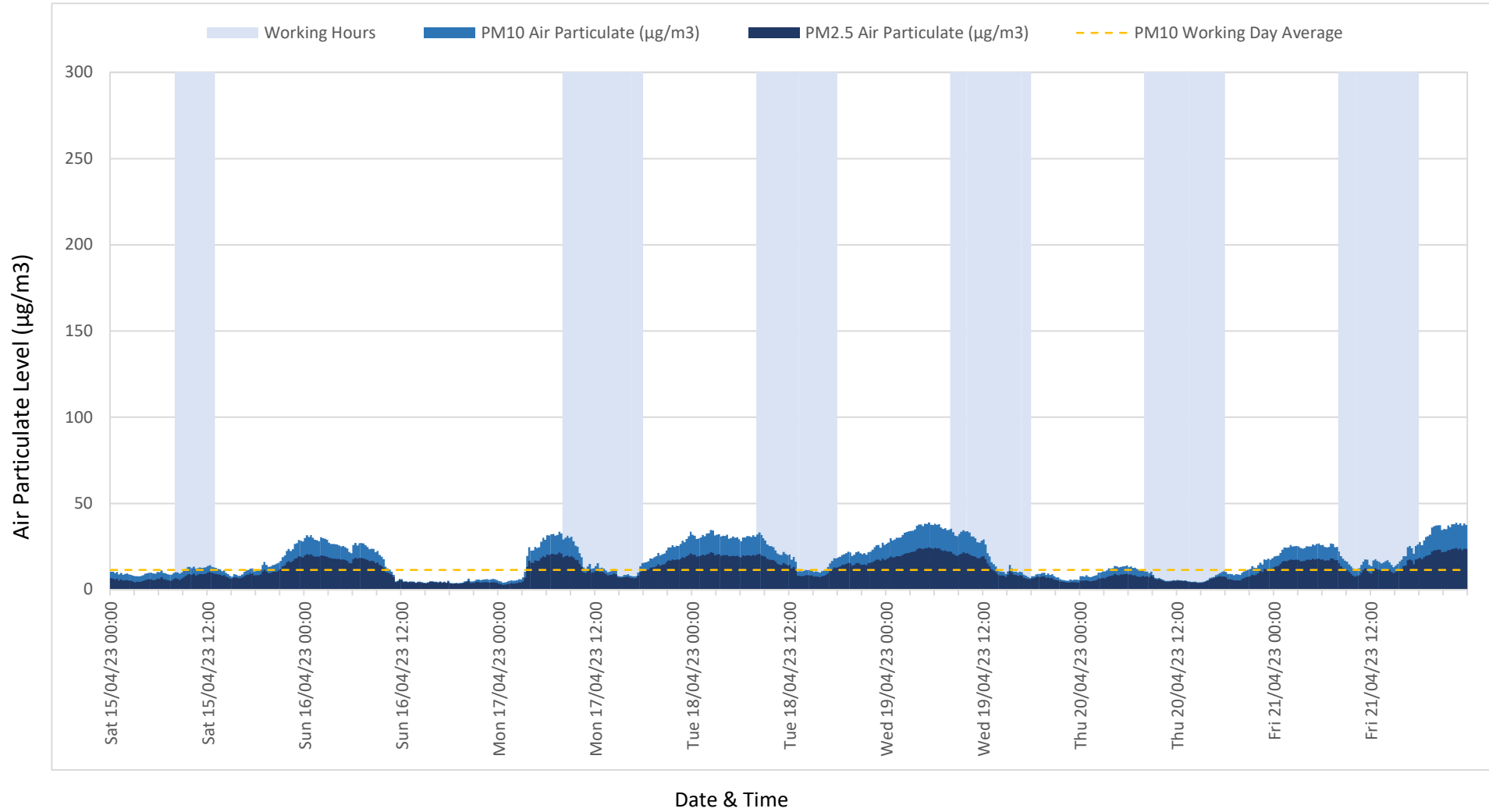




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Position 1

Saturday 15/04/2023 to Friday 21/04/2023

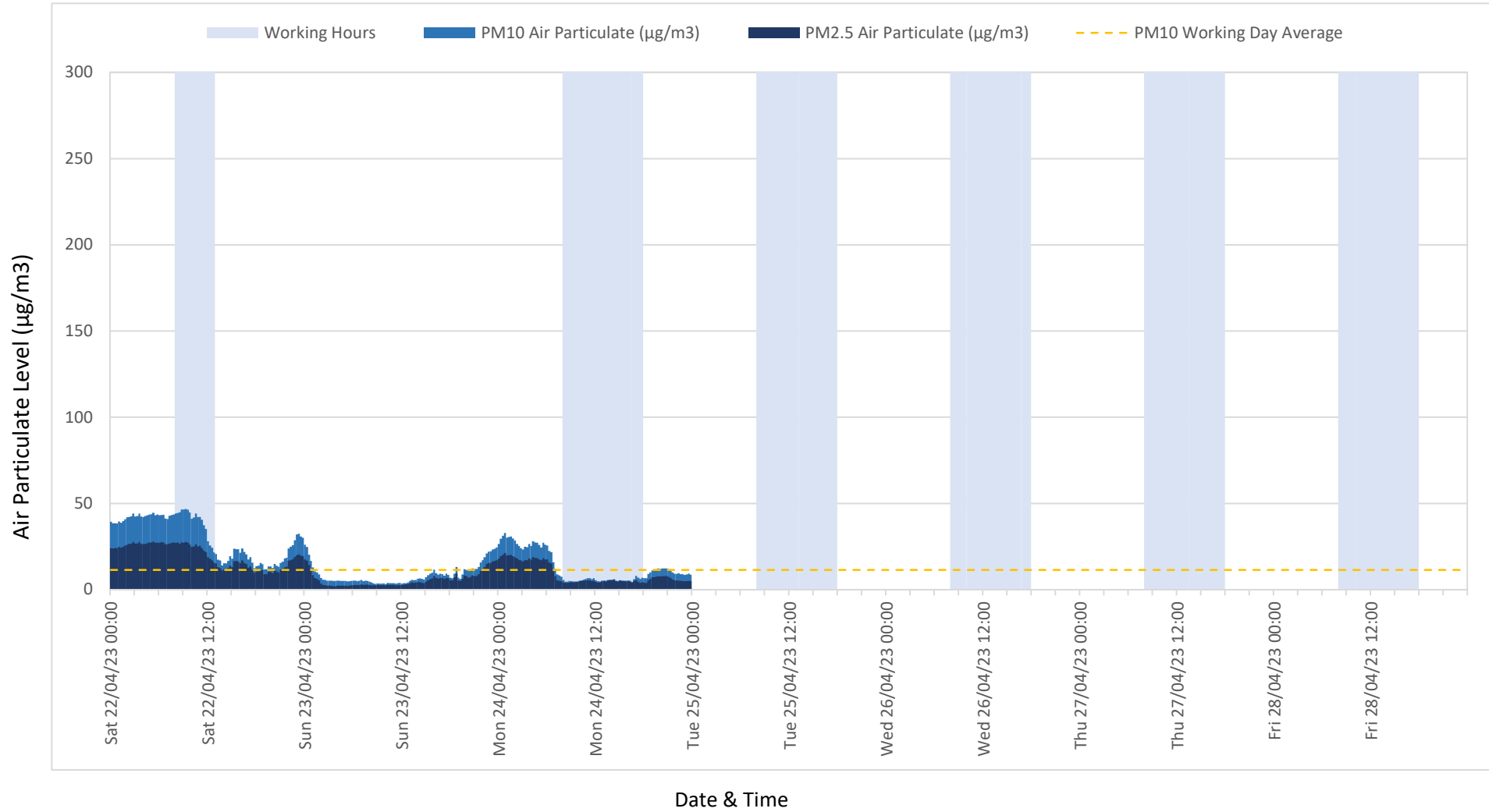




# 52 Avenue Road

Position 1

Saturday 22/04/2023 to Friday 28/04/2023

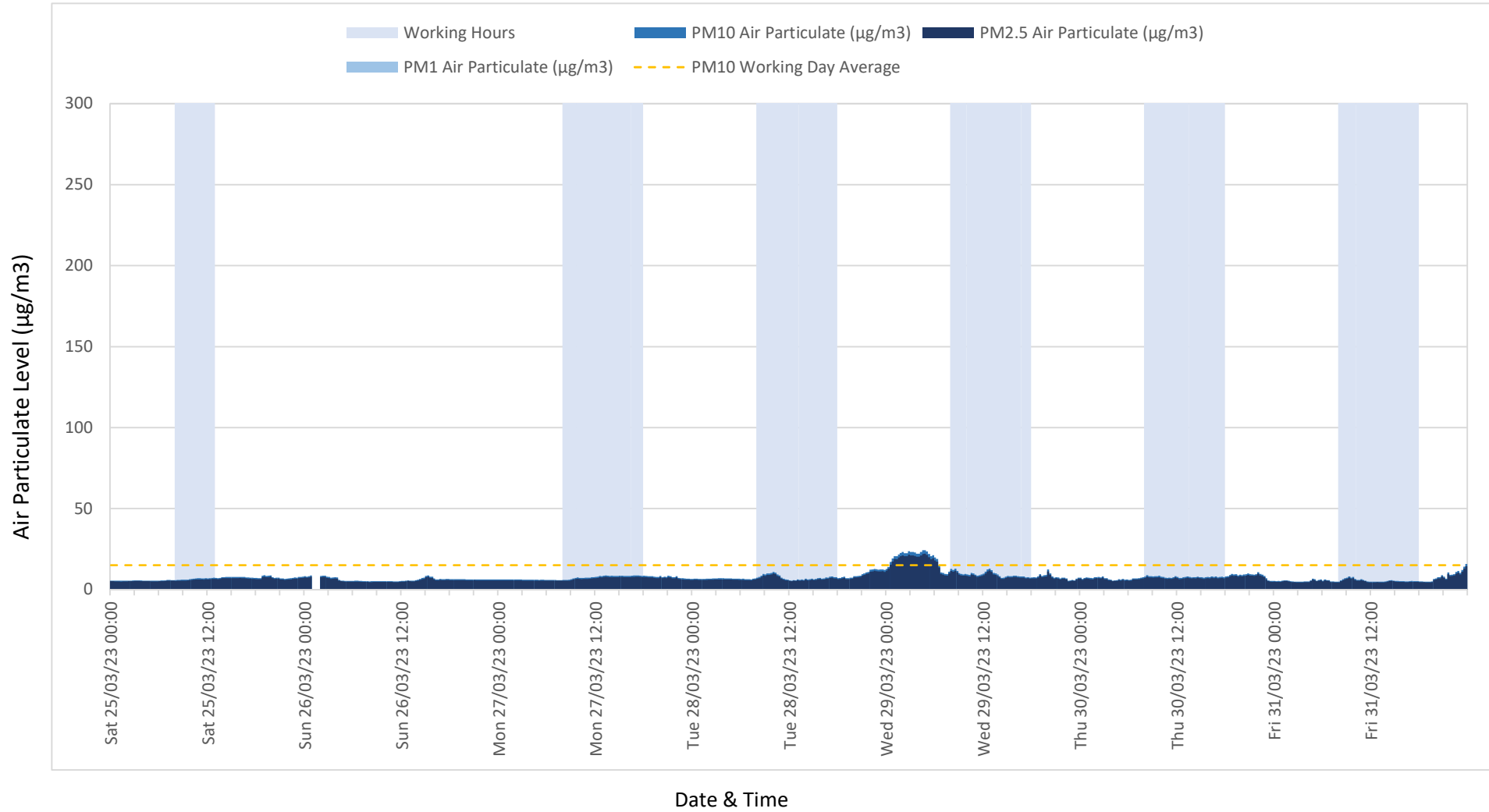




# 52 Avenue Road

Position 2

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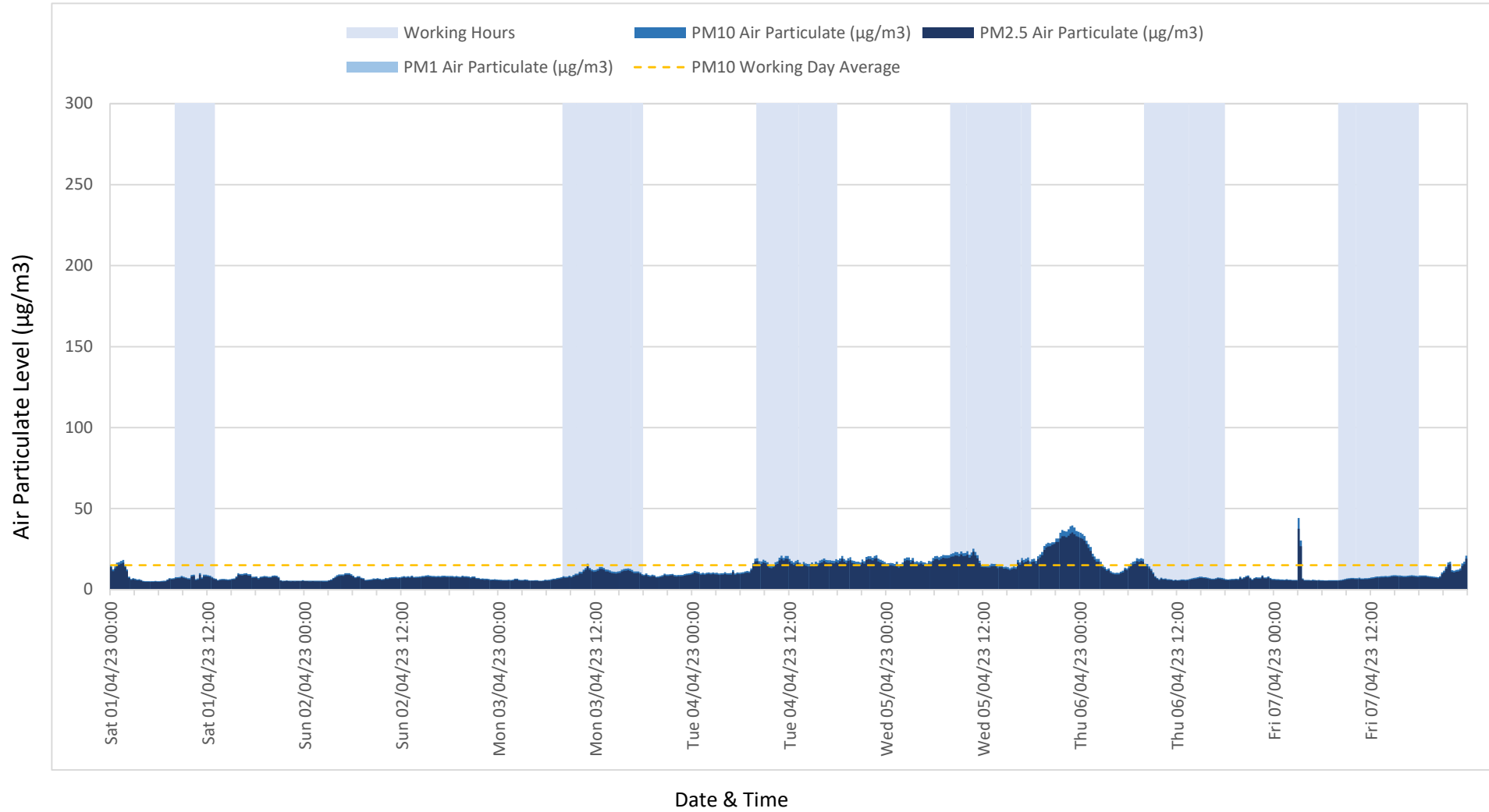




