

# AIR QUALITY

## IN HONG KONG 2024

*Air Science and Modelling Group*

**Environmental Protection Department**

The Government of the  
Hong Kong Special Administrative Region





# AIR QUALITY IN HONG KONG

## KEY FACTS FOR 2024

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According to data recorded by the Air Quality Monitoring Network of the Environmental Protection Department, Hong Kong's overall air quality remained good in 2024. Compared to 2023, the levels of various air pollutants in the ambient air were generally stable in 2024. The annual average concentrations of respirable suspended particulates (PM<sub>10</sub>) and sulphur dioxide (SO<sub>2</sub>) decreased by 1µg/m<sup>3</sup>, while the annual average concentration of ozone (O<sub>3</sub>) slightly increased by 1µg/m<sup>3</sup>. As for roadside air pollutants, the annual average concentrations of PM<sub>10</sub> and nitrogen dioxide (NO<sub>2</sub>) also slightly decreased by 1µg/m<sup>3</sup>, the annual average concentration of SO<sub>2</sub> fell by 2µg/m<sup>3</sup>, and the annual average concentration of O<sub>3</sub> decreased by 4µg/m<sup>3</sup>.

Overall, Hong Kong's air quality in 2024 broadly aligned with Hong Kong's Air Quality Objectives (AQOs). The annual average concentrations of PM<sub>10</sub>, fine suspended particulates (PM<sub>2.5</sub>), NO<sub>2</sub> and SO<sub>2</sub> in the ambient air decreased by 45% to 88% compared to the levels in 2004. During the same period, the annual average concentrations of pollutants at the roadsides also declined by 36% to 88%. With the continuous improvement in air quality, the long-term health risks of air quality have also significantly decreased by over 50% from 2004 to 2024.

Although significant progress has been made in improving air quality in Hong Kong in the past 20 years, roadside NO<sub>2</sub> and regional O<sub>3</sub> pollution remain two major challenges. Despite a 36% decrease in roadside NO<sub>2</sub> levels from 2004 to 2024, they still exceed the limits set by the Hong Kong's AQOs. To address this issue, the HKSAR government will continue to tighten vehicle emission standards and promote the popularisation of electric vehicles. Additionally, while ambient O<sub>3</sub> levels influenced by regional photochemical smog have risen in recent years, the trend has gradually stabilized. With substantial reductions in other air pollutants, the long-term health risks associated with air pollution in Hong Kong continue to decline. The HKSAR government will further strengthen cooperation with the Guangdong to reduce regional emissions and address issues related to photochemical smog and O<sub>3</sub>.

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# The Air Quality Monitoring Network

The Environmental Protection Department (EPD) operates a network of air quality monitoring stations (AQMSs) for measuring the concentrations of major air pollutants in Hong Kong. The air quality monitoring network comprises 18 AQMSs, including 15 general stations and 3 roadside stations monitoring ambient air quality and roadside air quality respectively. Details of these AQMSs, quality control and quality assurance policies are set out in [Appendix A](#).

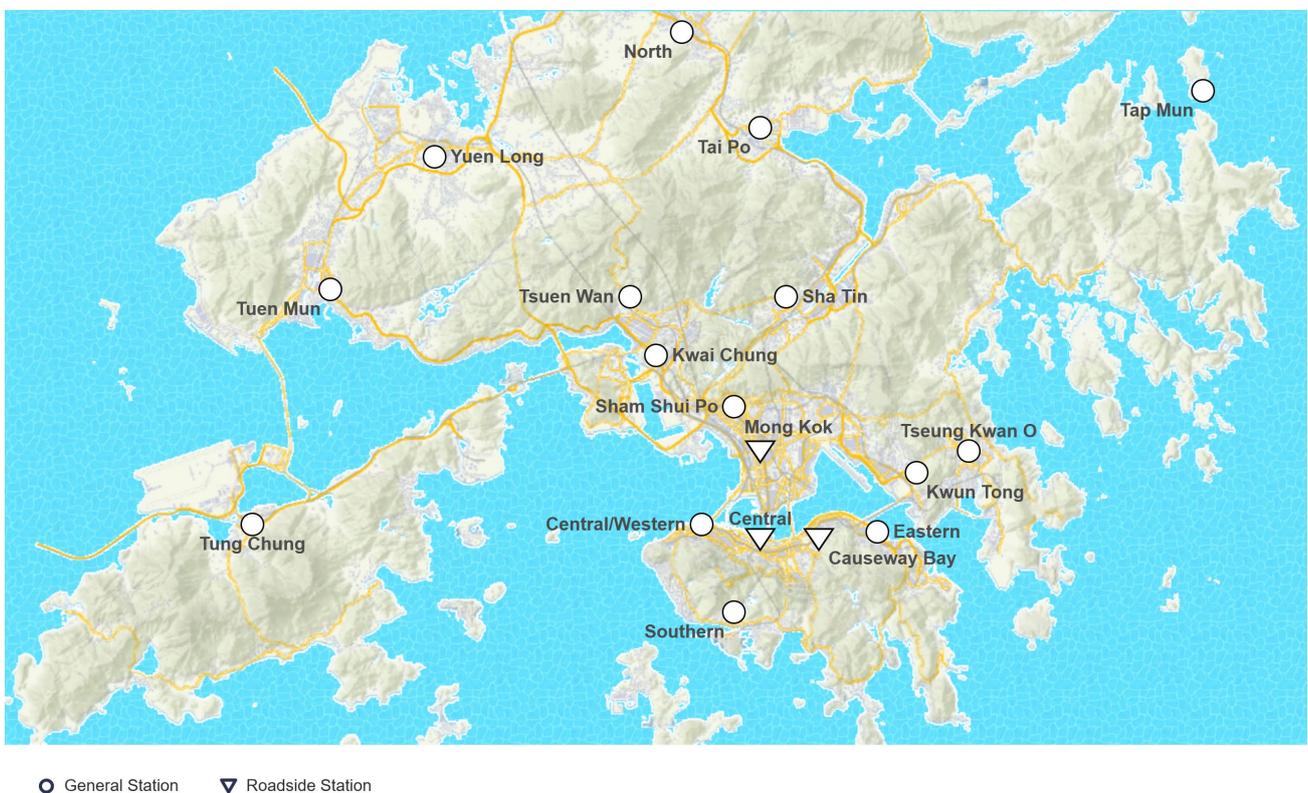


Figure 1: Locations of EPD's AQMSs in 2024

The monitoring network operated smoothly in 2024. The average monthly data capture rate for the six air pollutants, namely sulphur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), ozone (O<sub>3</sub>), respirable suspended particulates (PM<sub>10</sub>) and fine suspended particulates (PM<sub>2.5</sub>), measured at all AQMSs was above 97%.

This report summarises the air quality data collected by the EPD's air quality monitoring network in 2024.

# Monitoring Results of Air Pollutant Levels

## Sulphur Dioxide (SO<sub>2</sub>)

### Sources

SO<sub>2</sub> is formed primarily from the combustion of sulphur-containing fossil fuels. In Hong Kong, emissions from power stations and marine vessels are the major sources of SO<sub>2</sub>, followed by fuel combustion equipment and motor vehicles.

### Health Impact

Exposure to high levels of SO<sub>2</sub> may cause impairment of respiratory function and aggravate existing respiratory and cardiac illnesses. Even at