# 52 Avenue Road

Position 2

Saturday 01/04/2023 to Friday 07/04/2023

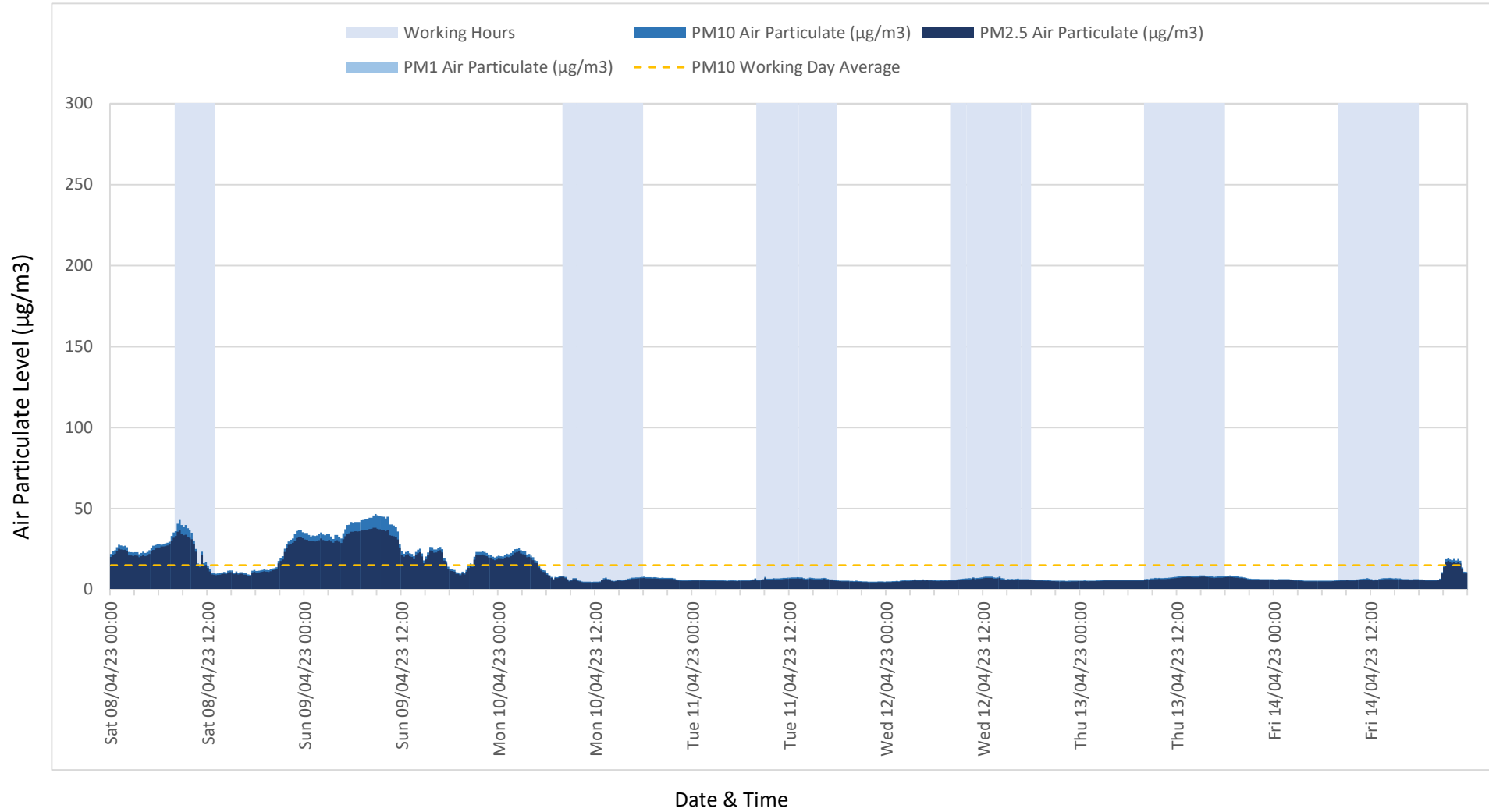




# 52 Avenue Road

Position 2

Saturday 08/04/2023 to Friday 14/04/2023



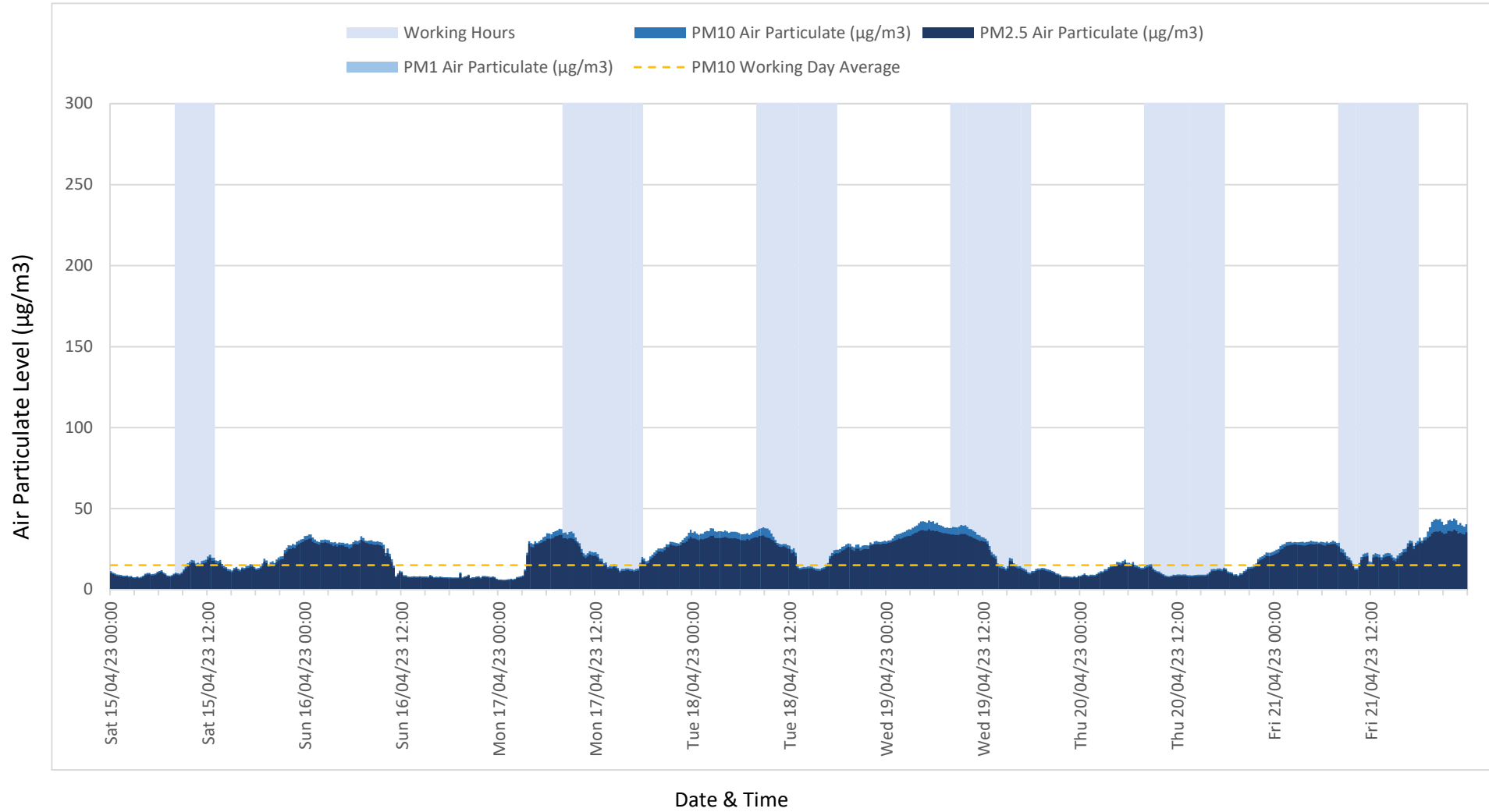




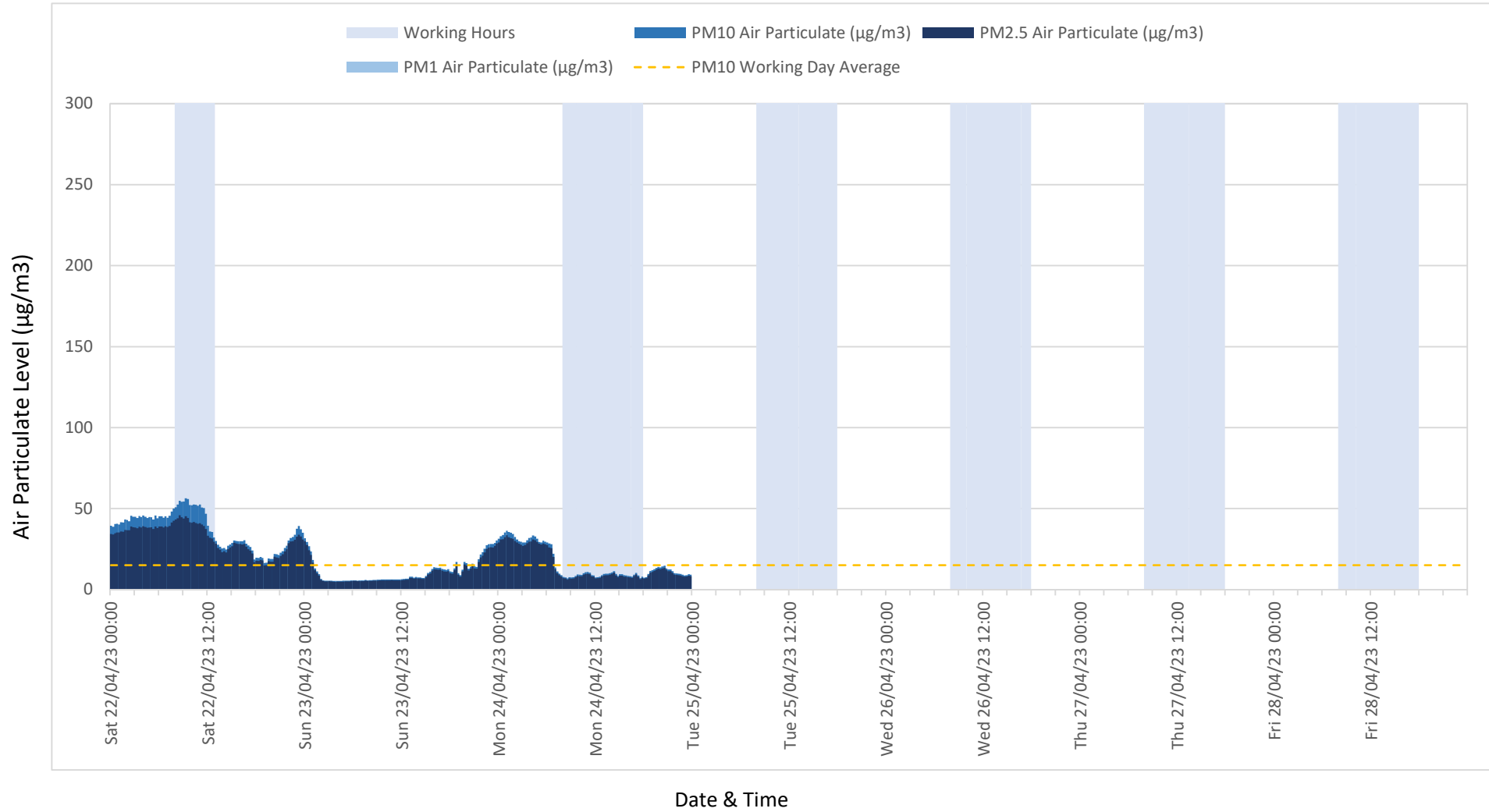
# 52 Avenue Road

Position 2

Saturday 15/04/2023 to Friday 21/04/2023



**52 Avenue Road**  
**Position 2**  
 Saturday 22/04/2023 to Friday 28/04/2023

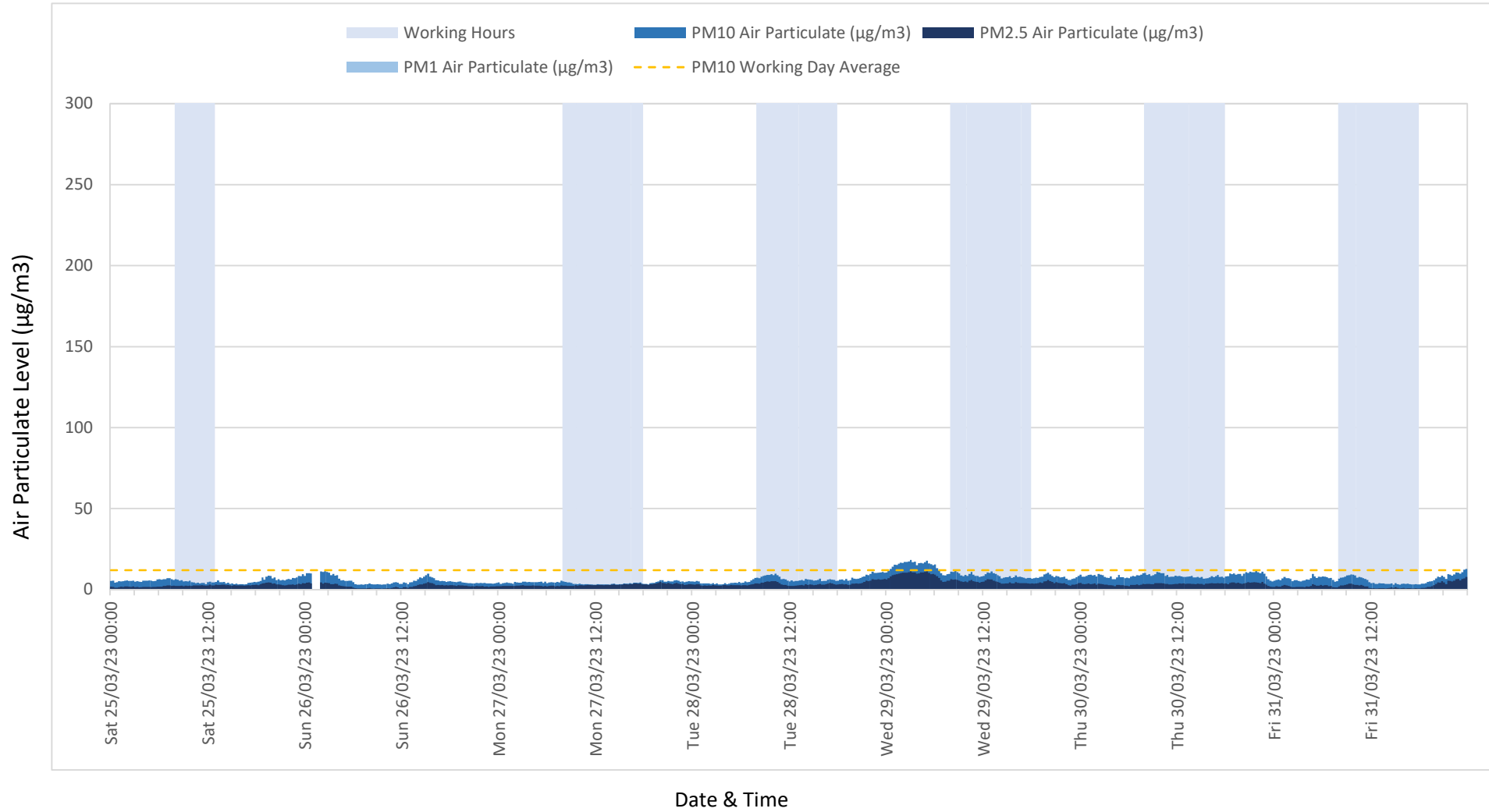




# 52 Avenue Road

Position 3

Saturday 25/03/2023 to Friday 31/03/2023

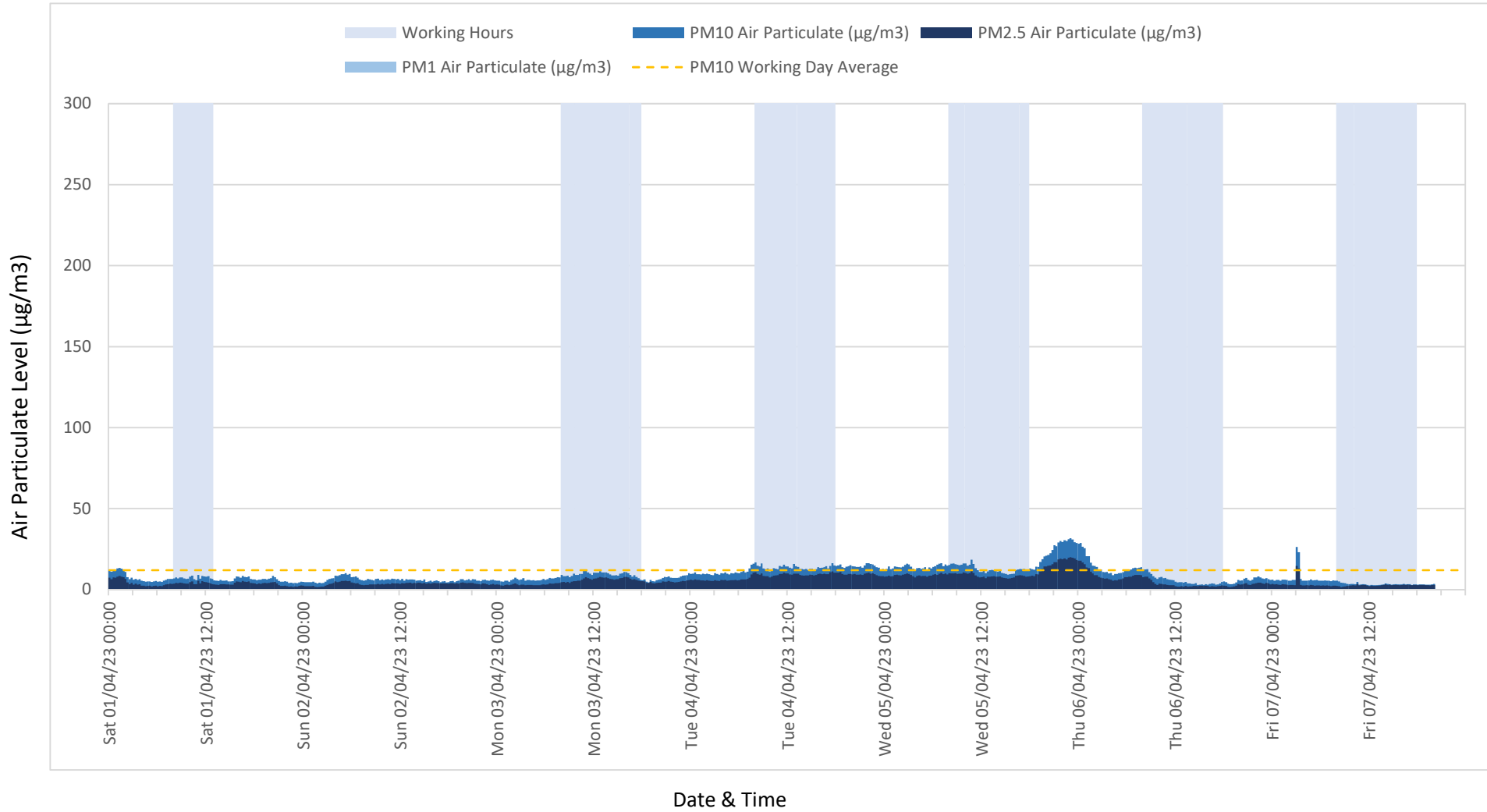




# 52 Avenue Road

Position 3

Saturday 01/04/2023 to Friday 07/04/2023

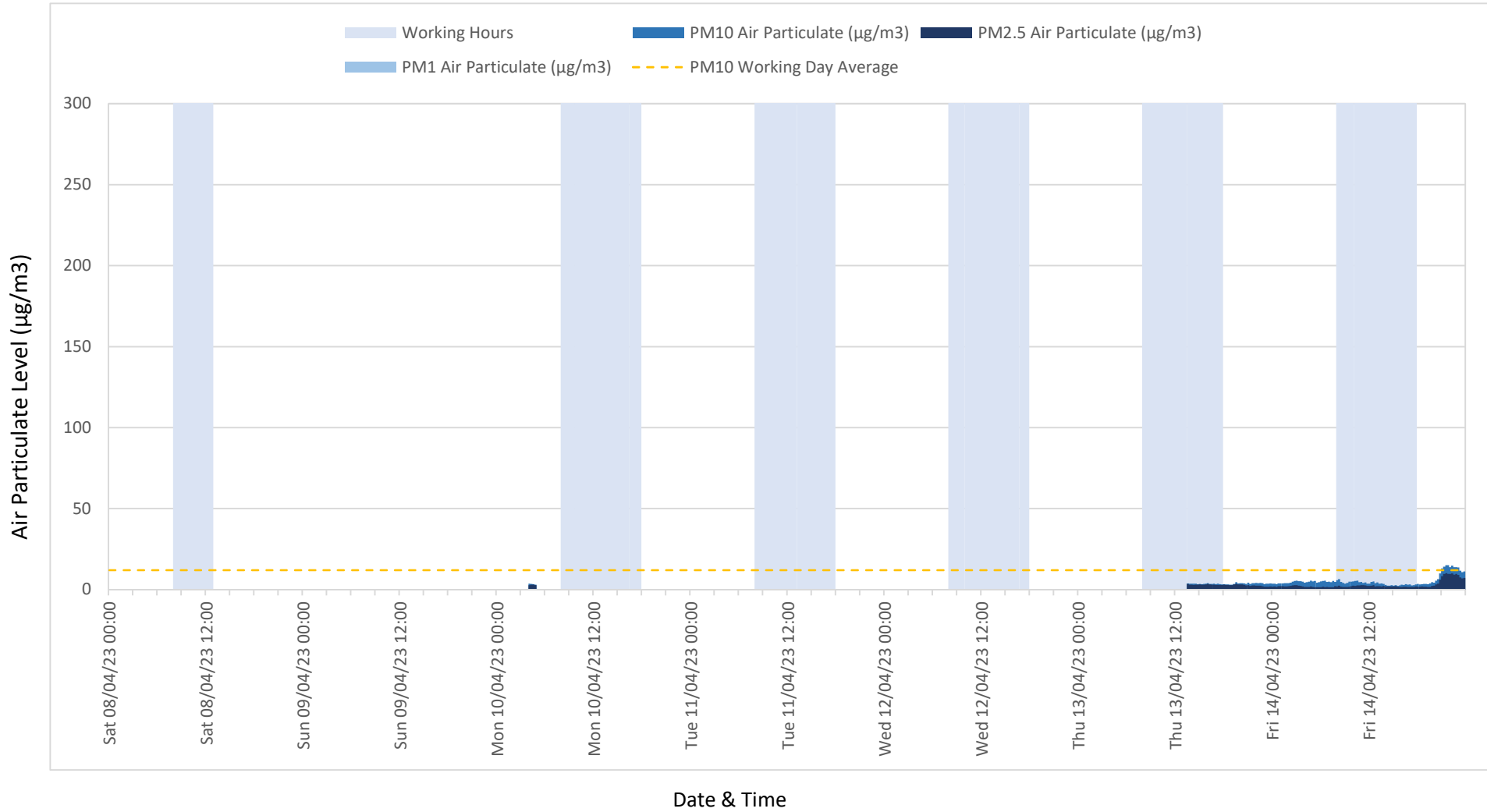




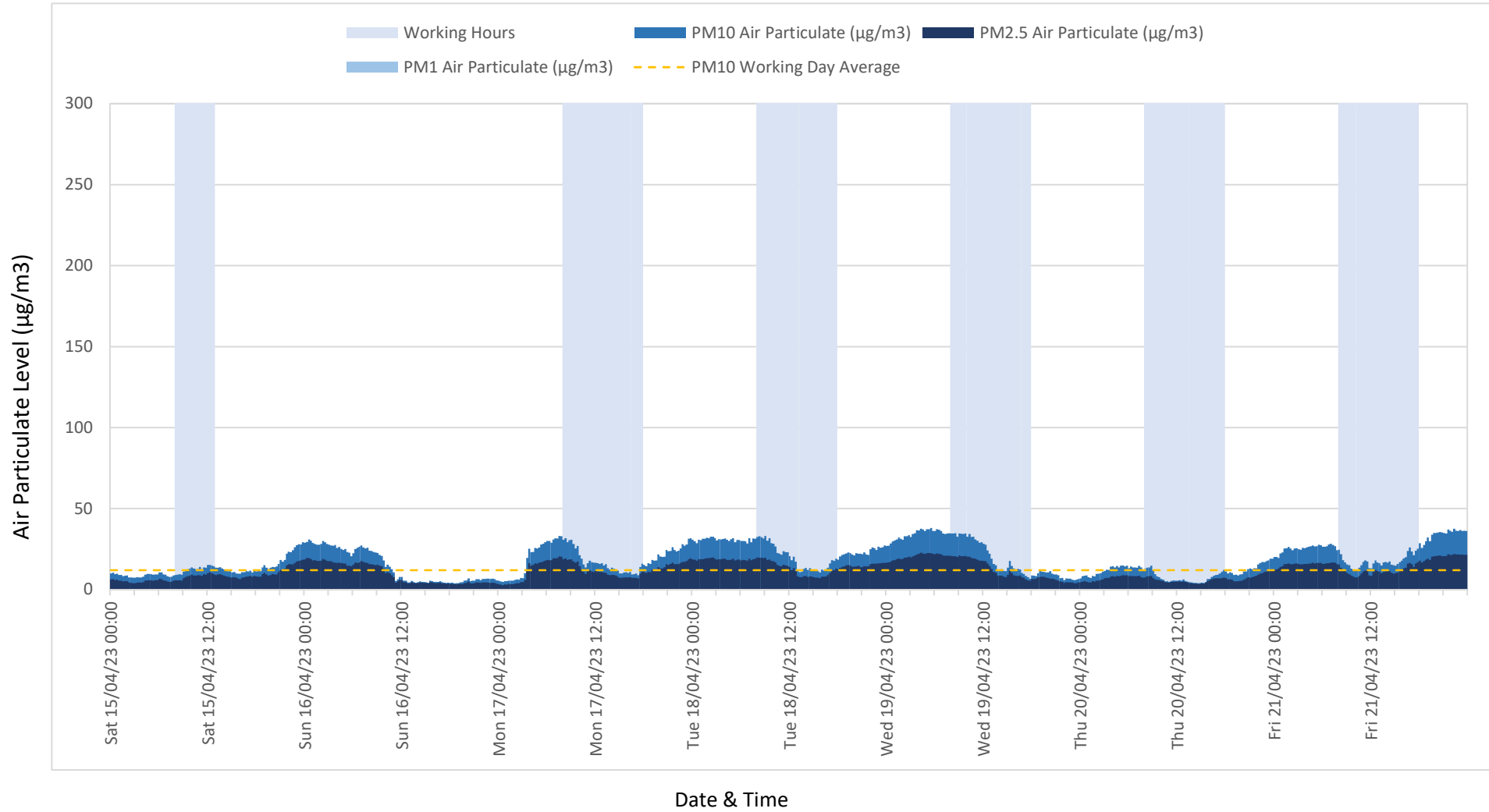
# 52 Avenue Road

Position 3

Saturday 08/04/2023 to Friday 14/04/2023



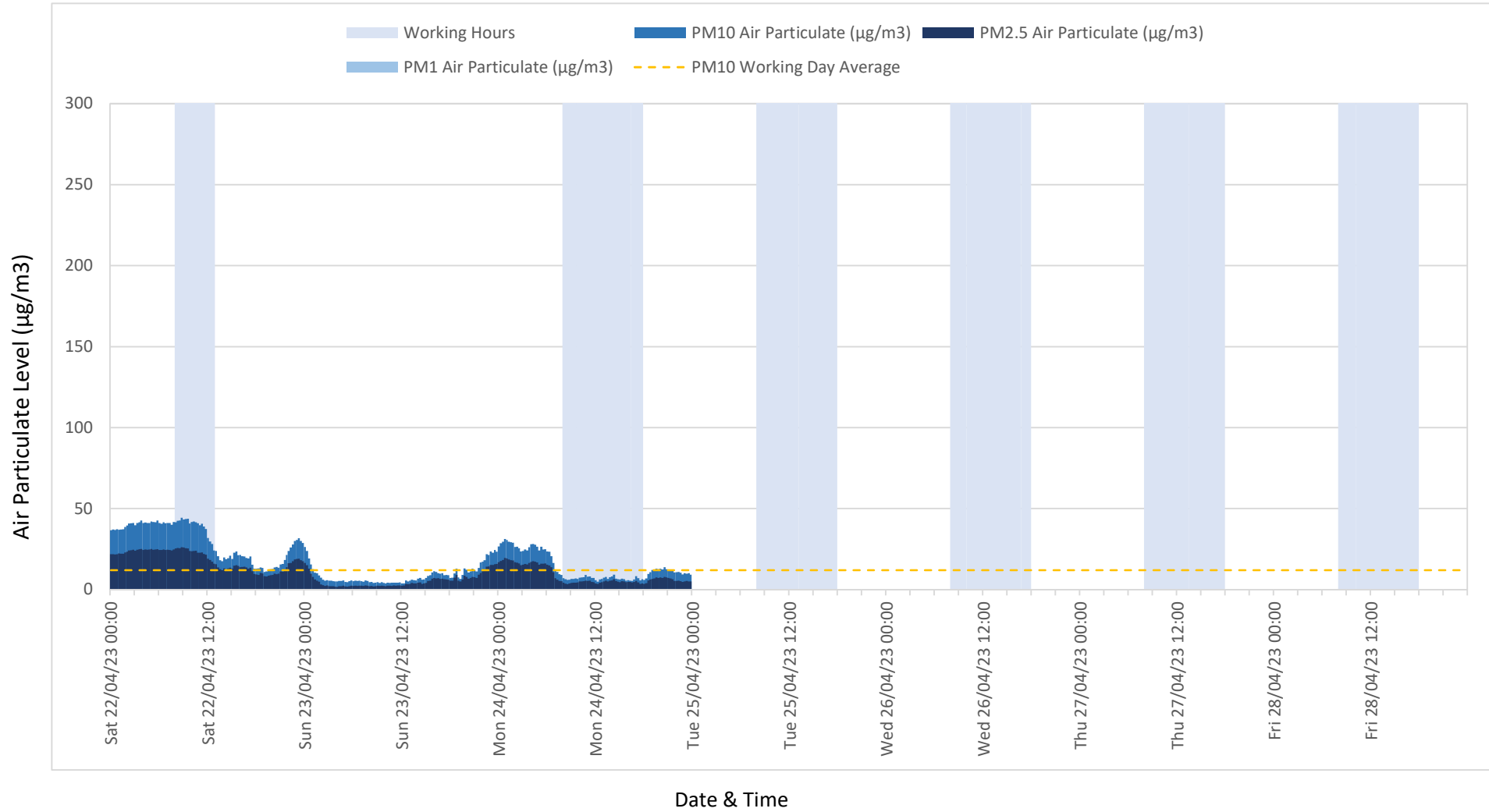
**52 Avenue Road**  
**Position 3**  
 Saturday 15/04/2023 to Friday 21/04/2023



### 52 Avenue Road

Position 3

Saturday 22/04/2023 to Friday 28/04/2023

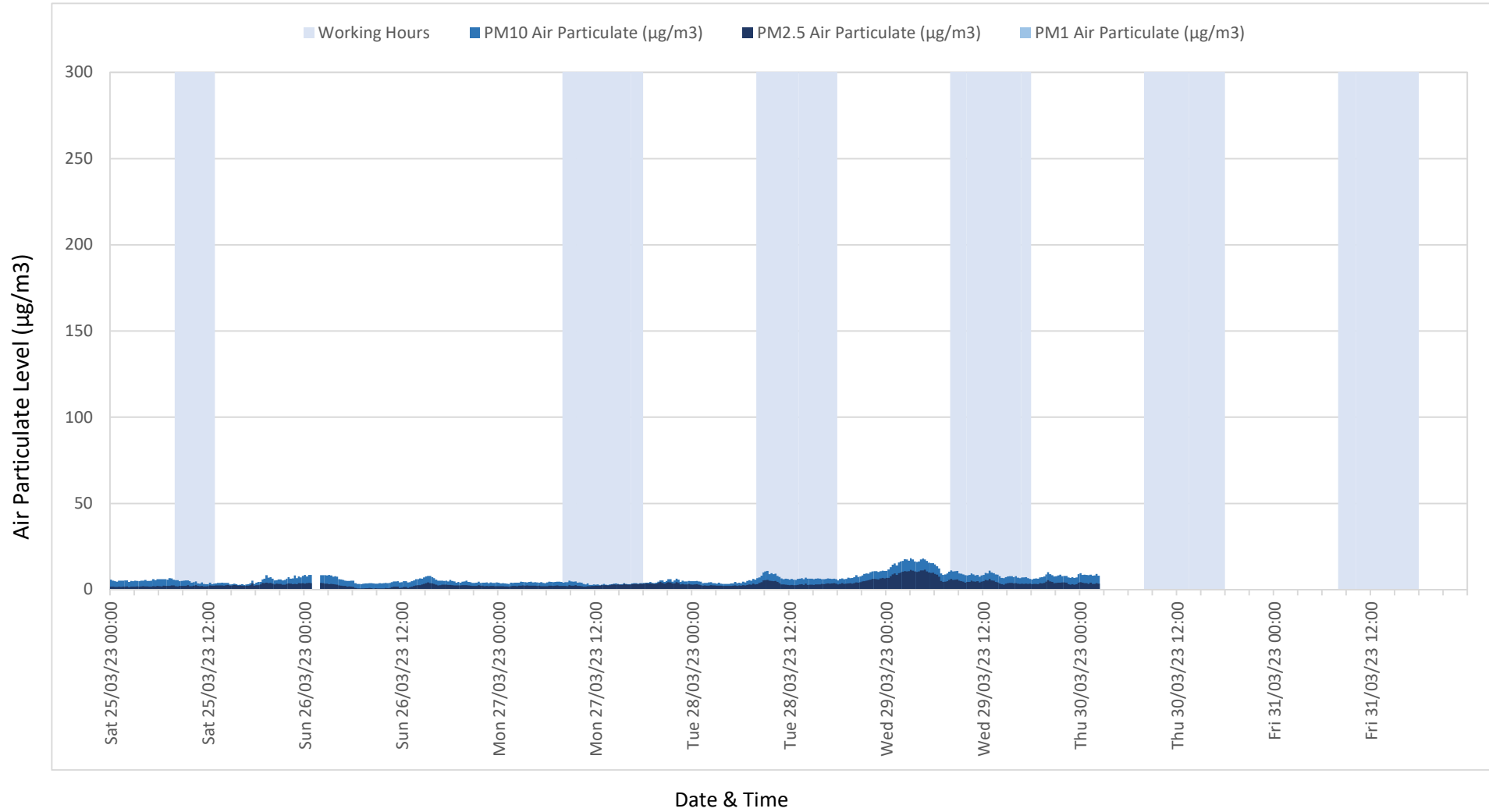




# 52 Avenue Road

Position 4

Saturday 25/03/2023 to Friday 31/03/2023



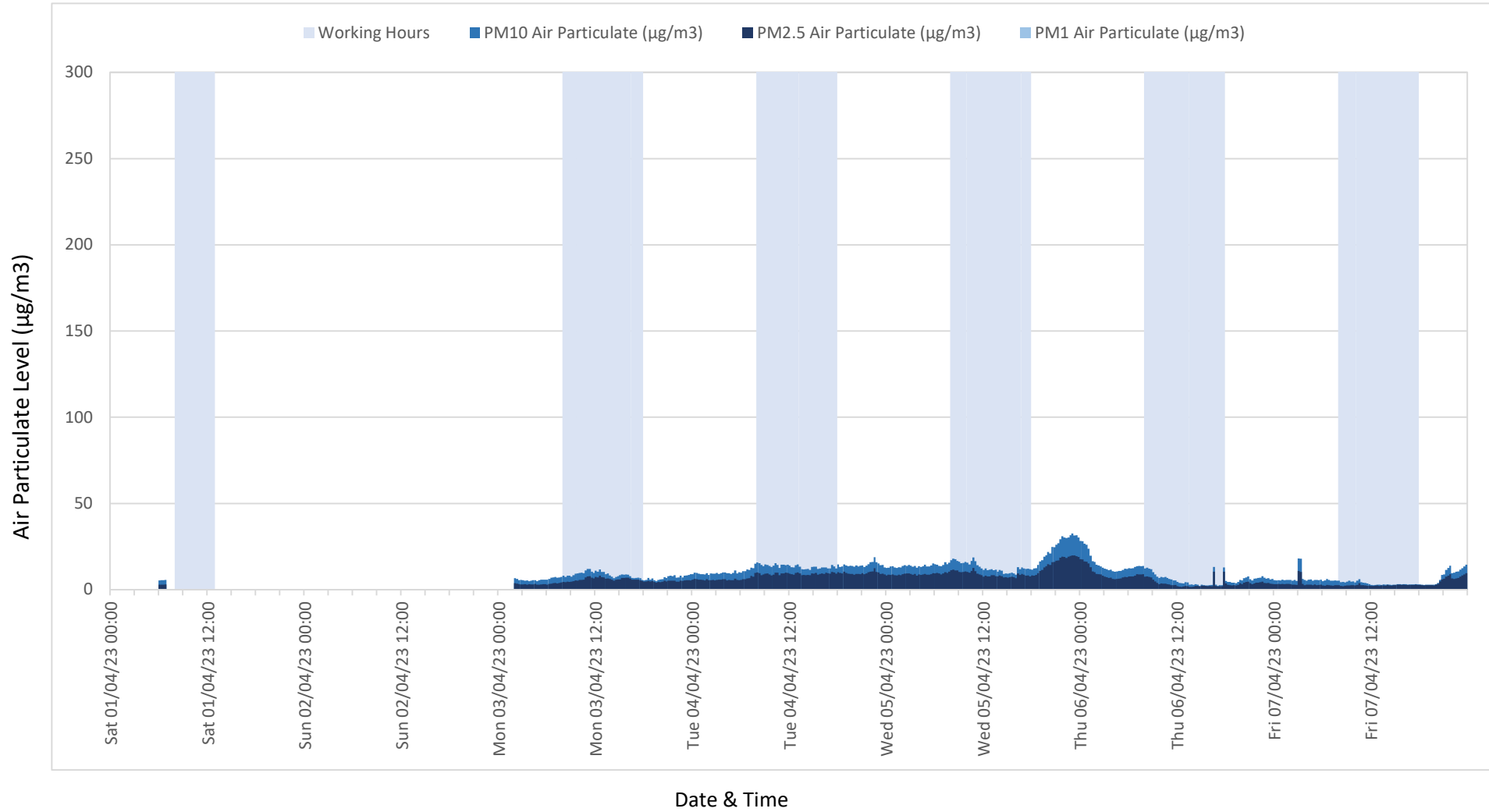




# 52 Avenue Road

Position 4

Saturday 01/04/2023 to Friday 07/04/2023

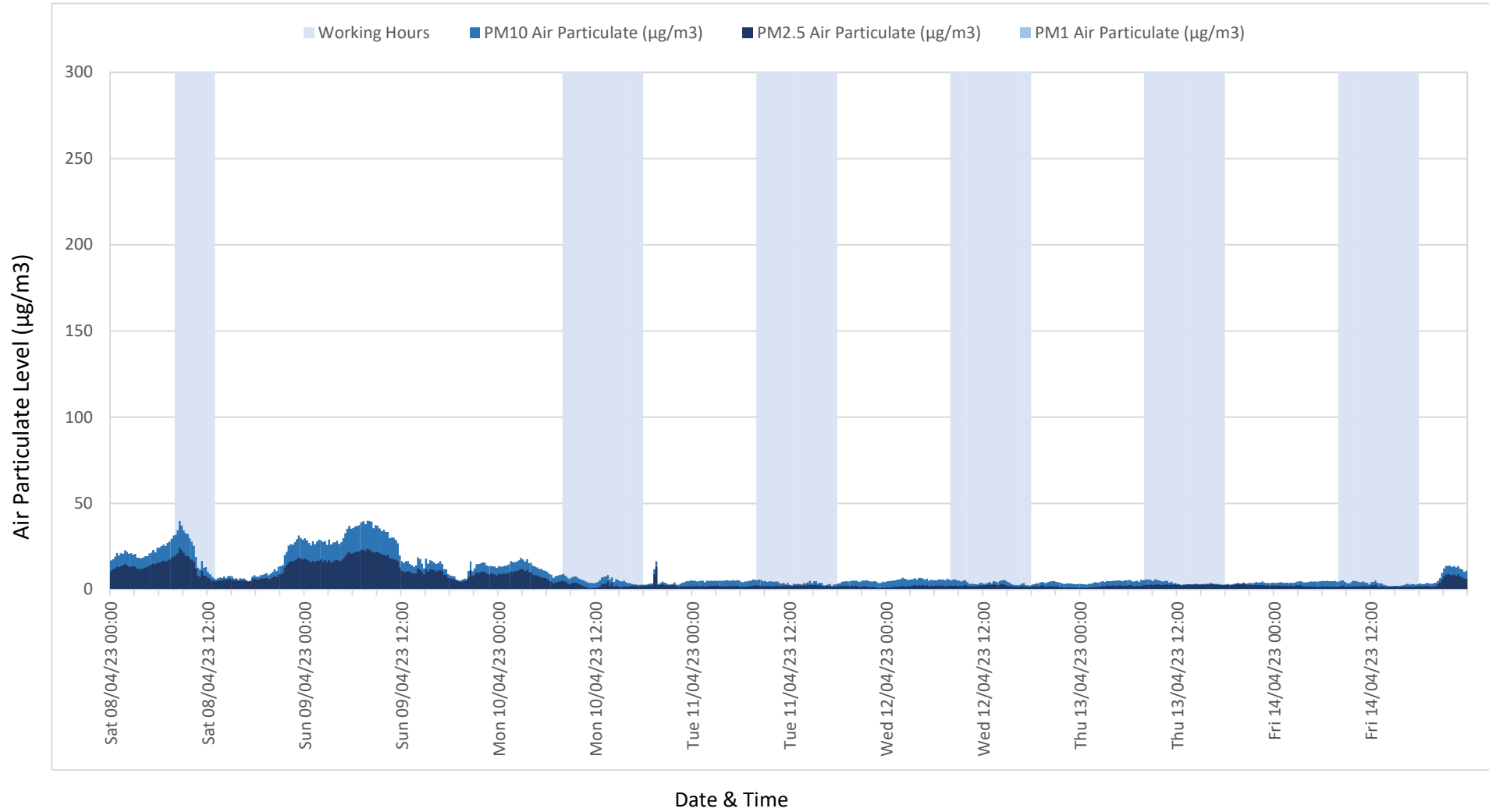




# 52 Avenue Road

Position 4

Saturday 08/04/2023 to Friday 14/04/2023

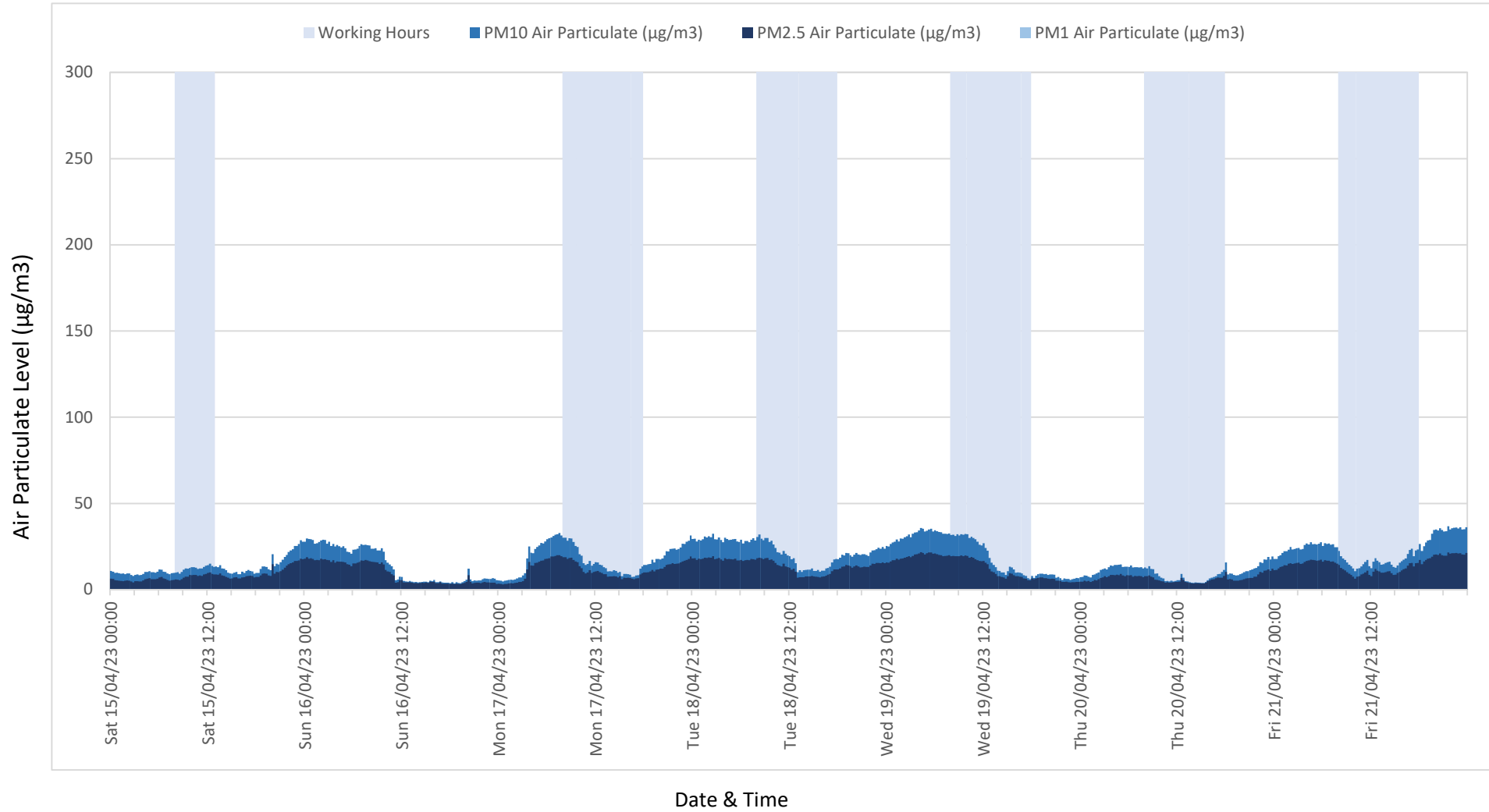




# 52 Avenue Road

Position 4

Saturday 15/04/2023 to Friday 21/04/2023

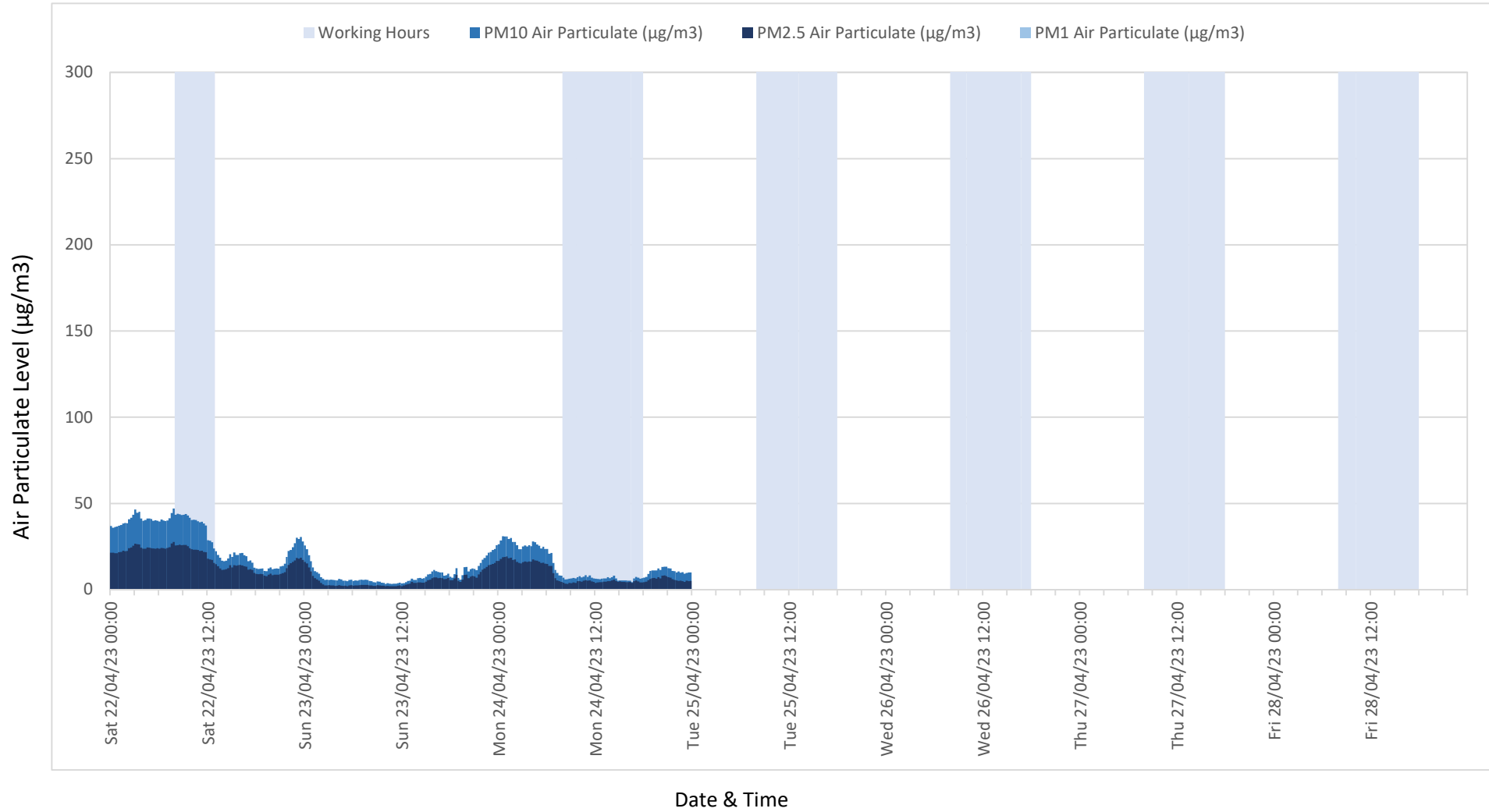




# 52 Avenue Road

Position 4

Saturday 22/04/2023 to Friday 28/04/2023

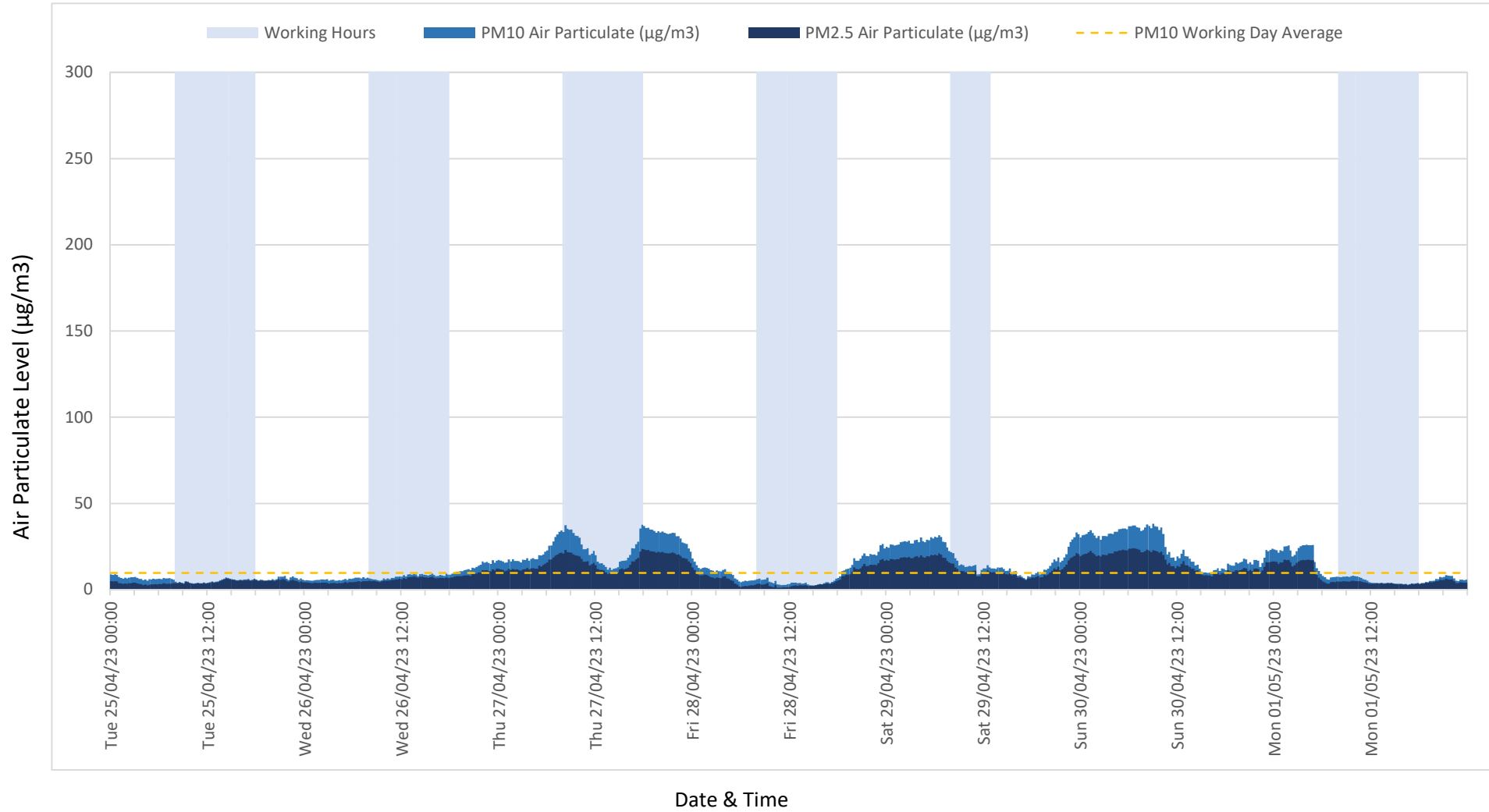




# 52 Avenue Road

Position 1

Tuesday 25/04/2023 to Monday 01/05/2023

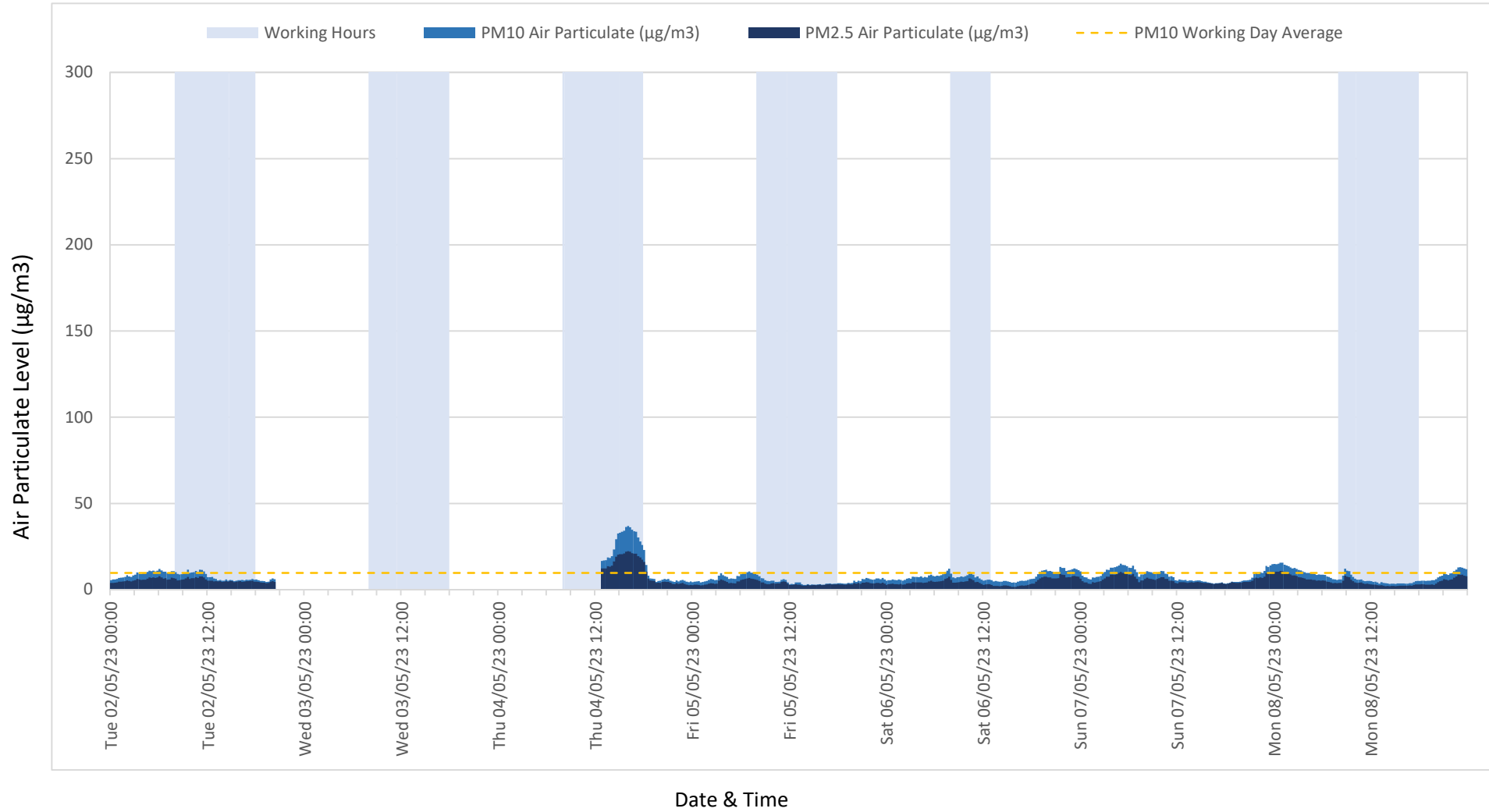




# 52 Avenue Road

Position 1

Tuesday 02/05/2023 to Monday 08/05/2023

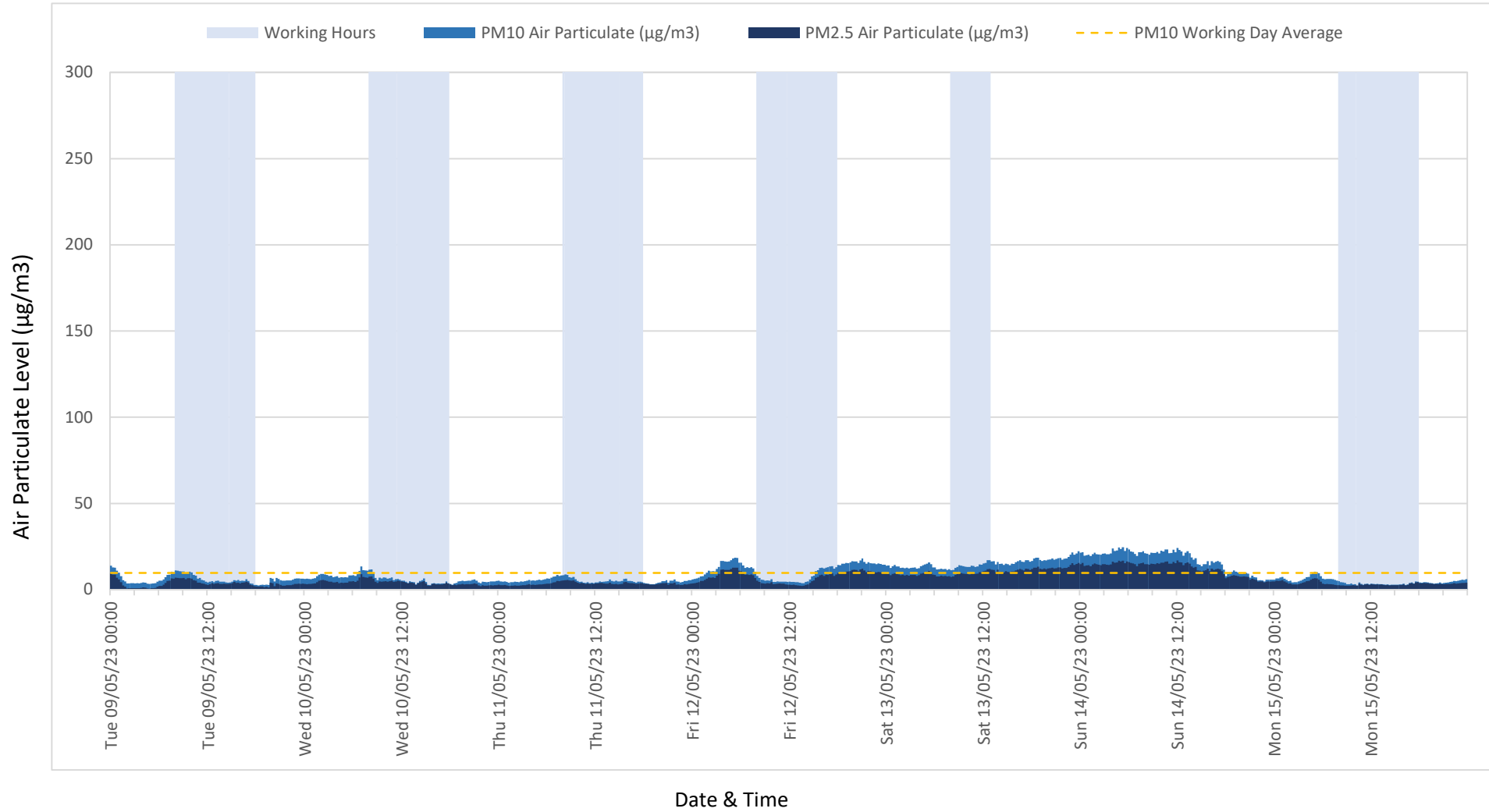




# 52 Avenue Road

Position 1

Tuesday 09/05/2023 to Monday 15/05/2023

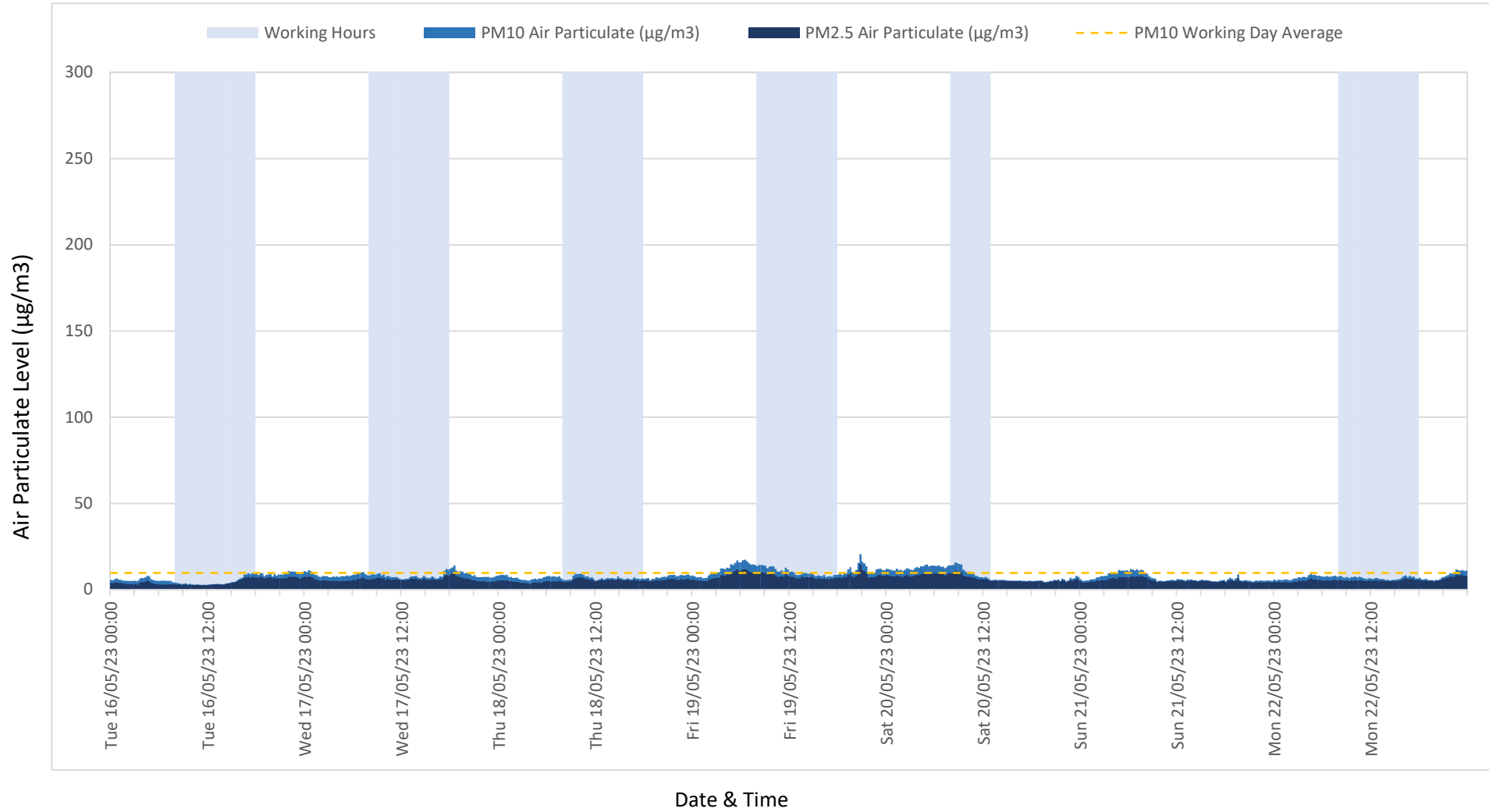




# 52 Avenue Road

Position 1

Tuesday 16/05/2023 to Monday 22/05/2023



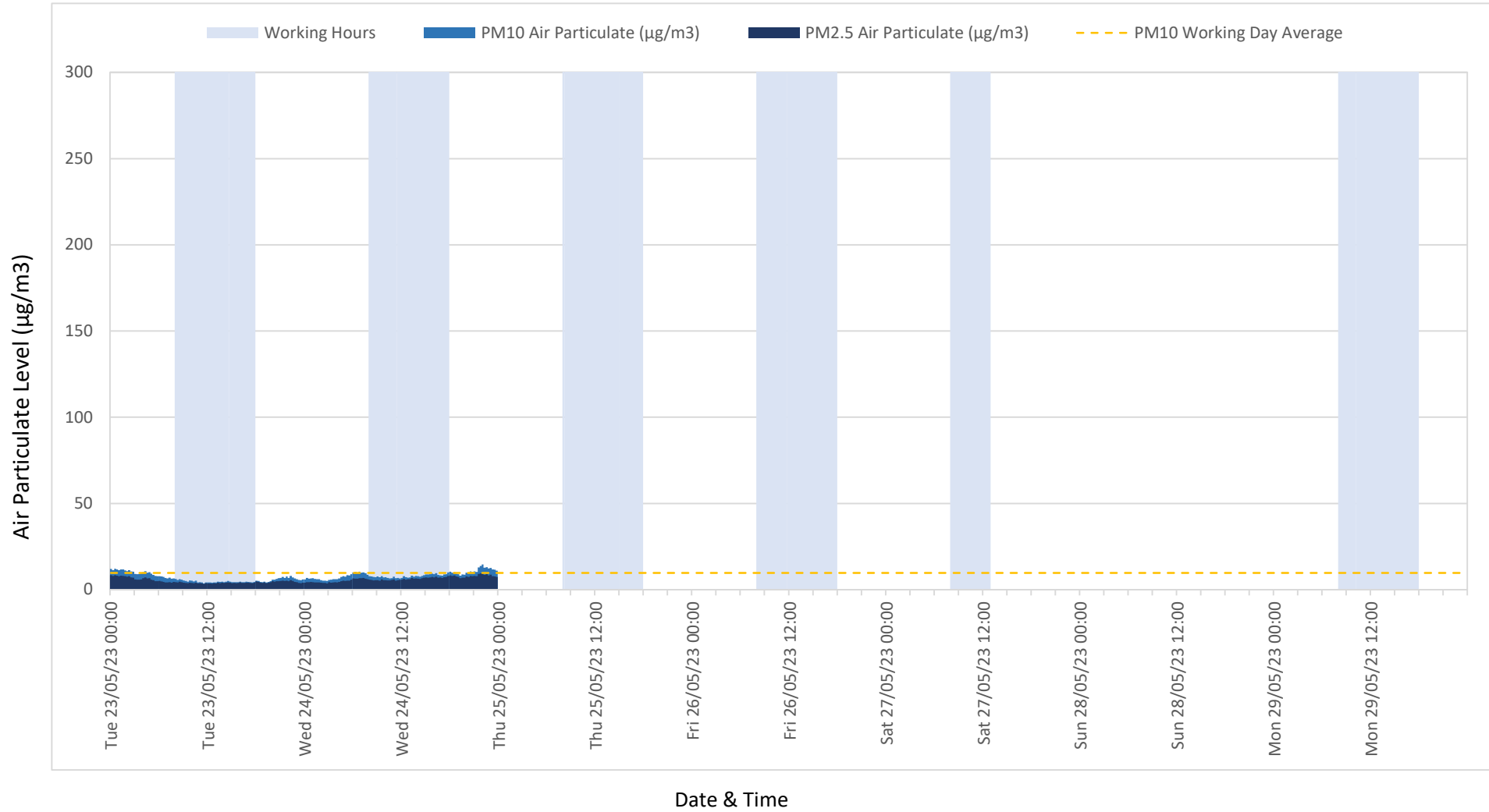




# 52 Avenue Road

Position 1

Tuesday 23/05/2023 to Monday 29/05/2023

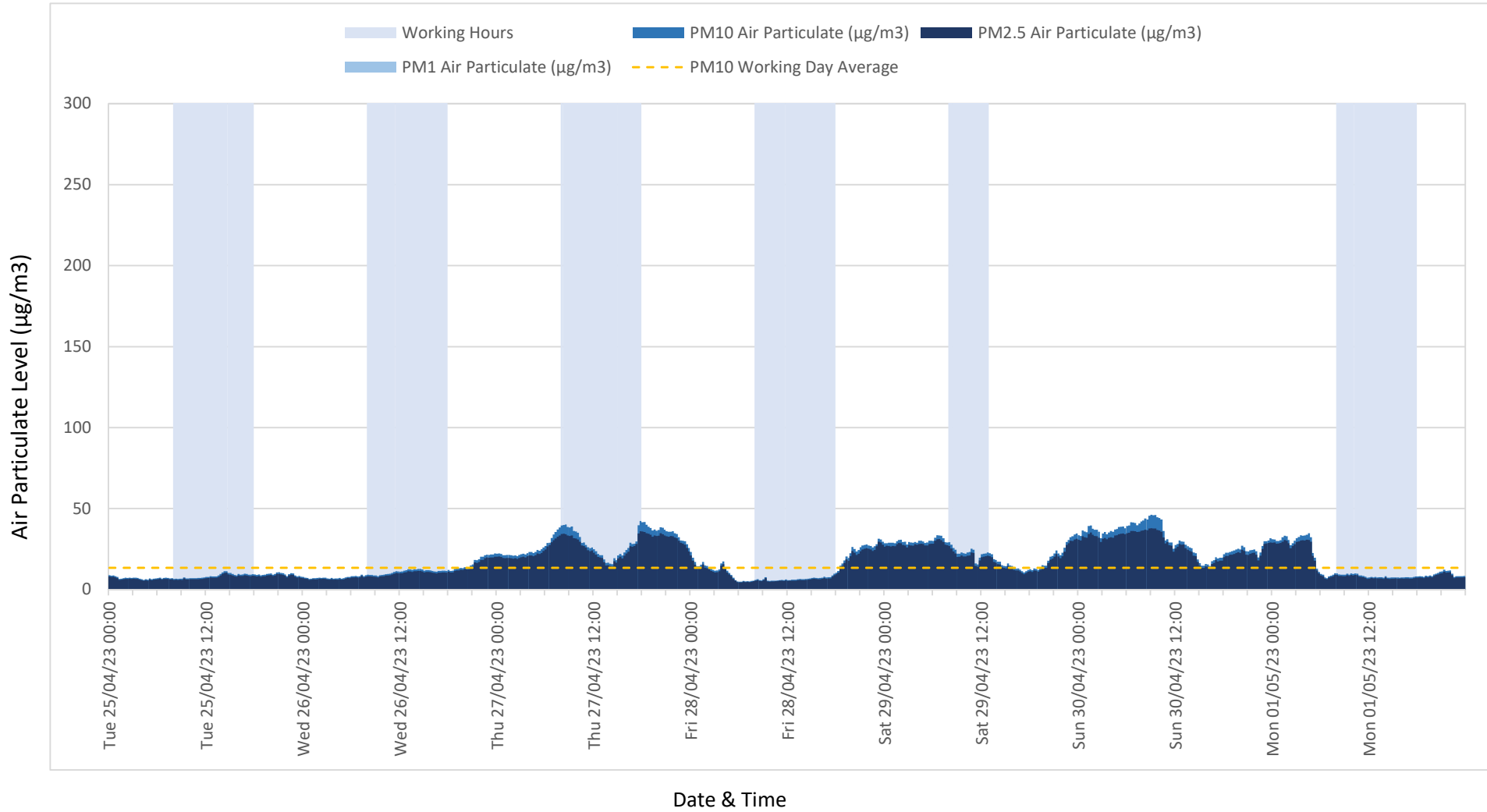




# 52 Avenue Road

## Position 2

Tuesday 25/04/2023 to Monday 01/05/2023

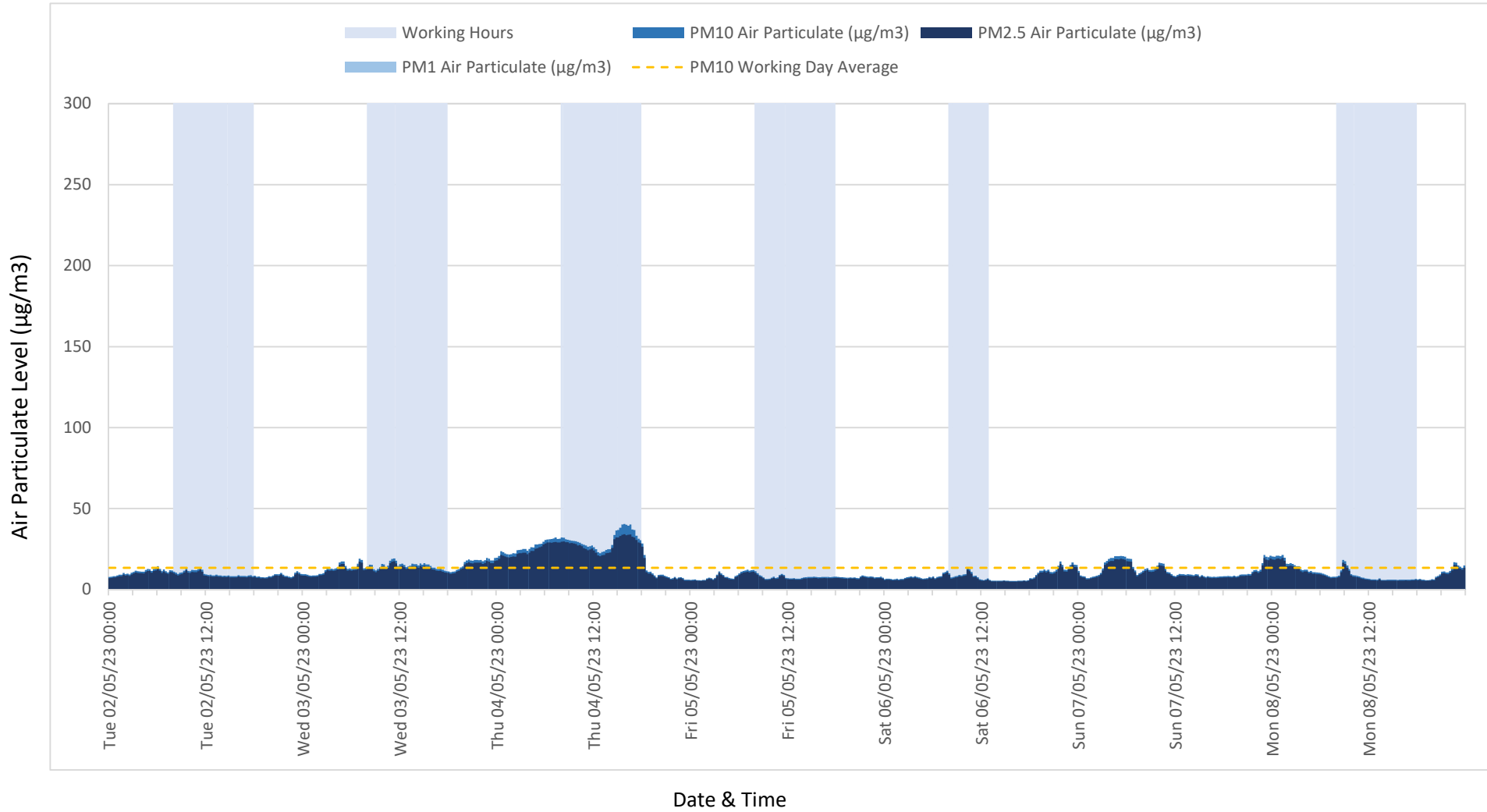




# 52 Avenue Road

Position 2

Tuesday 02/05/2023 to Monday 08/05/2023

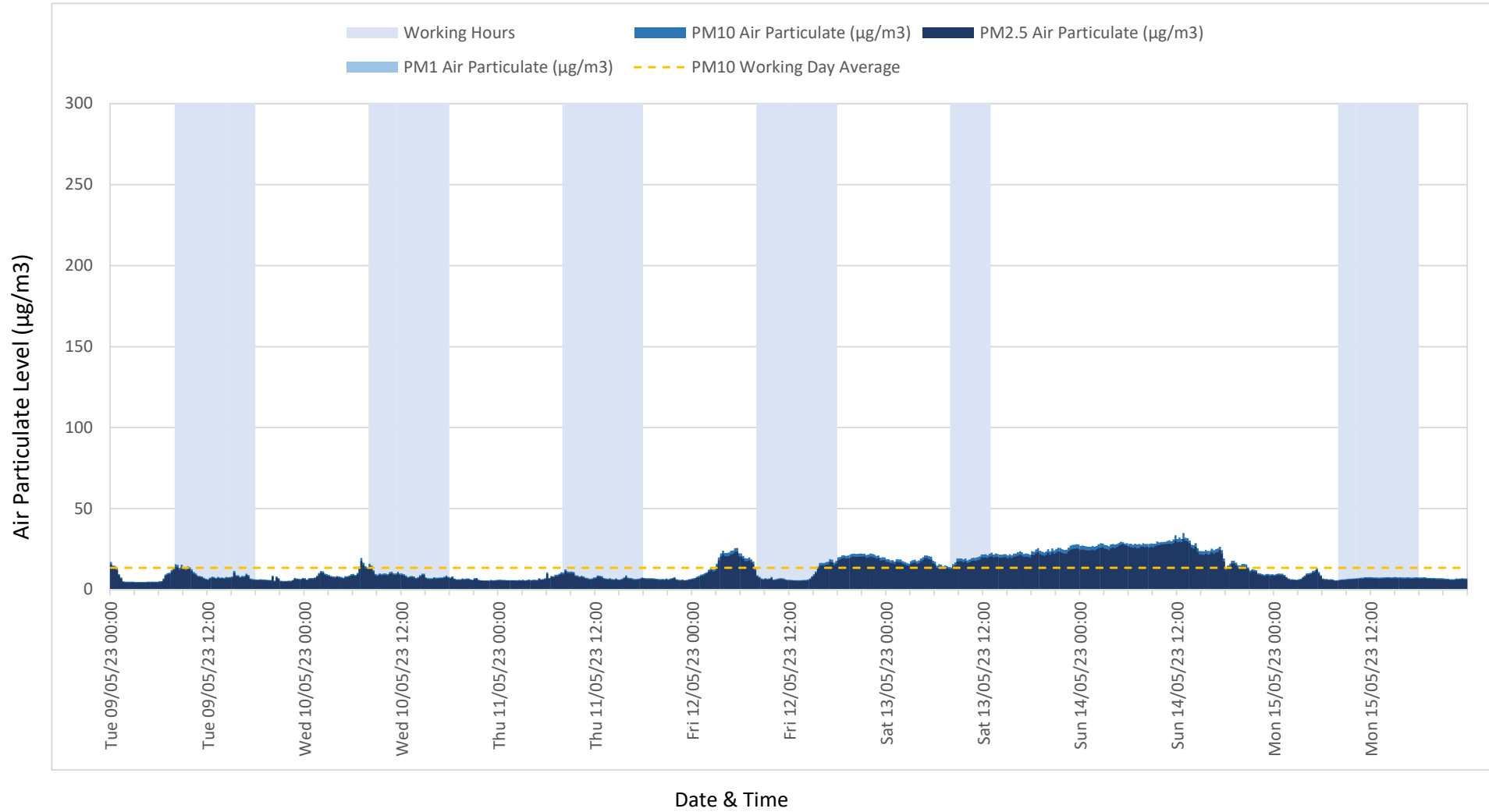




# 52 Avenue Road

Position 2

Tuesday 09/05/2023 to Monday 15/05/2023

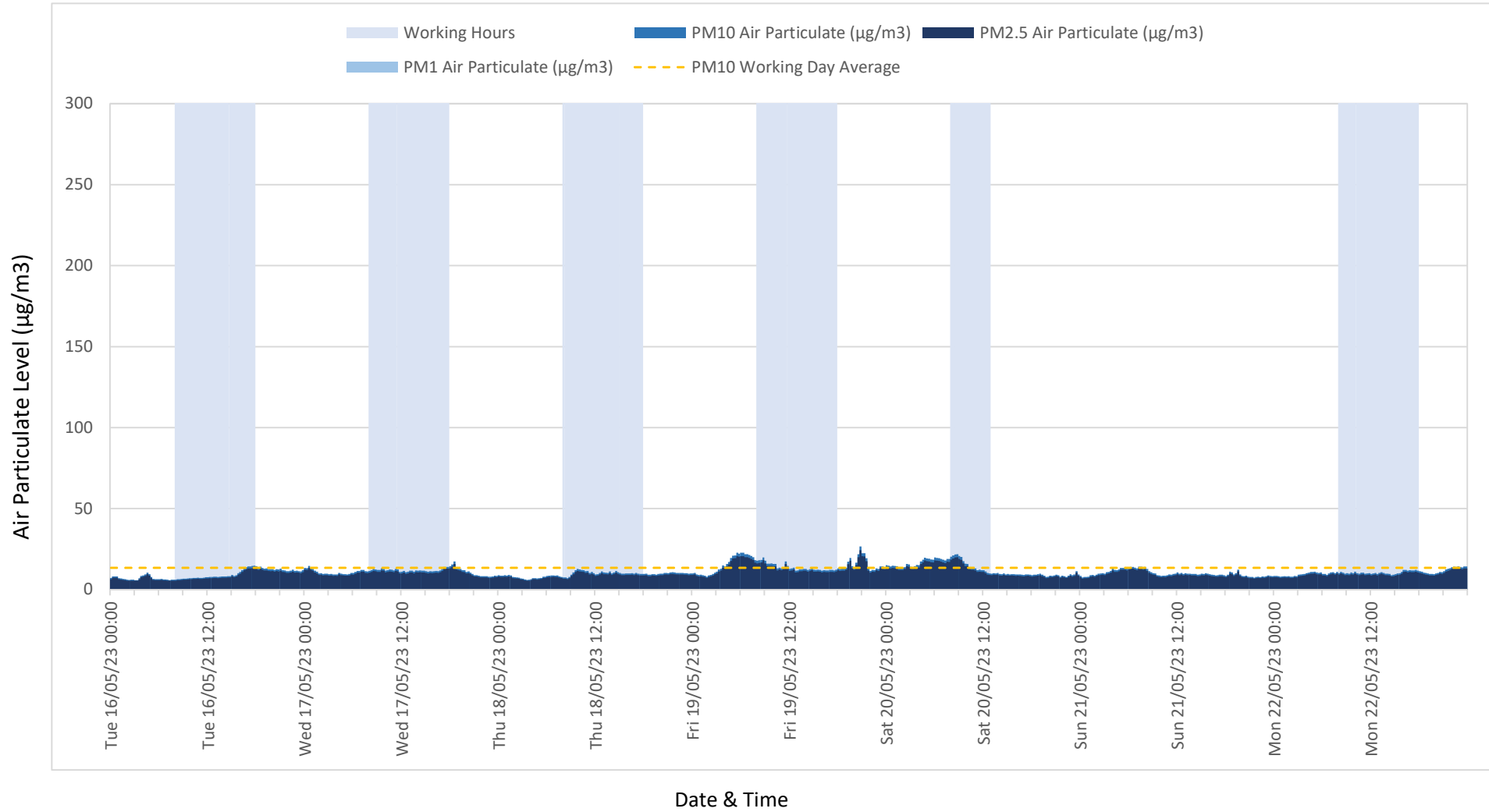




# 52 Avenue Road

Position 2

Tuesday 16/05/2023 to Monday 22/05/2023

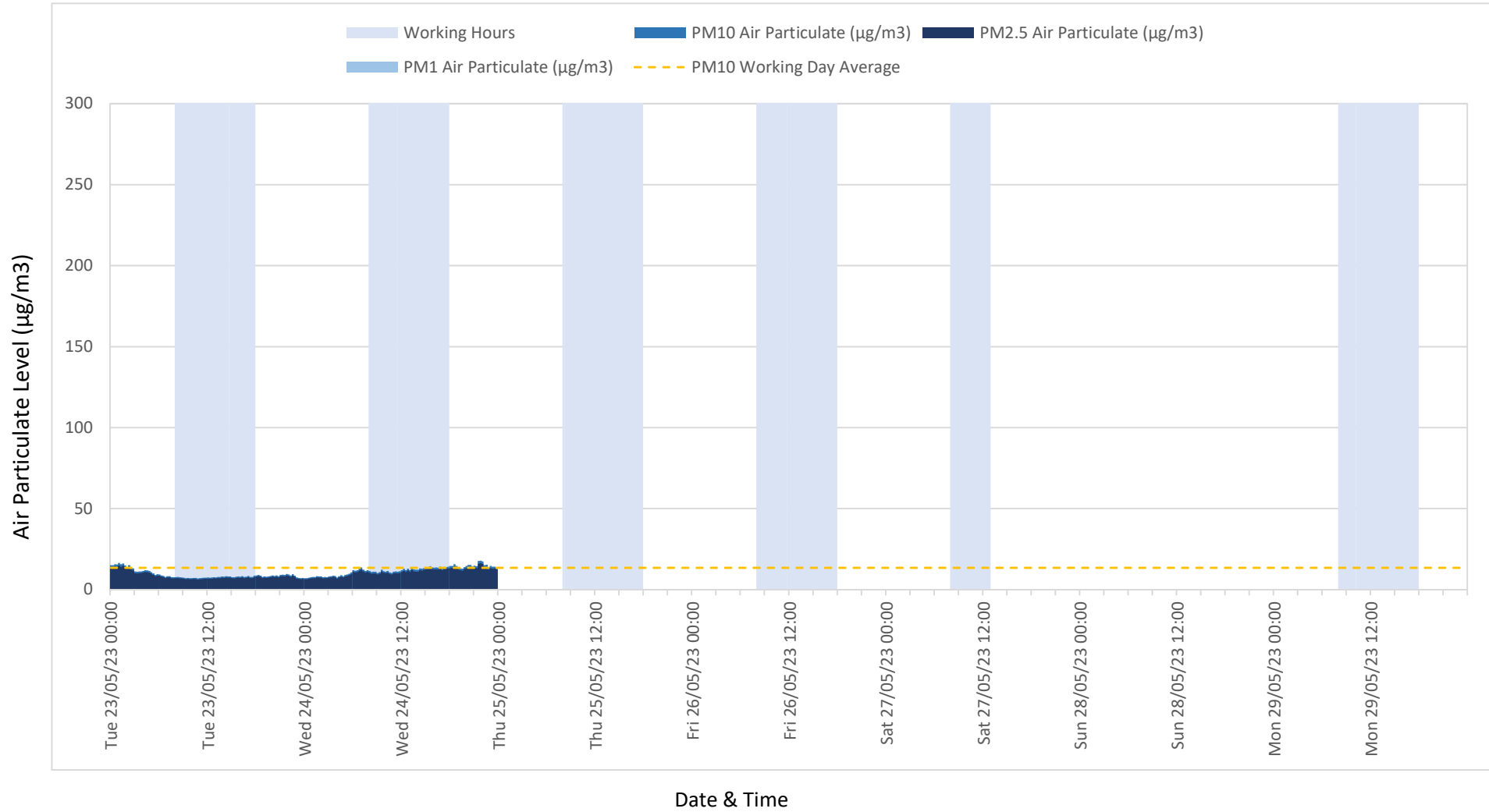




# 52 Avenue Road

## Position 2

Tuesday 23/05/2023 to Monday 29/05/2023

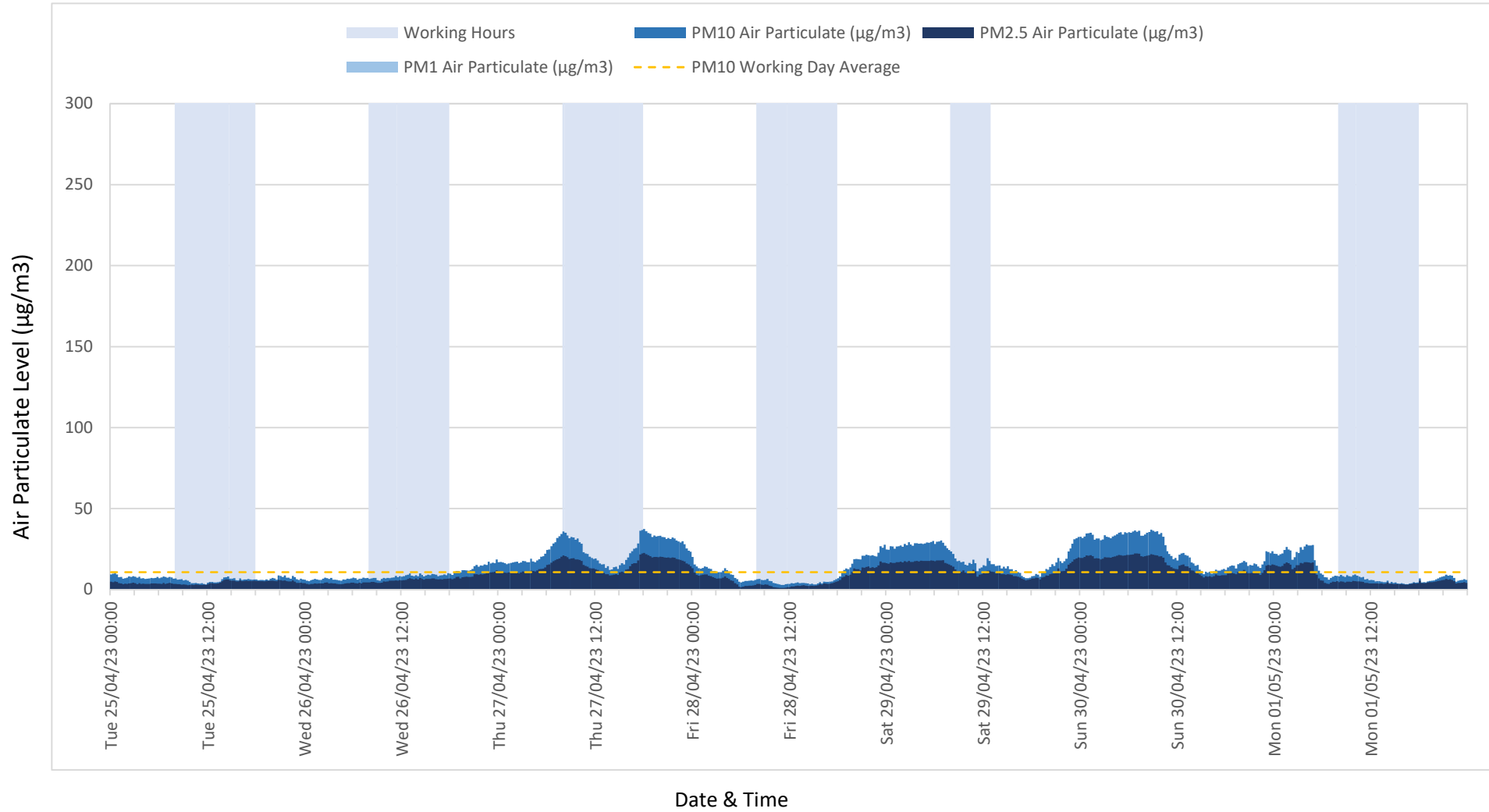




# 52 Avenue Road

Position 3

Tuesday 25/04/2023 to Monday 01/05/2023

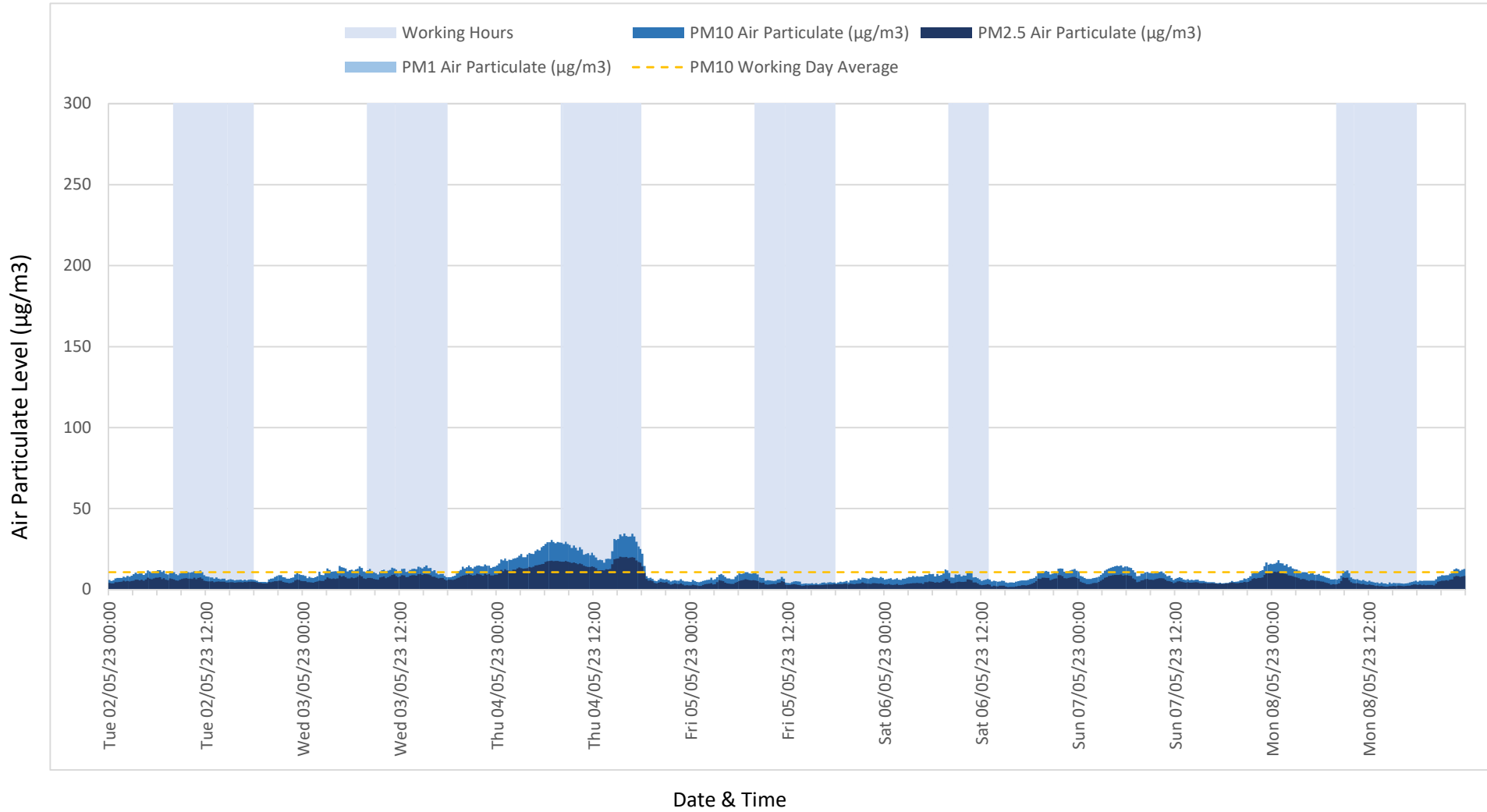




# 52 Avenue Road

Position 3

Tuesday 02/05/2023 to Monday 08/05/2023



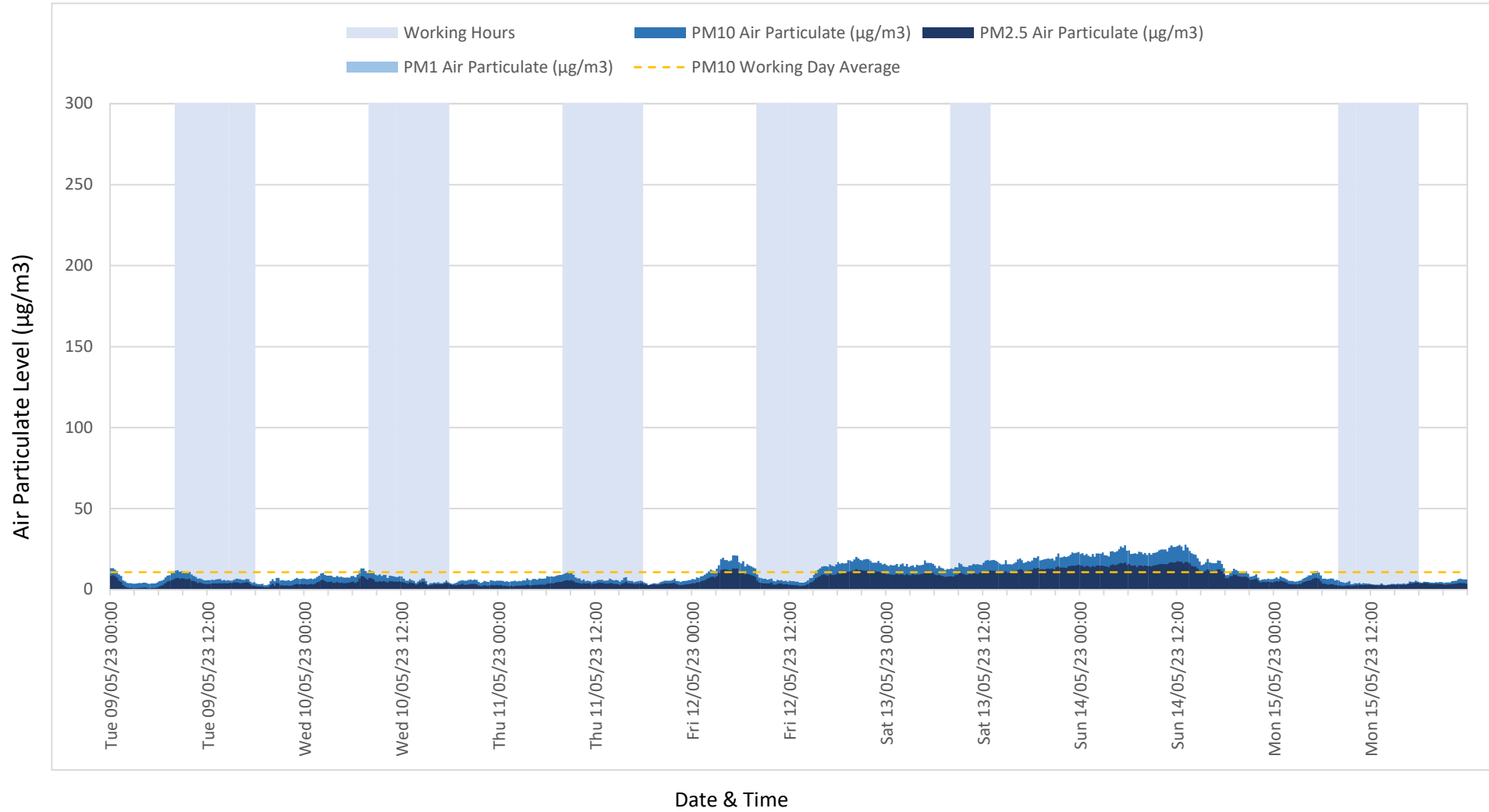




# 52 Avenue Road

Position 3

Tuesday 09/05/2023 to Monday 15/05/2023

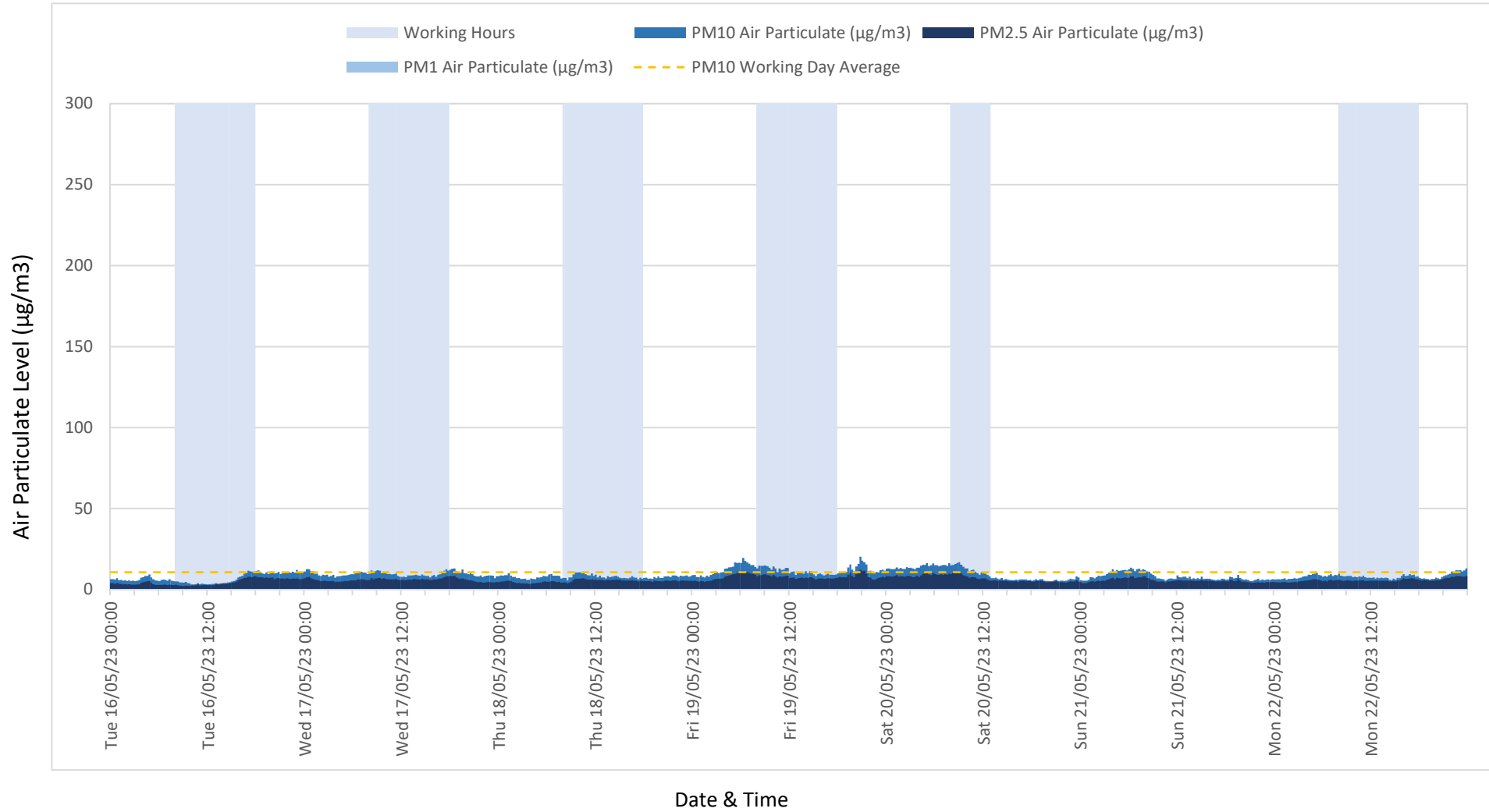




# 52 Avenue Road

Position 3

Tuesday 16/05/2023 to Monday 22/05/2023

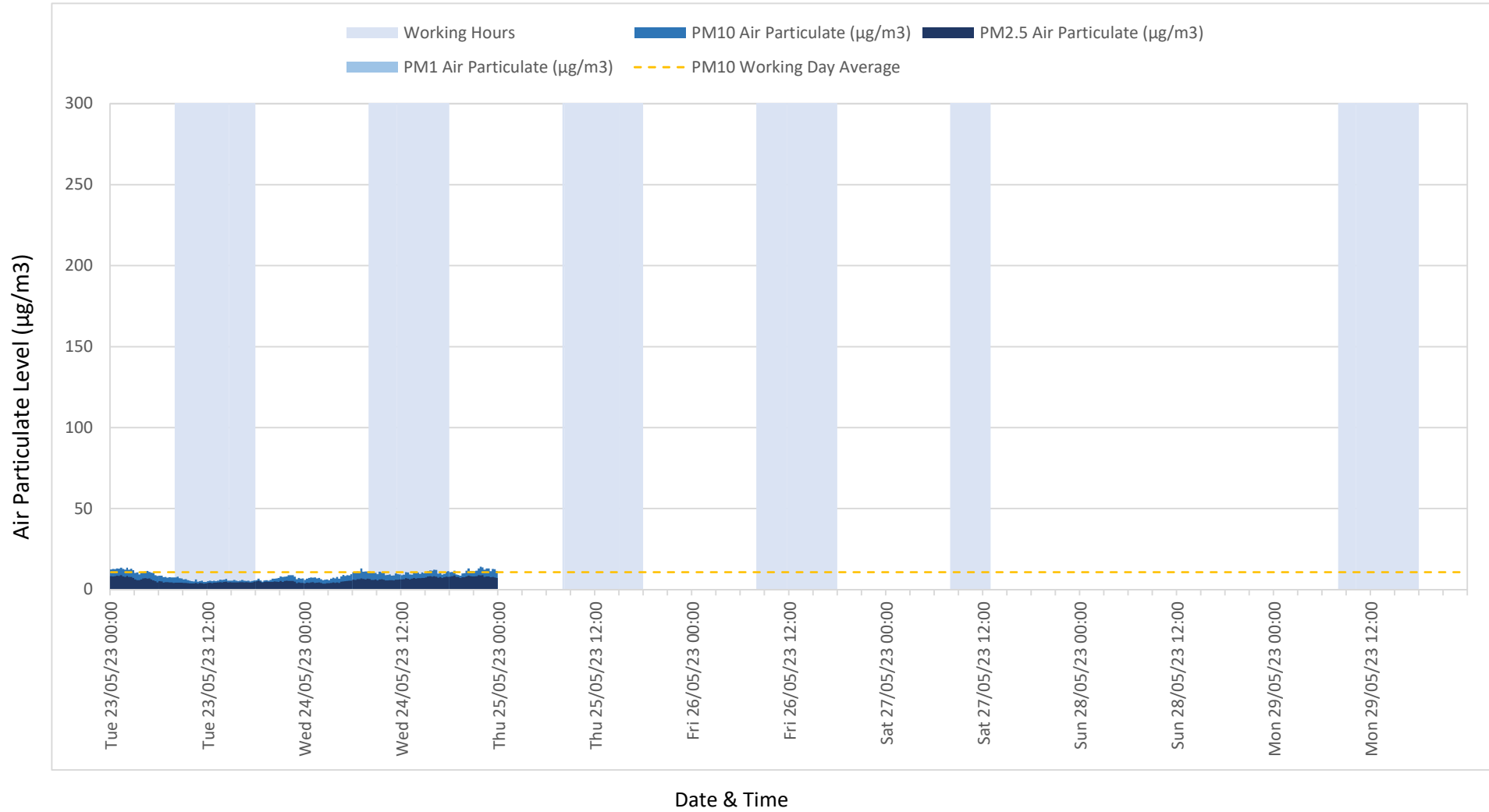




# 52 Avenue Road

Position 3

Tuesday 23/05/2023 to Monday 29/05/2023

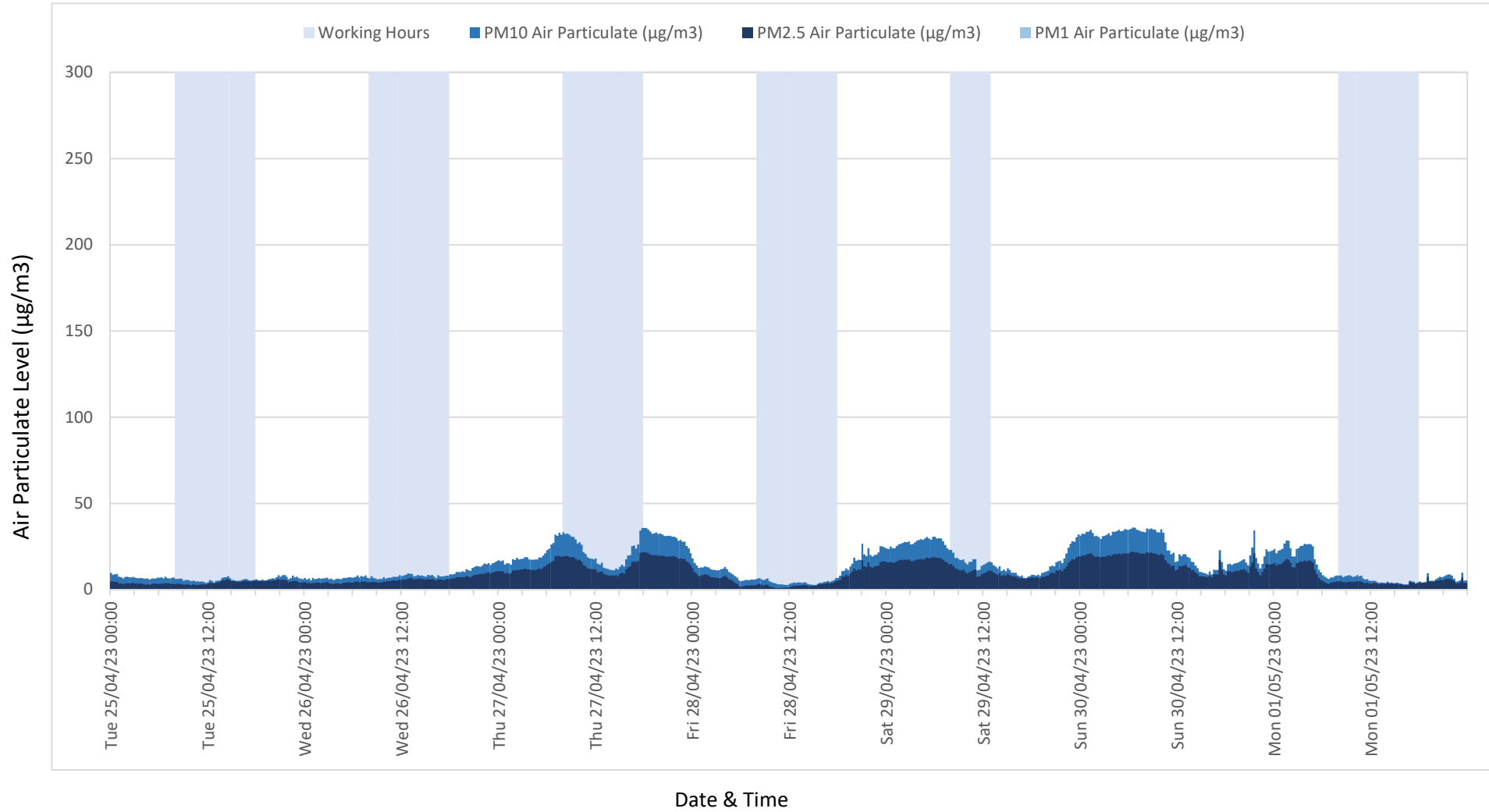




# 52 Avenue Road

Position 4

Tuesday 25/04/2023 to Monday 01/05/2023

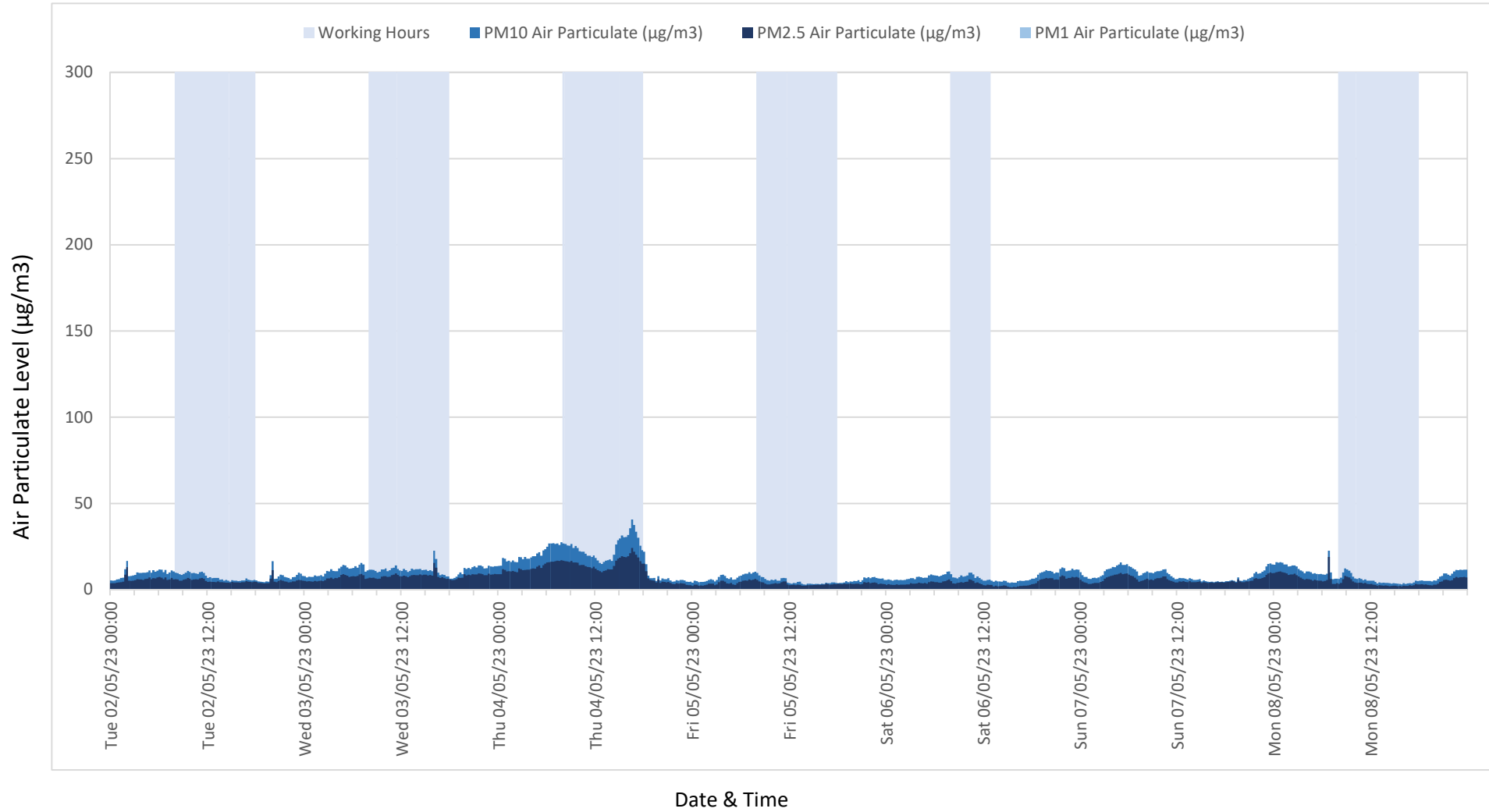




# 52 Avenue Road

Position 4

Tuesday 02/05/2023 to Monday 08/05/2023

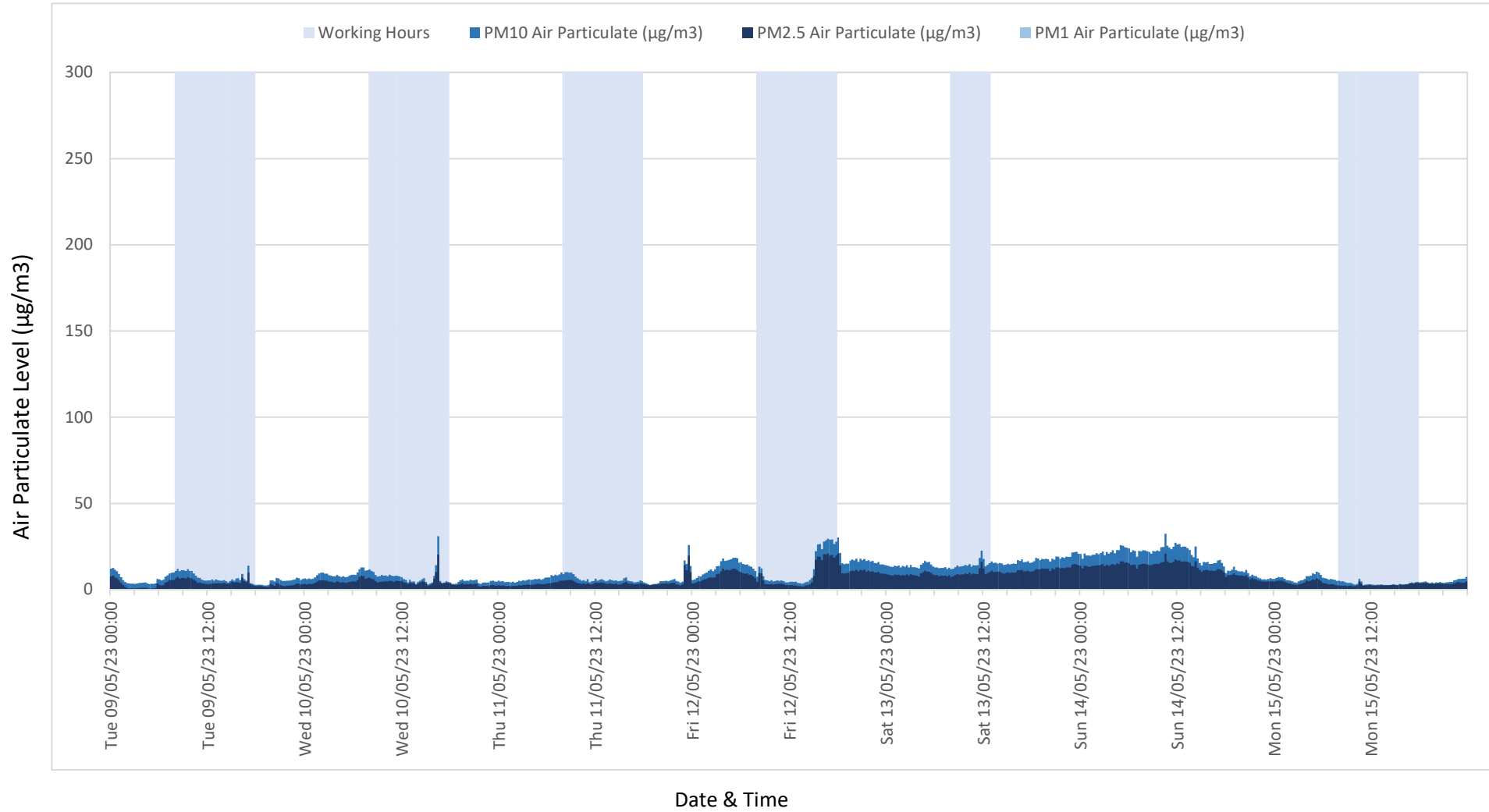




# 52 Avenue Road

Position 4

Tuesday 09/05/2023 to Monday 15/05/2023

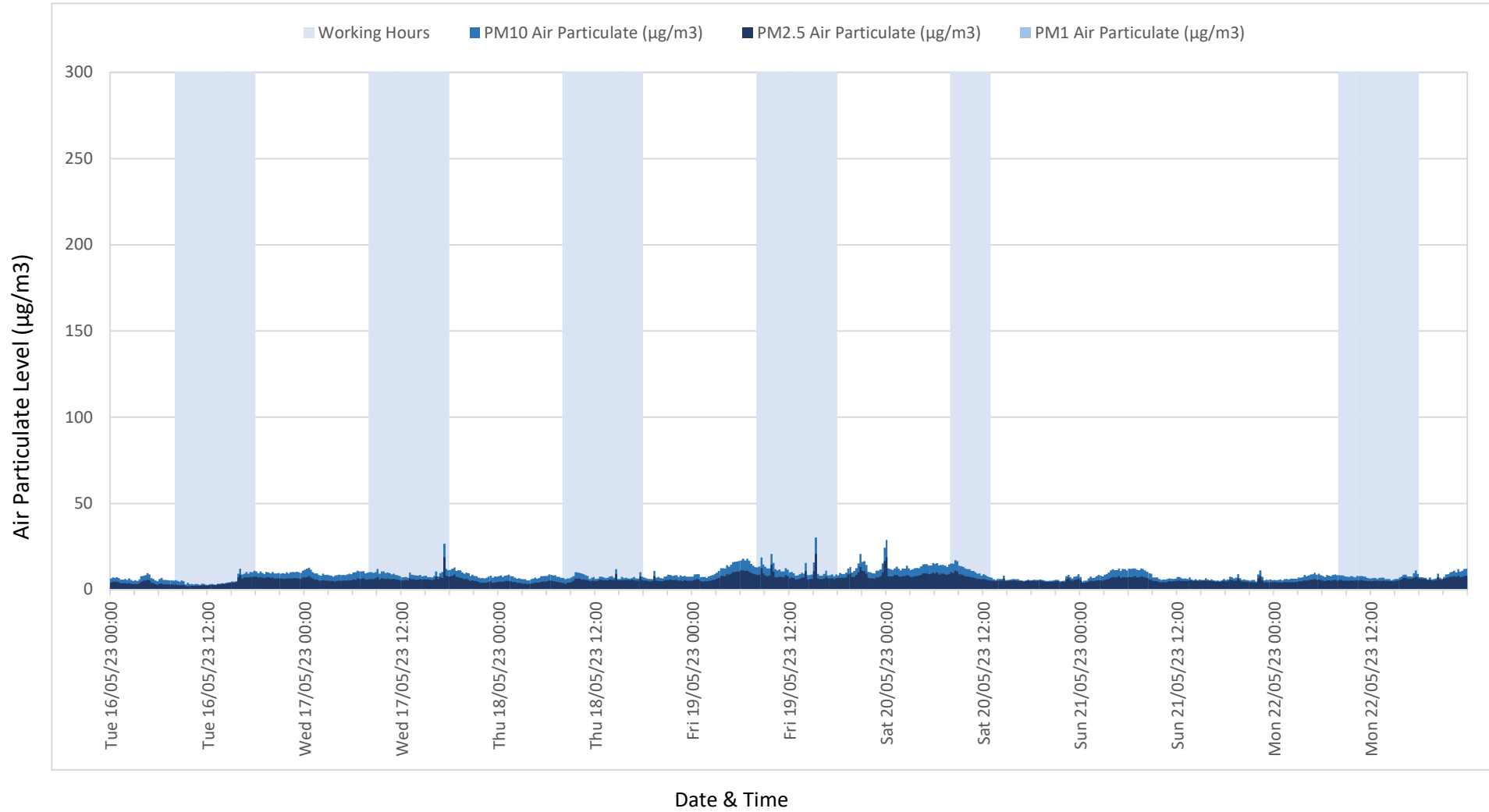




# 52 Avenue Road

Position 4

Tuesday 16/05/2023 to Monday 22/05/2023

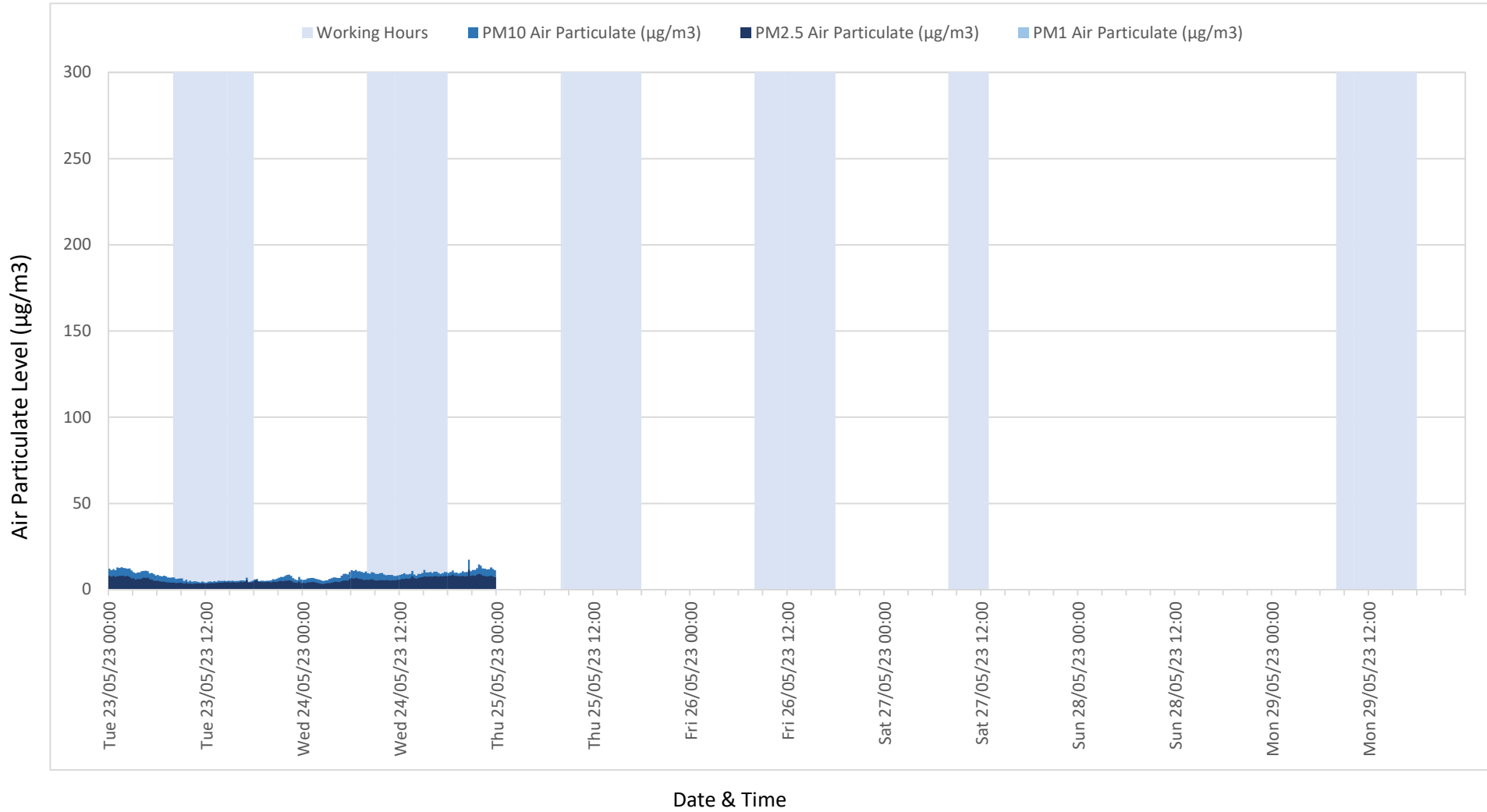




# 52 Avenue Road

Position 4

Tuesday 23/05/2023 to Monday 29/05/2023

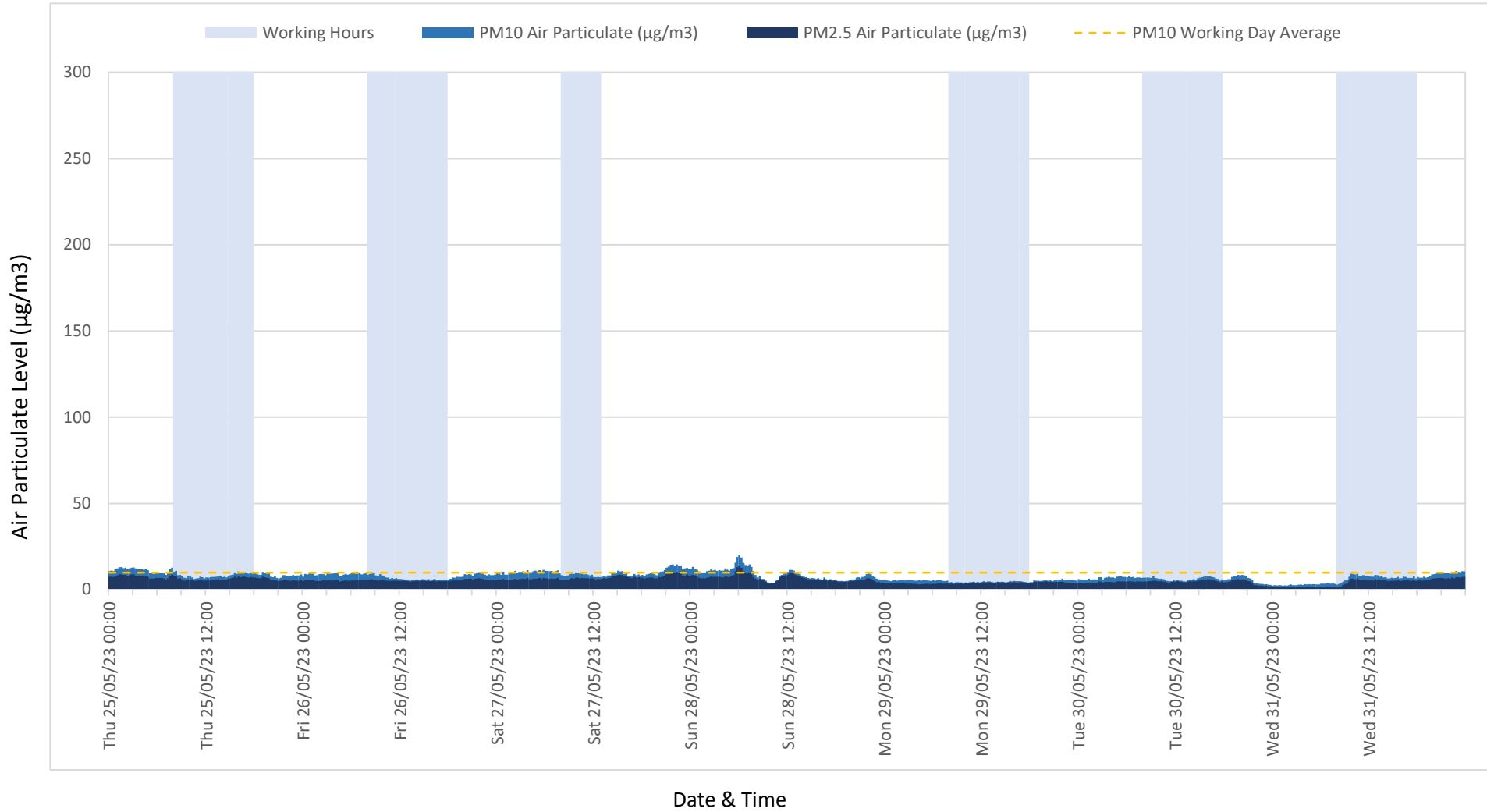




### 52 Avenue Road

Position 1

Thursday 25/05/2023 to Wednesday 31/05/2023

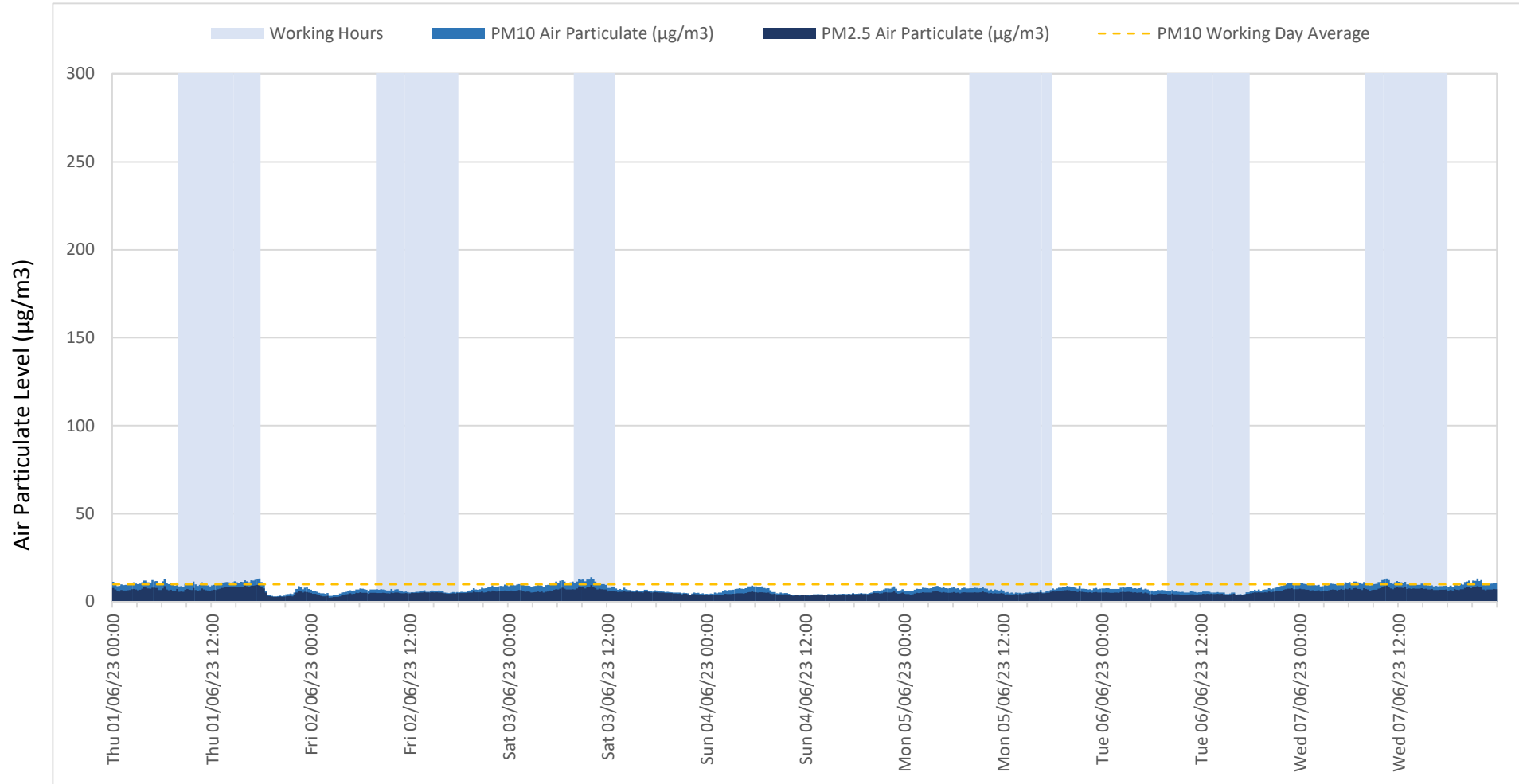




# 52 Avenue Road

Position 1

Thursday 01/06/2023 to Wednesday 07/06/2023



Date & Time

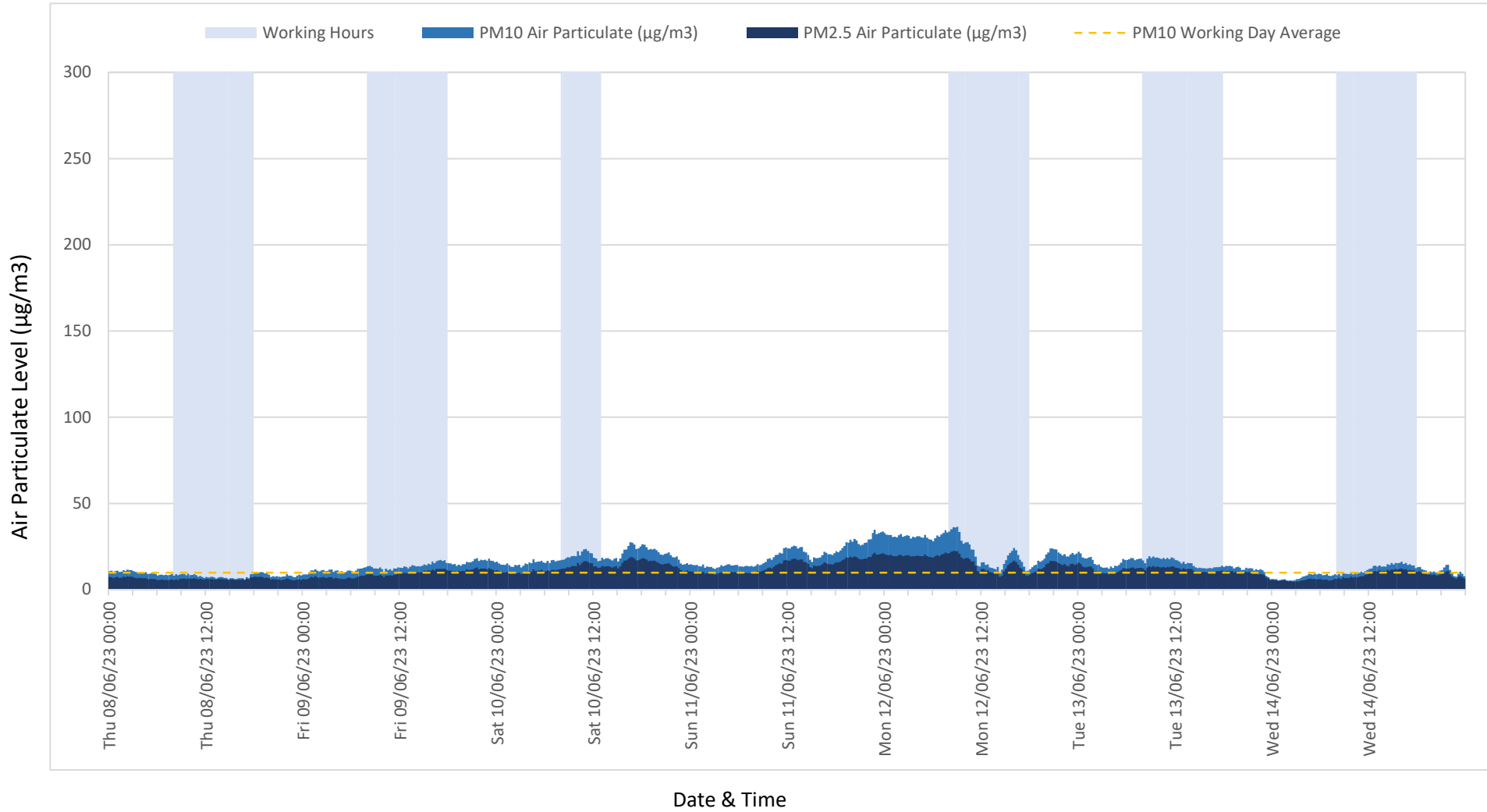
KPM-AP:26019-5.1-2



# 52 Avenue Road

Position 1

Thursday 08/06/2023 to Wednesday 14/06/2023

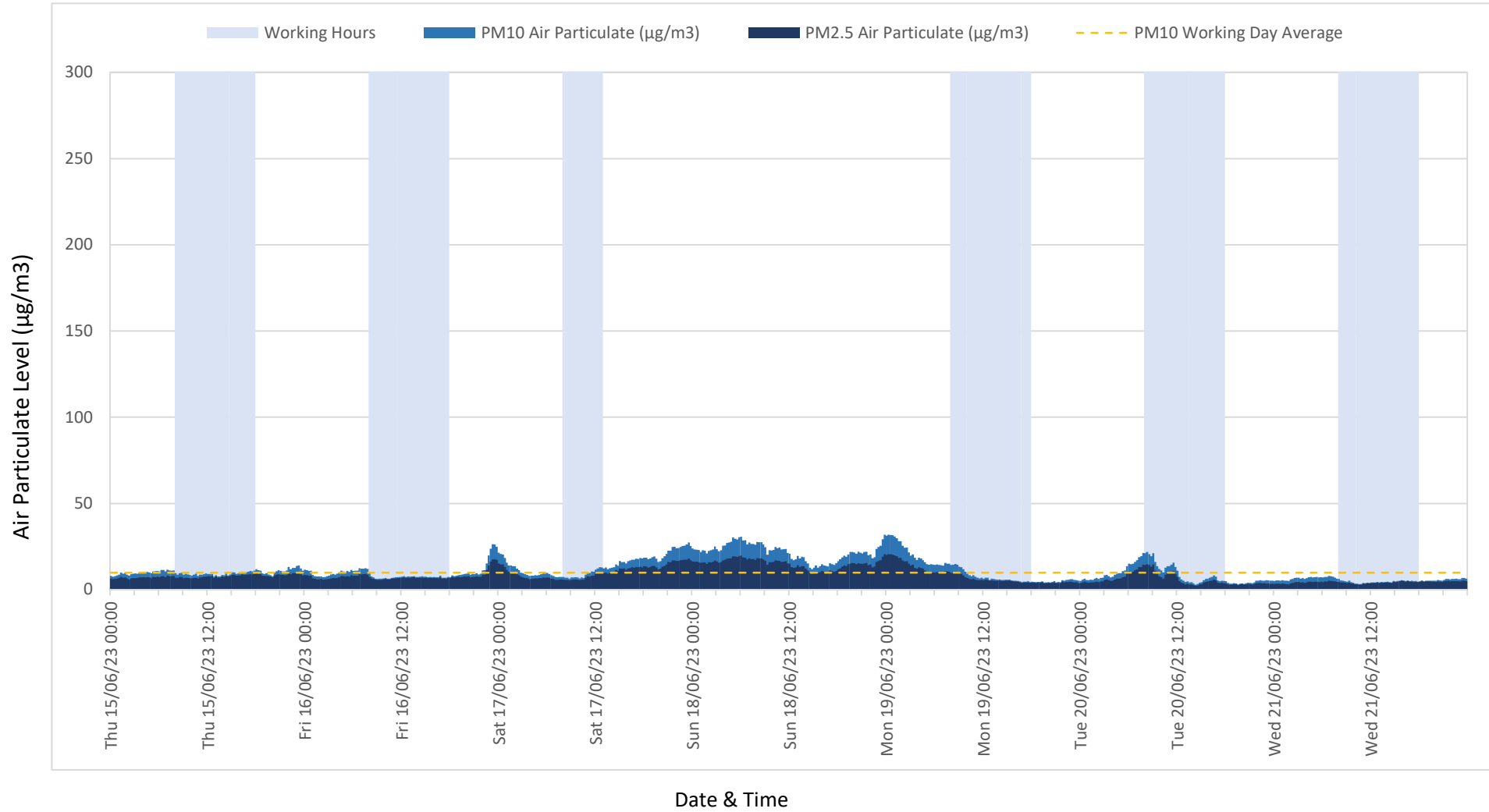




# 52 Avenue Road

Position 1

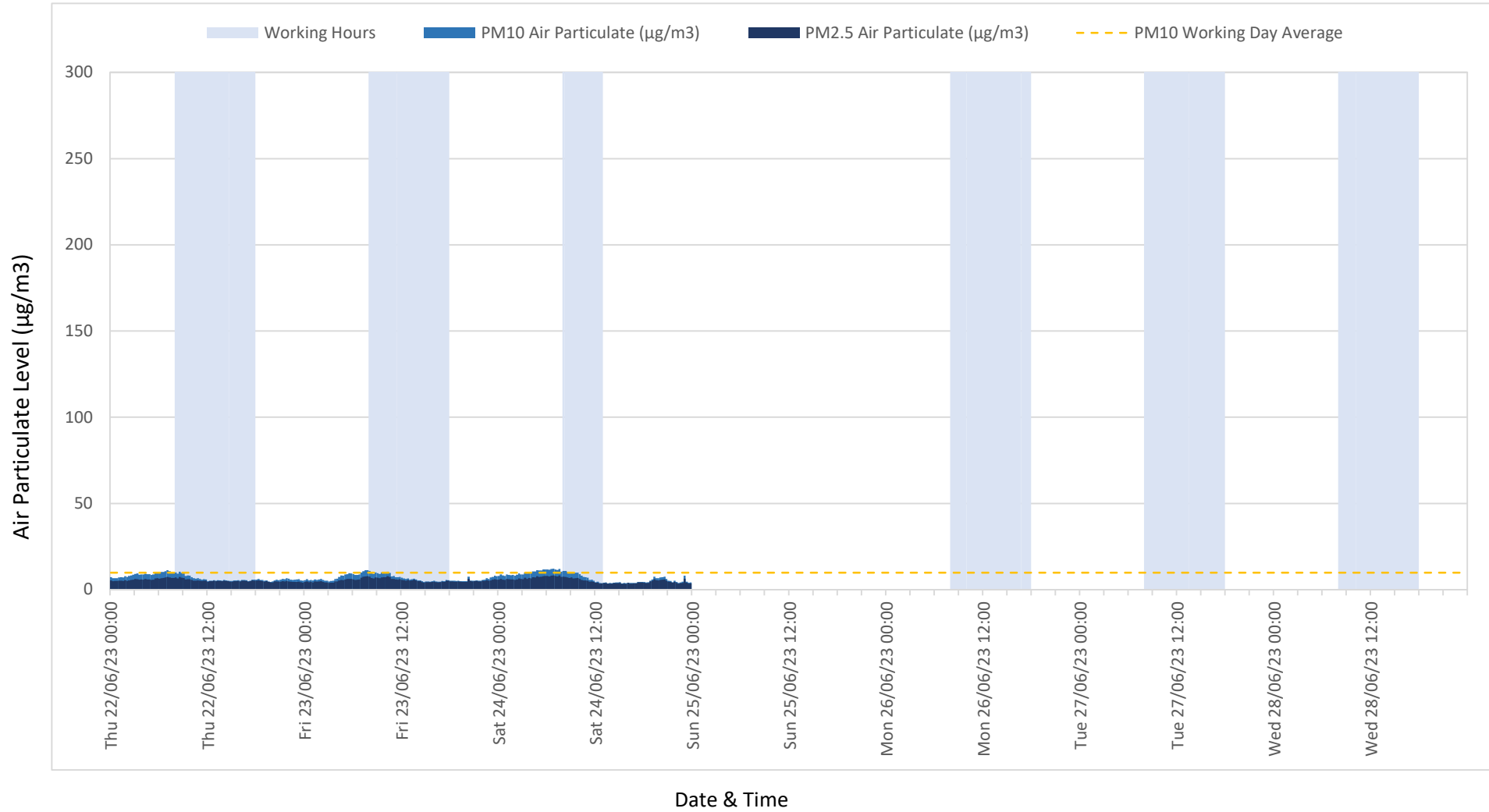
Thursday 15/06/2023 to Wednesday 21/06/2023



### 52 Avenue Road

Position 1

Thursday 22/06/2023 to Wednesday 28/06/2023

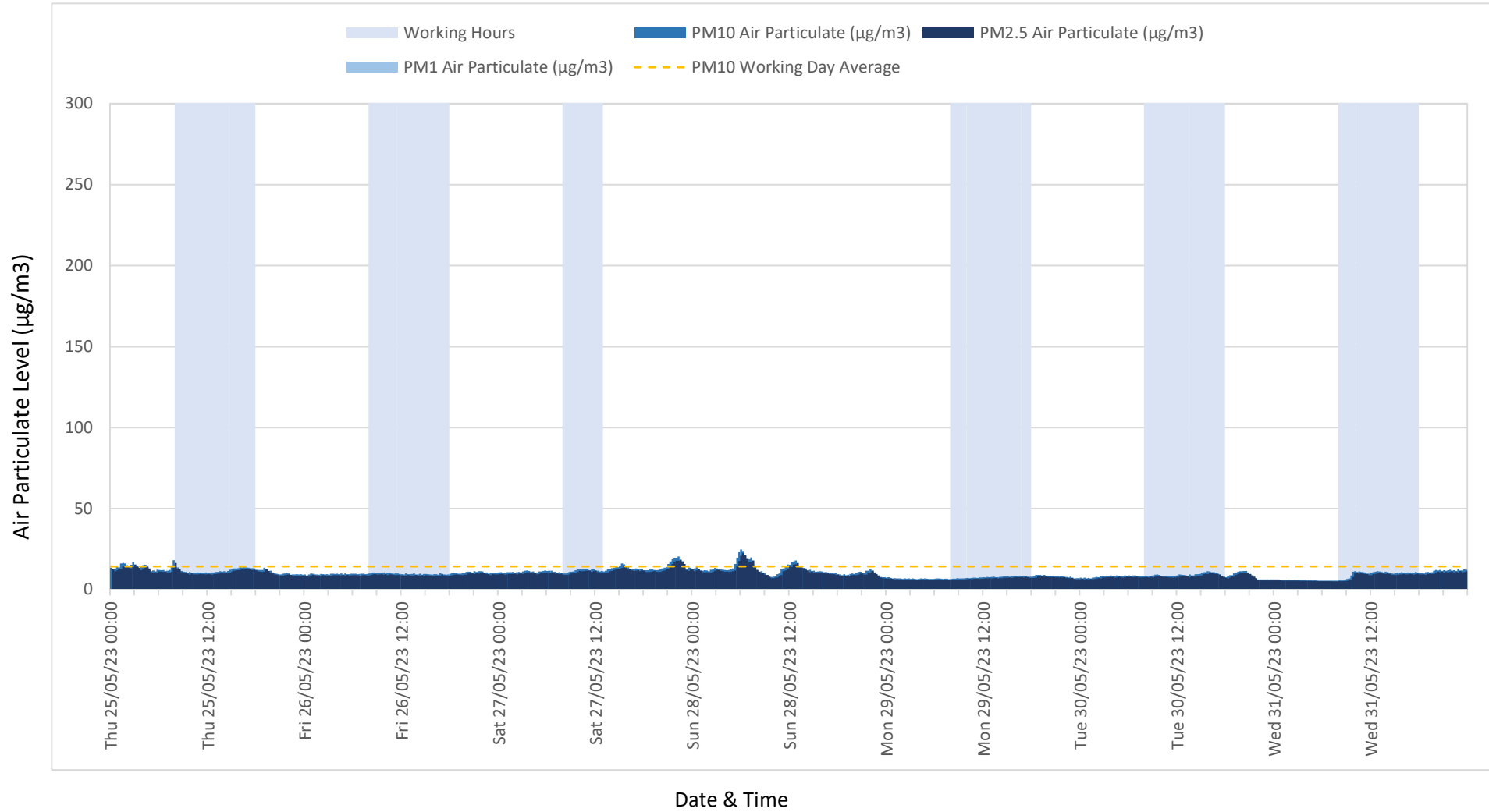




# 52 Avenue Road

Position 2

Thursday 25/05/2023 to Wednesday 31/05/2023

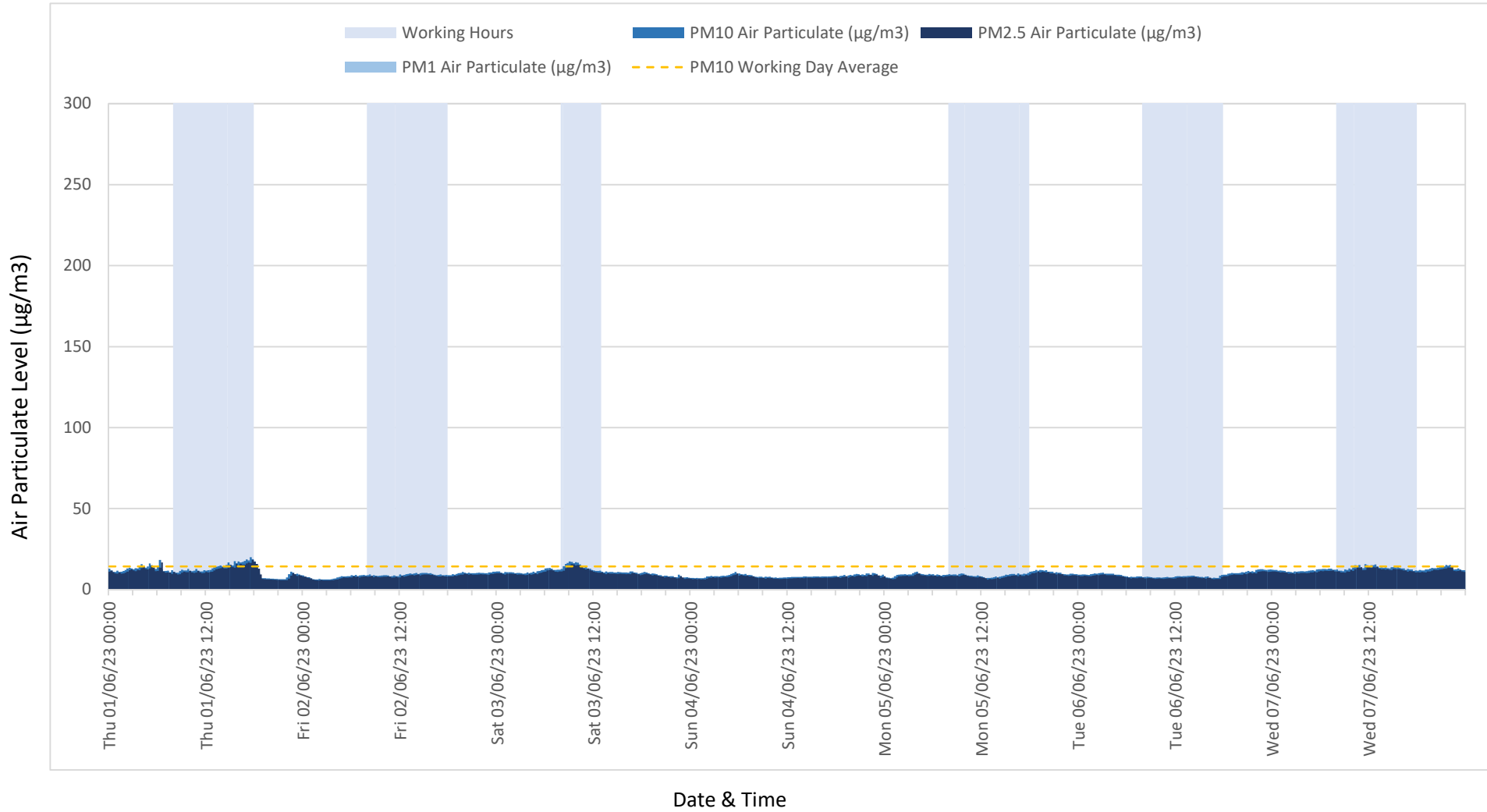




# 52 Avenue Road

Position 2

Thursday 01/06/2023 to Wednesday 07/06/2023

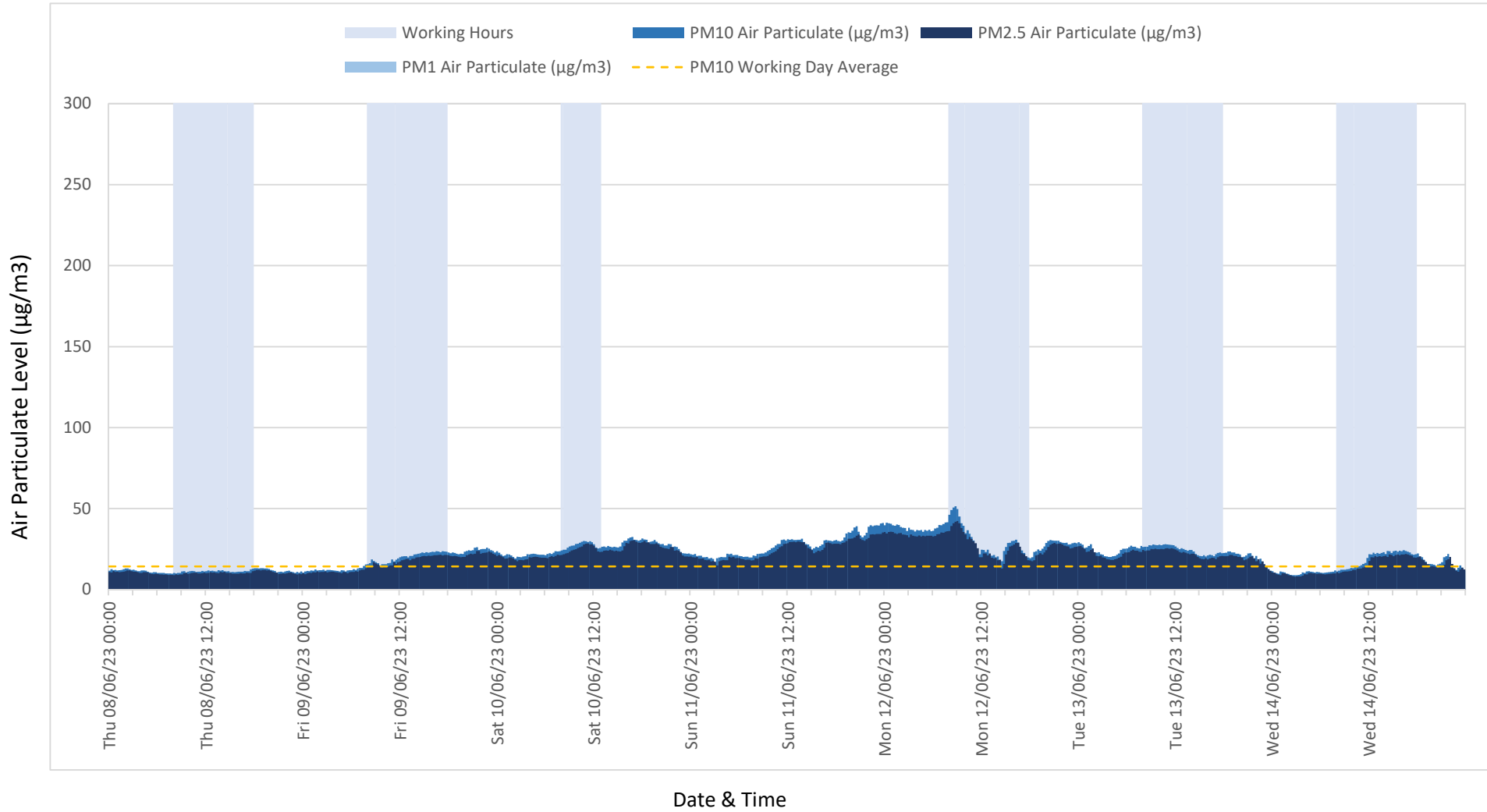




# 52 Avenue Road

Position 2

Thursday 08/06/2023 to Wednesday 14/06/2023



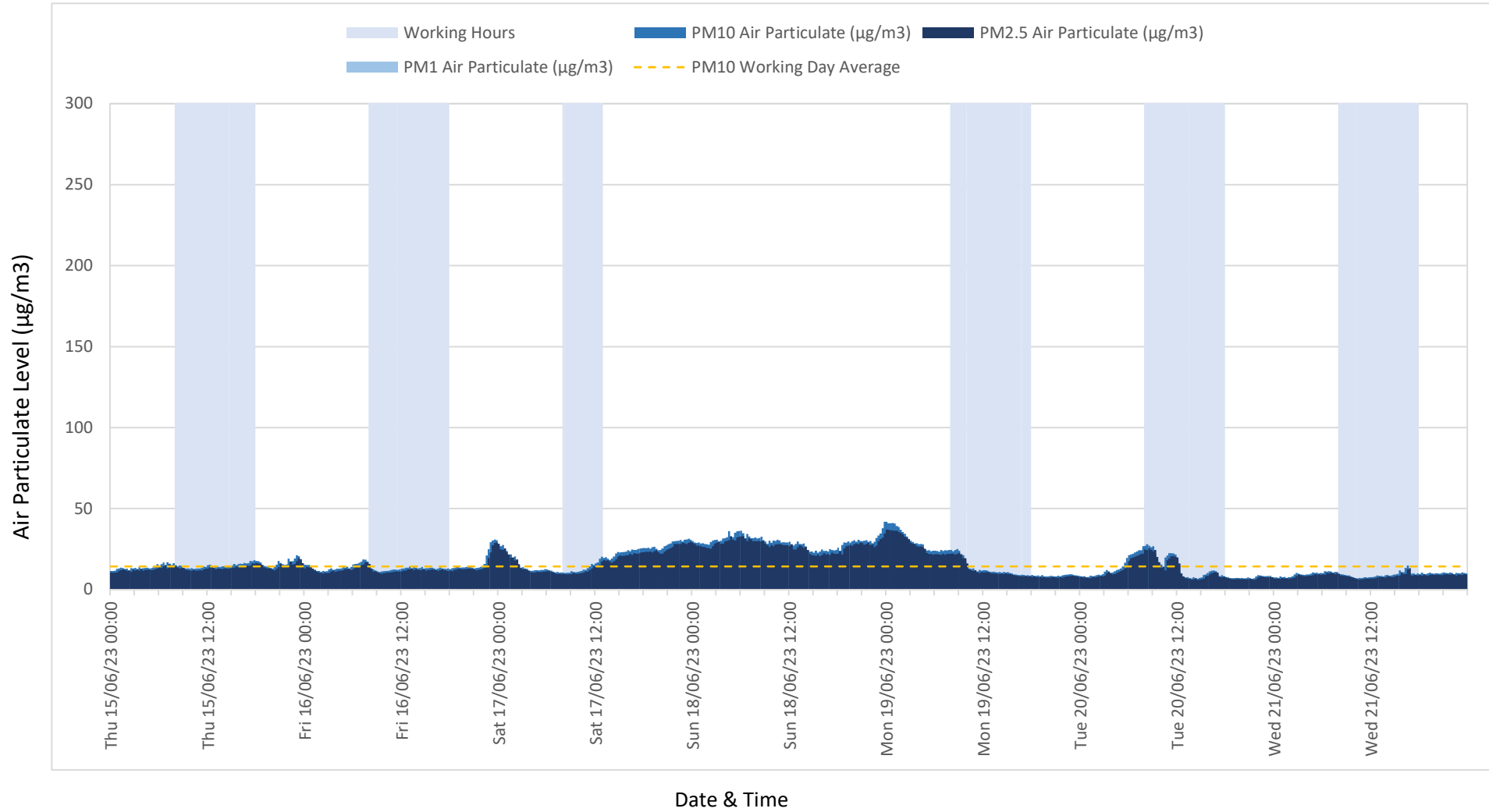




# 52 Avenue Road

Position 2

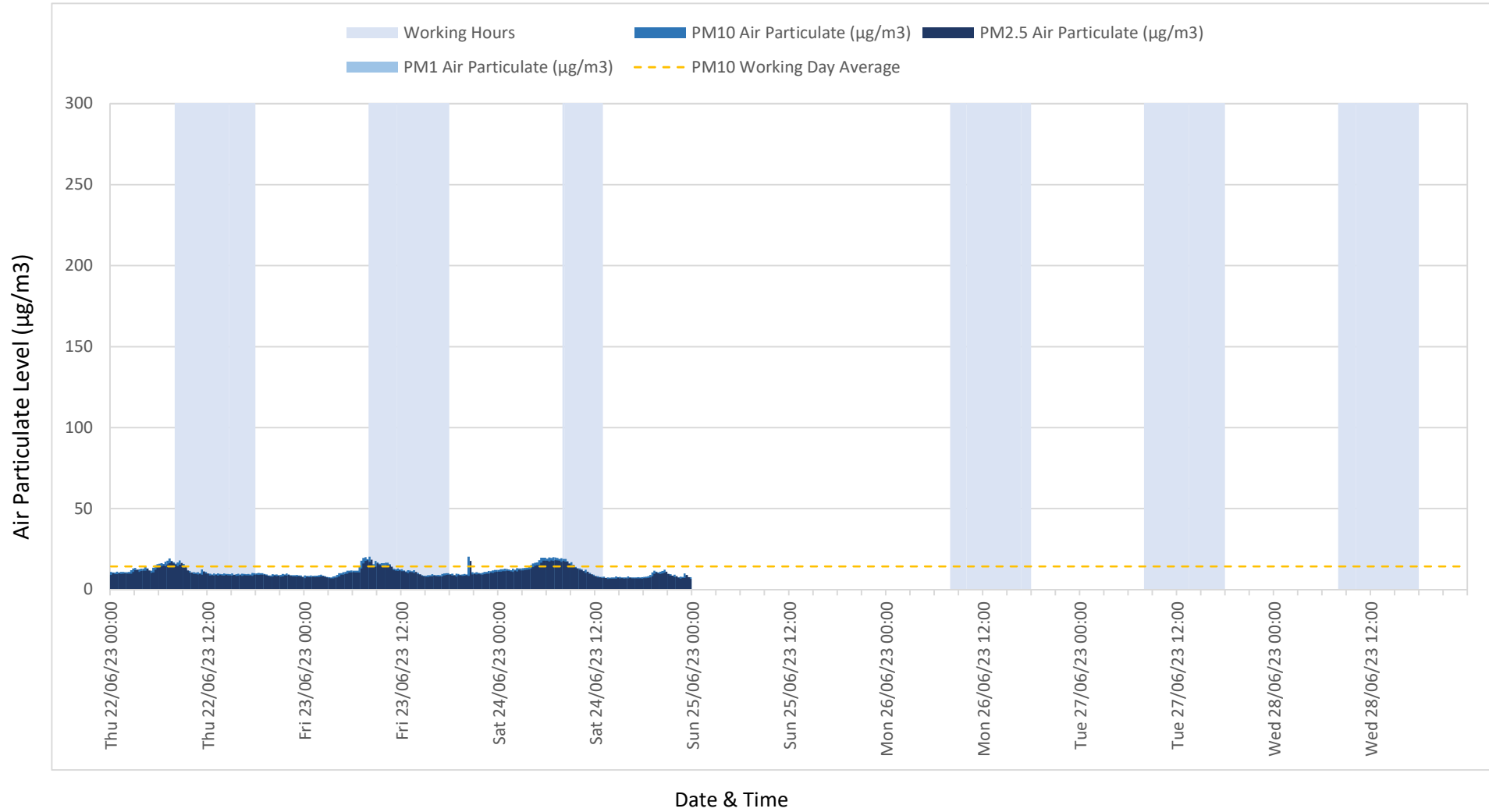
Thursday 15/06/2023 to Wednesday 21/06/2023



### 52 Avenue Road

Position 2

Thursday 22/06/2023 to Wednesday 28/06/2023

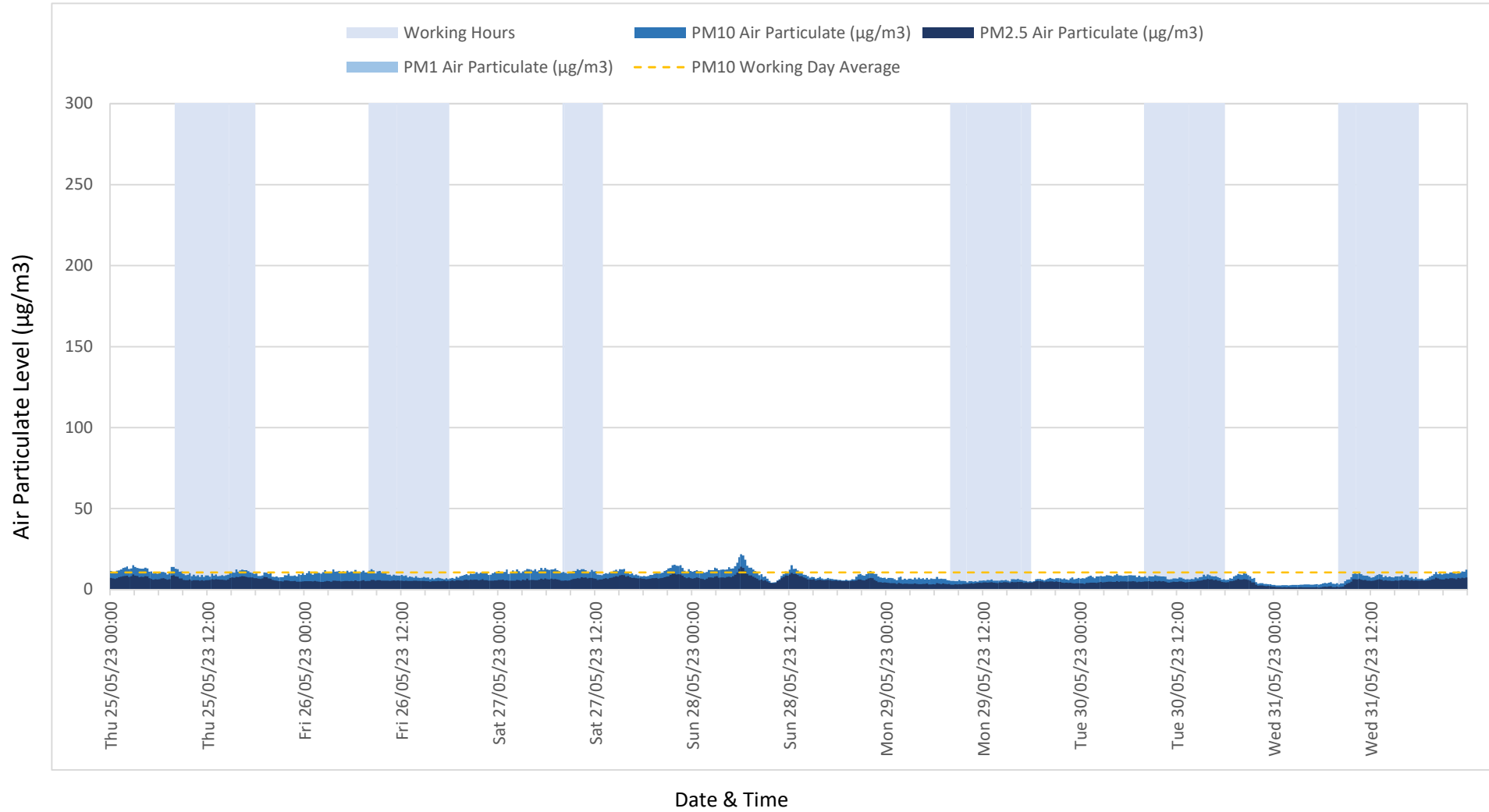




# 52 Avenue Road

Position 3

Thursday 25/05/2023 to Wednesday 31/05/2023

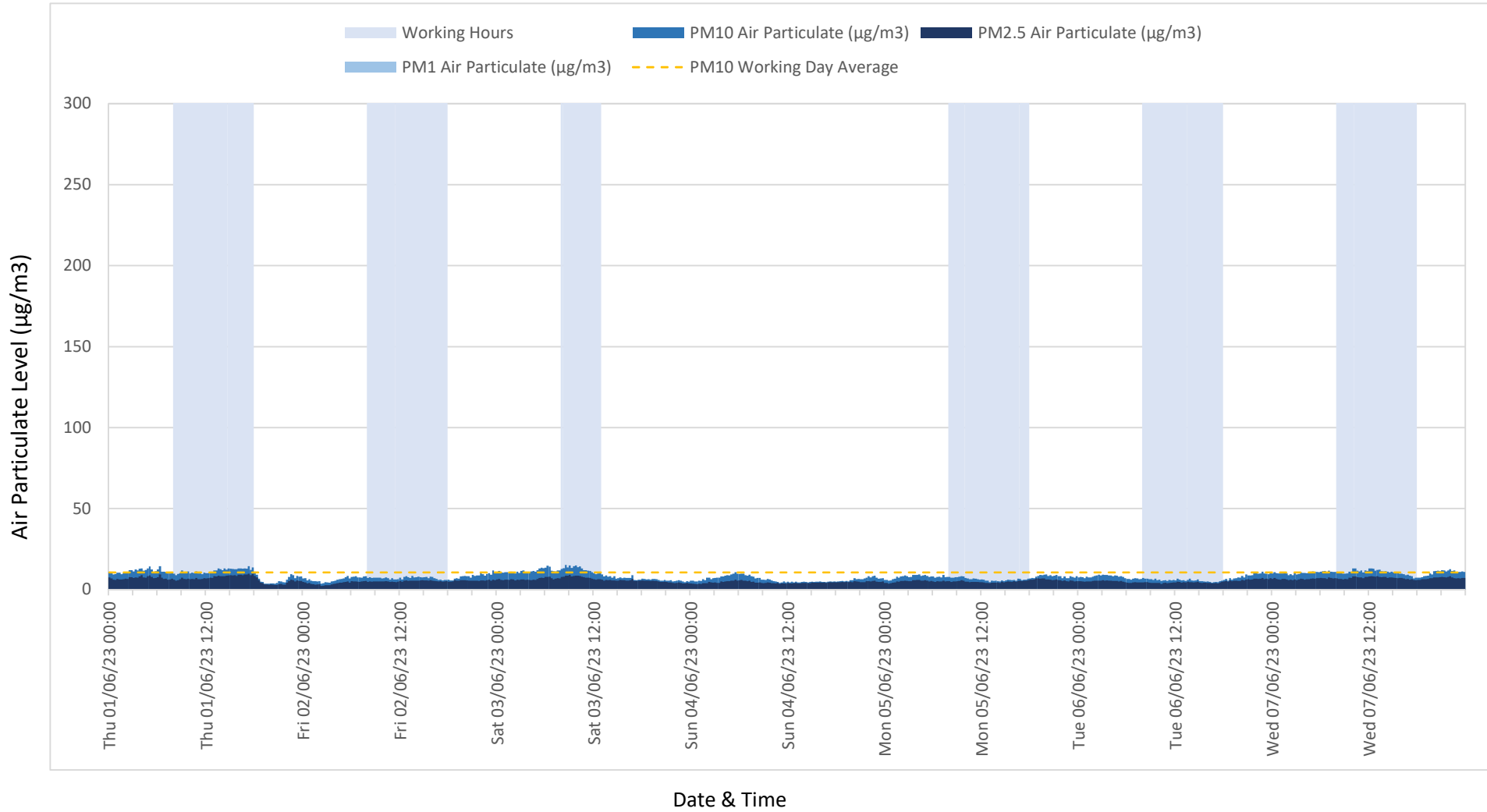




# 52 Avenue Road

Position 3

Thursday 01/06/2023 to Wednesday 07/06/2023

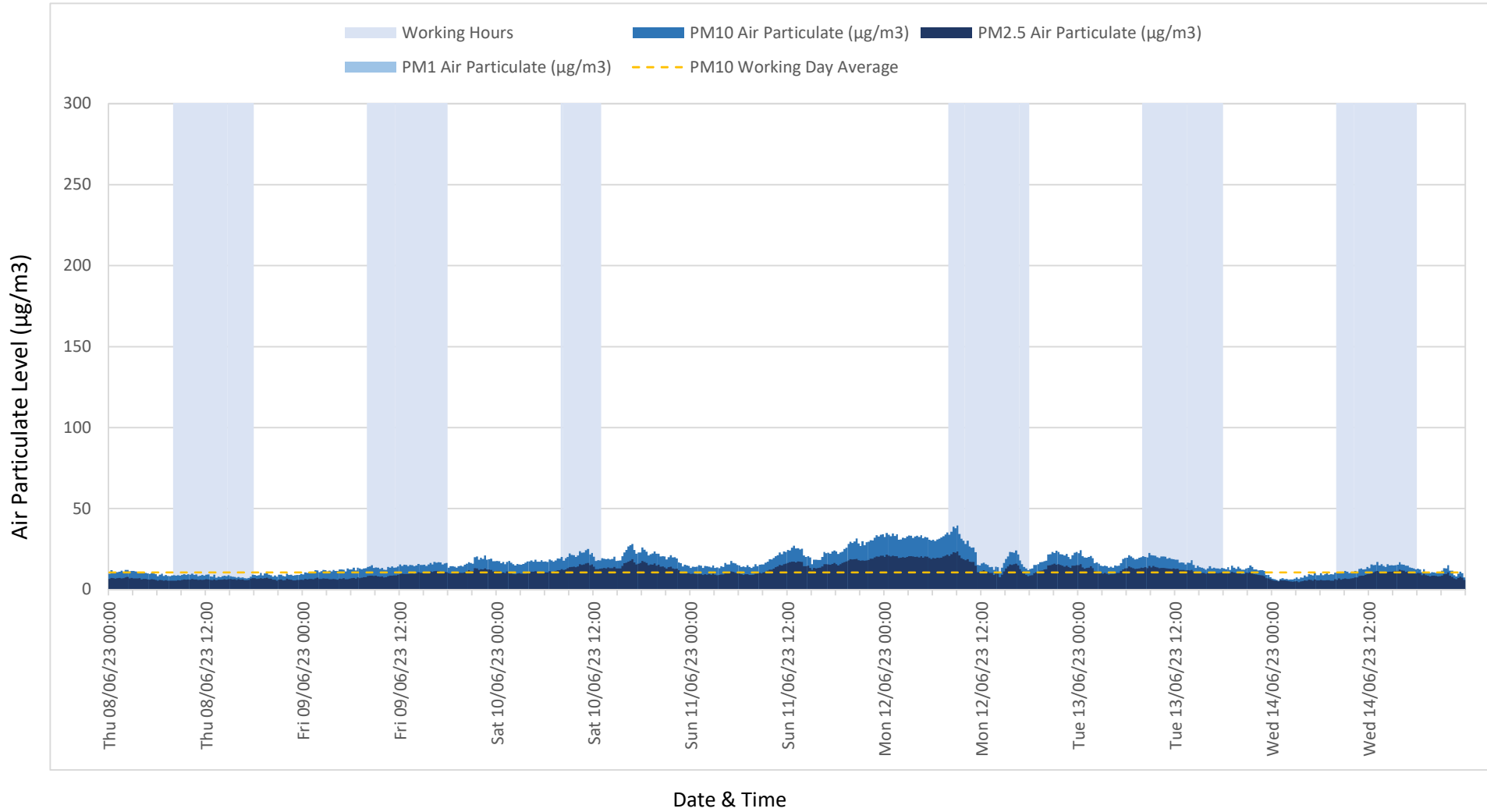




# 52 Avenue Road

Position 3

Thursday 08/06/2023 to Wednesday 14/06/2023

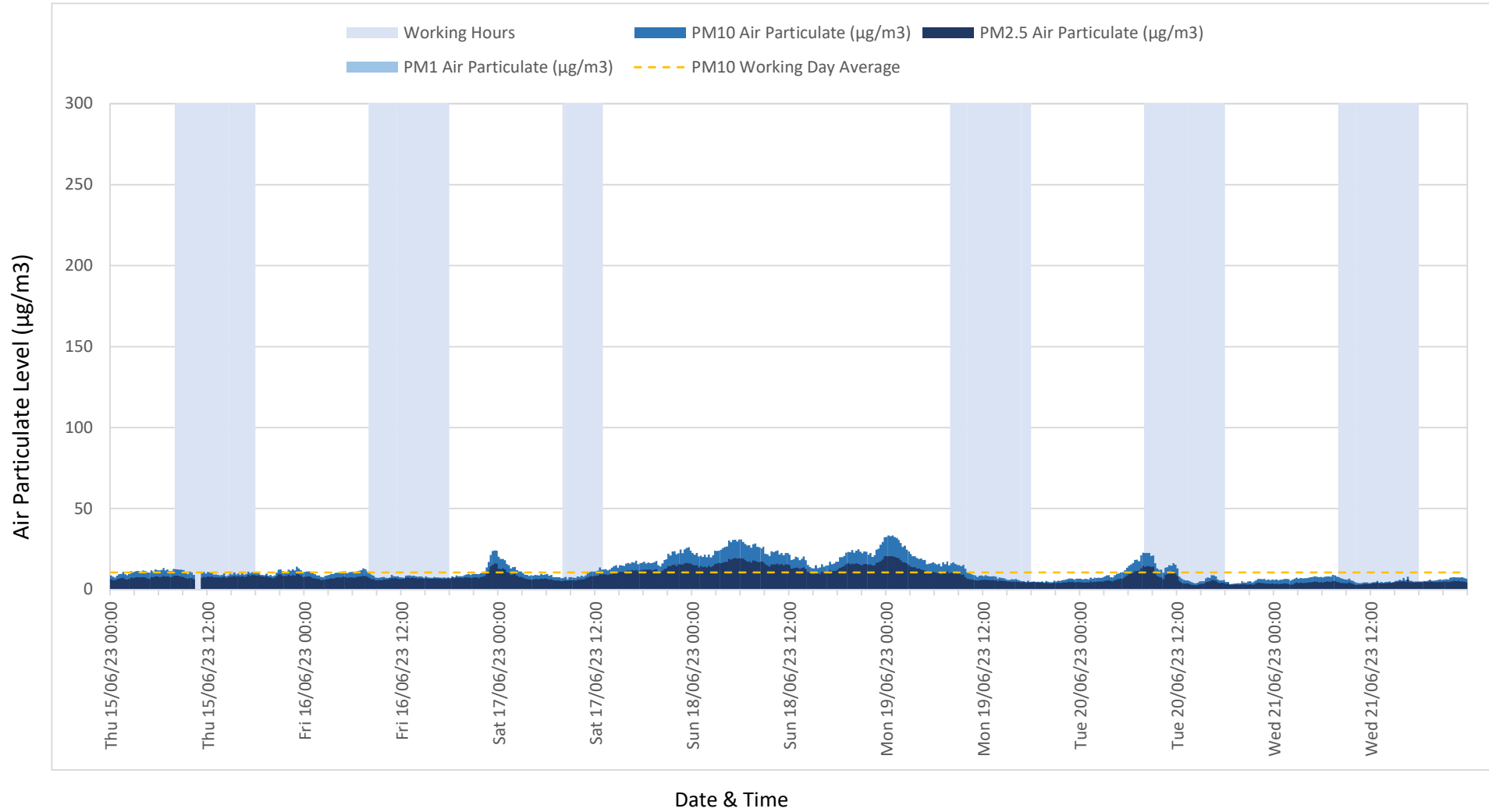




# 52 Avenue Road

Position 3

Thursday 15/06/2023 to Wednesday 21/06/2023

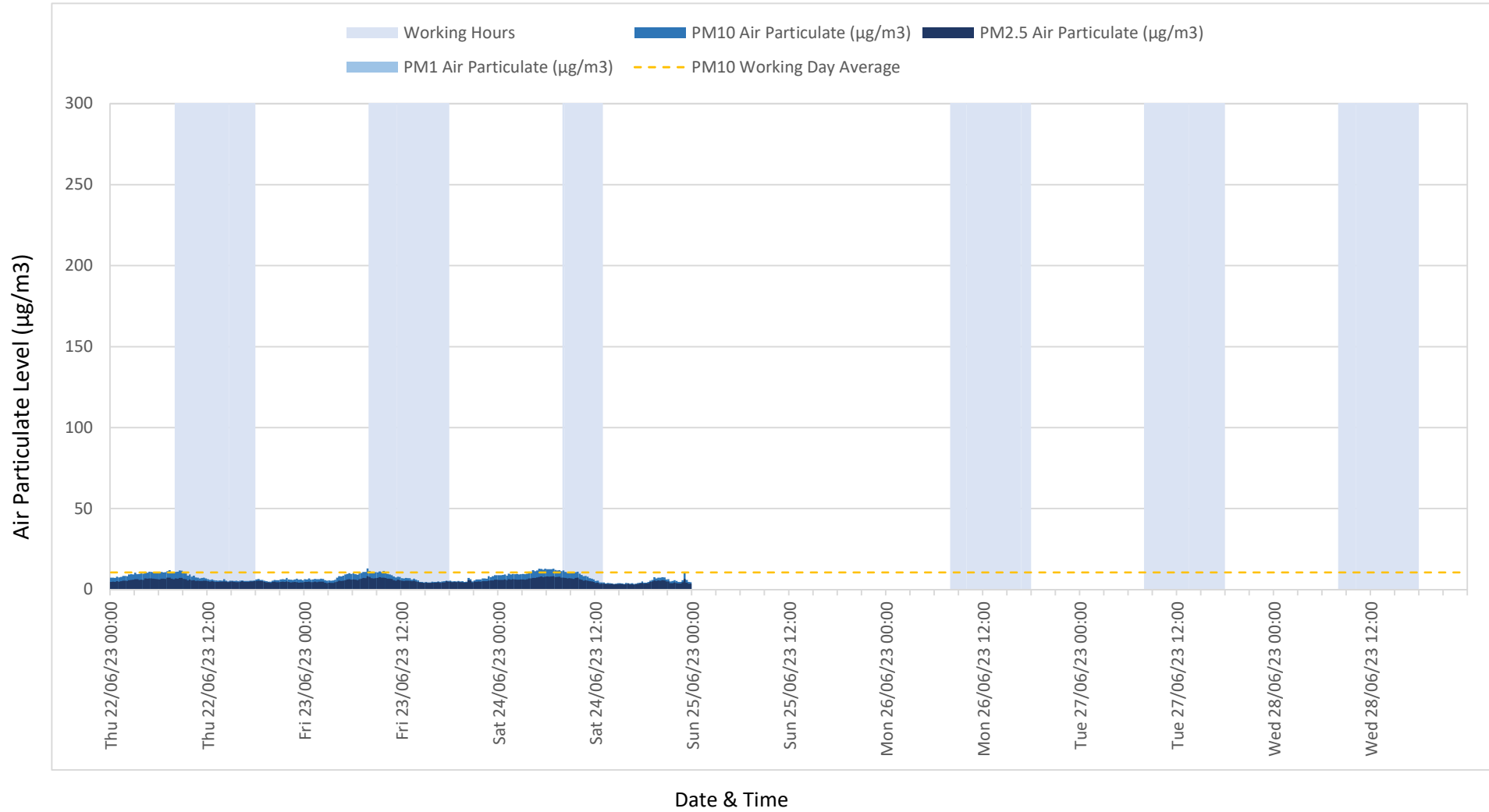




# 52 Avenue Road

Position 3

Thursday 22/06/2023 to Wednesday 28/06/2023

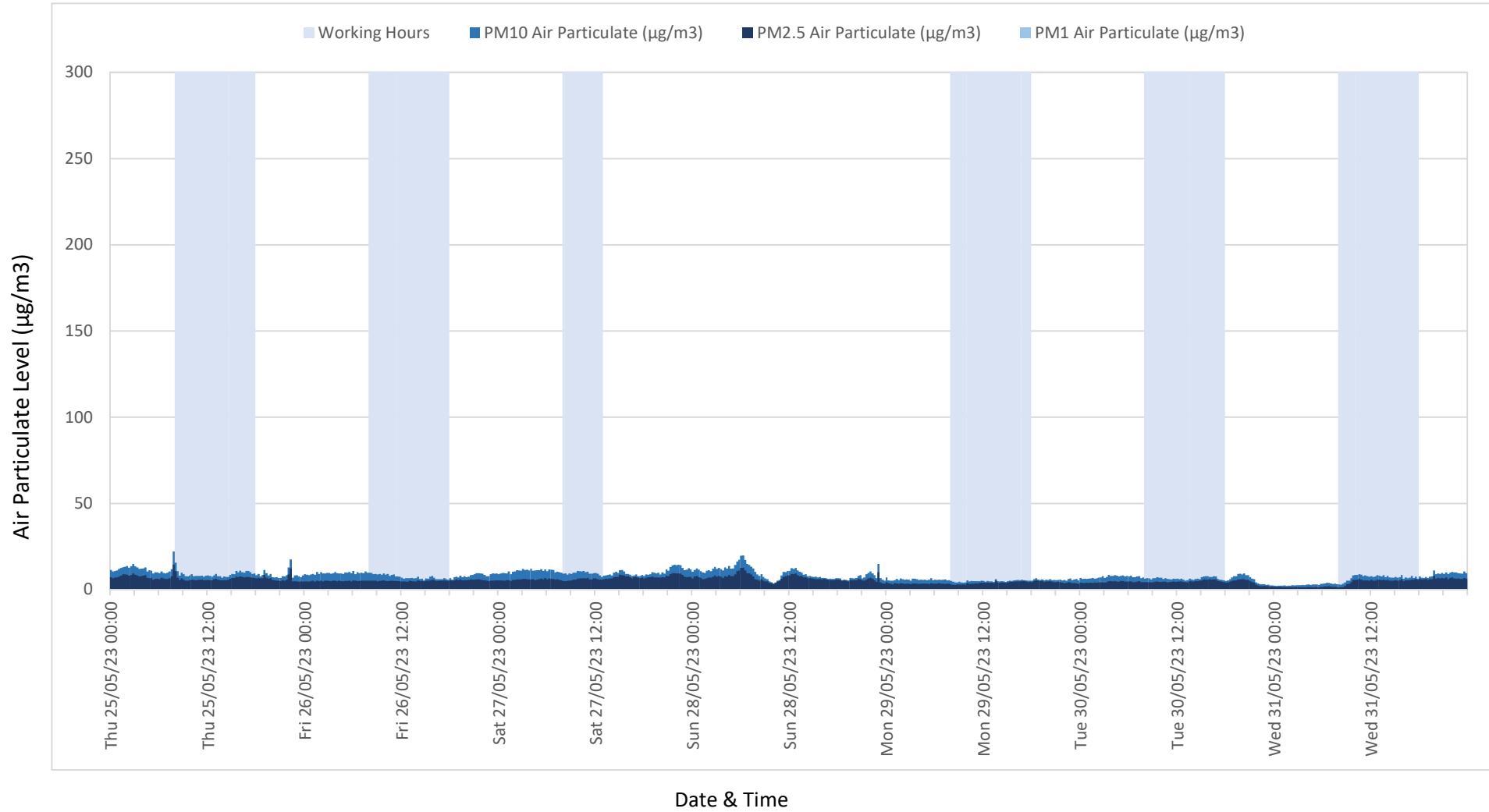




# 52 Avenue Road

Position 4

Thursday 25/05/2023 to Wednesday 31/05/2023



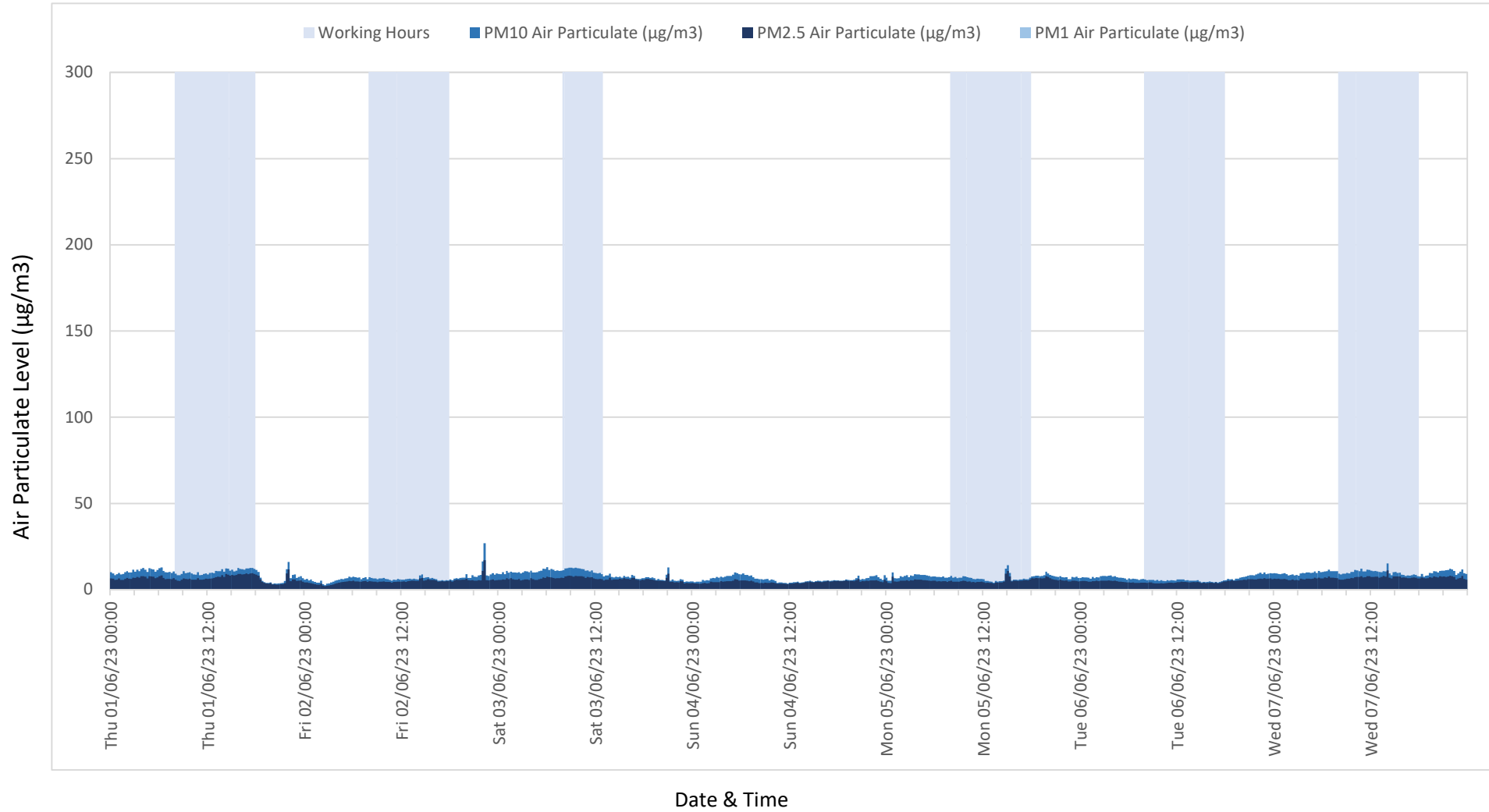




# 52 Avenue Road

Position 4

Thursday 01/06/2023 to Wednesday 07/06/2023

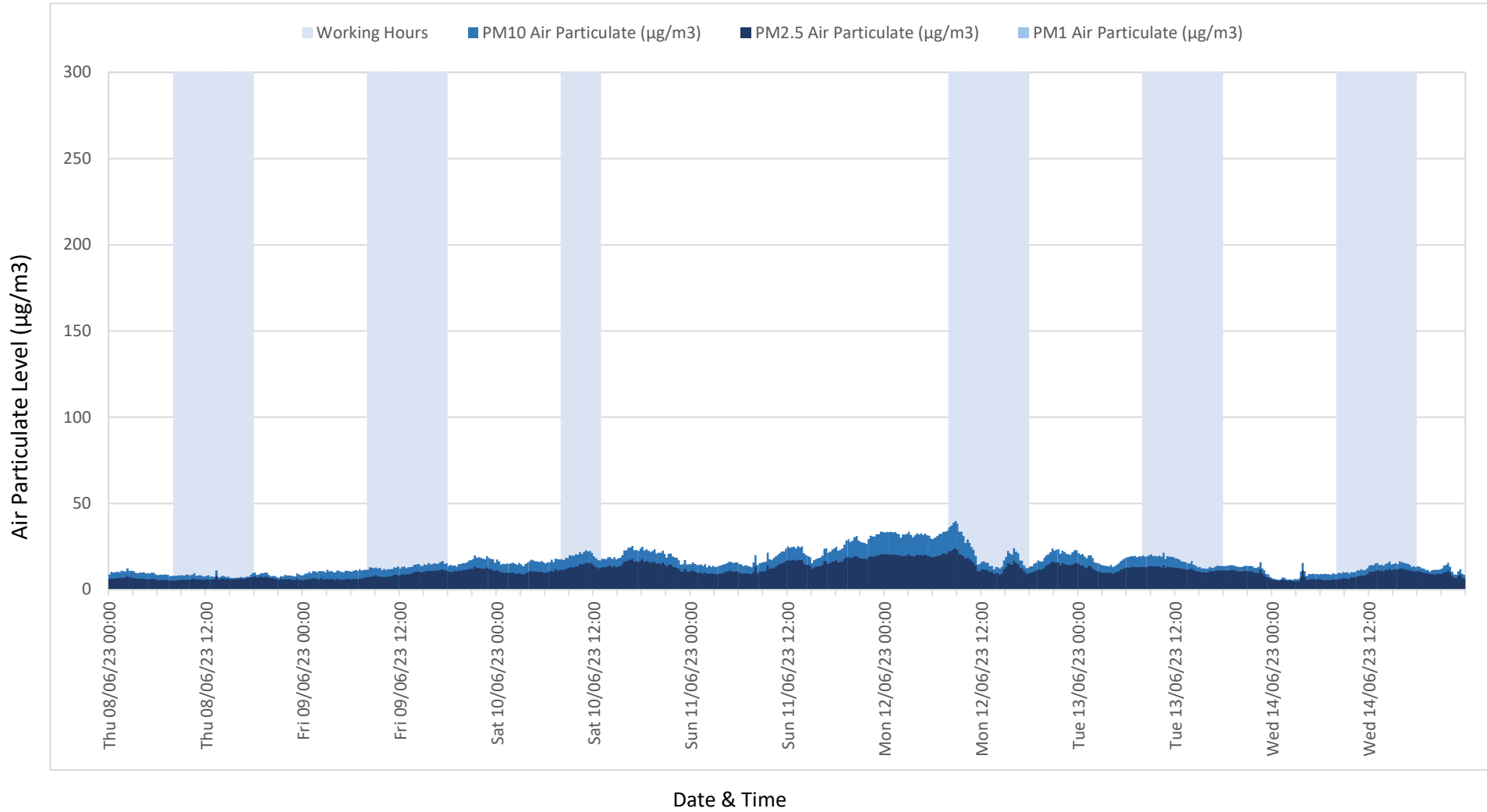




# 52 Avenue Road

Position 4

Thursday 08/06/2023 to Wednesday 14/06/2023

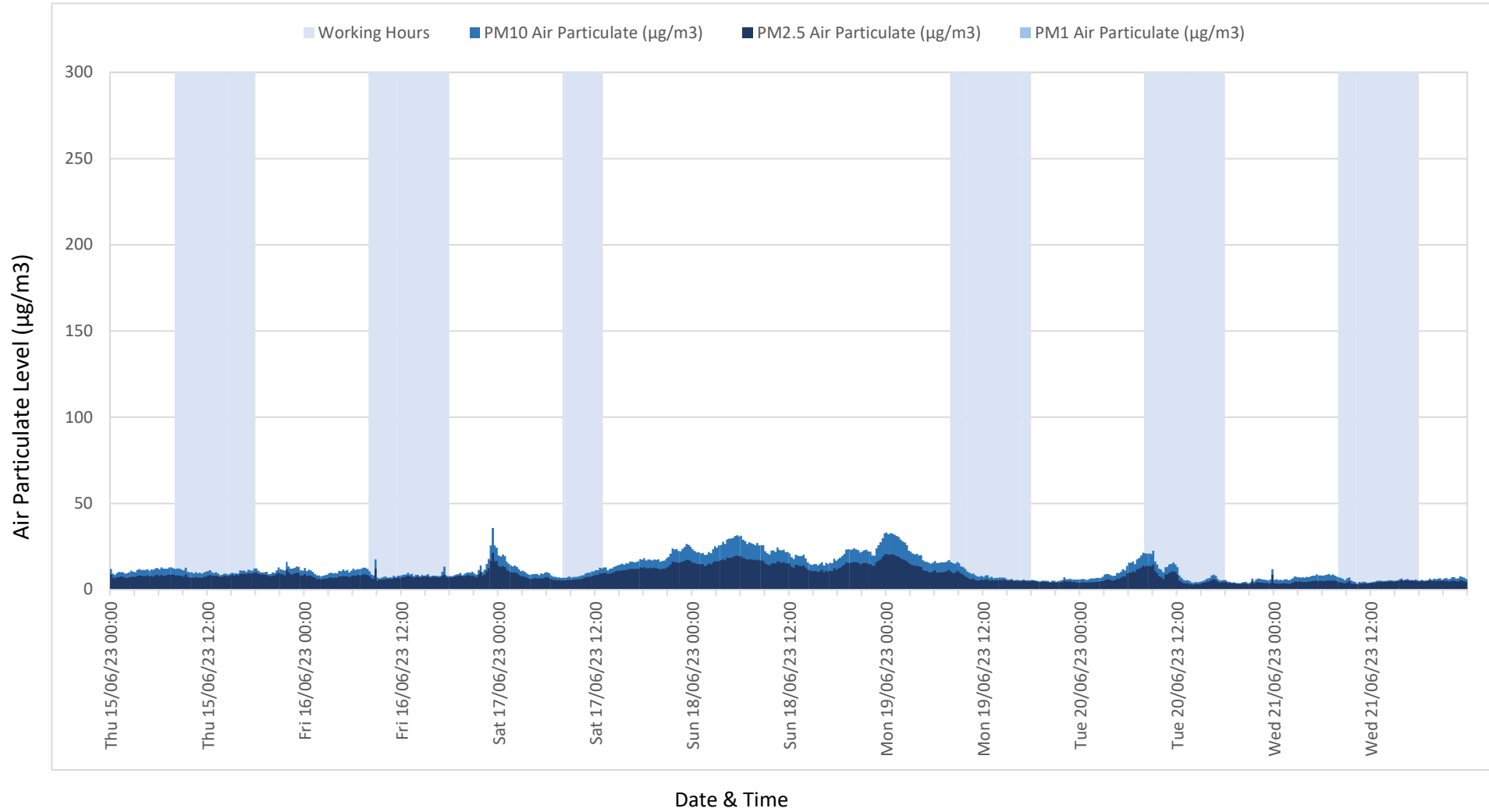




# 52 Avenue Road

Position 4

Thursday 15/06/2023 to Wednesday 21/06/2023





# 52 Avenue Road

Position 4

Thursday 22/06/2023 to Wednesday 28/06/2023

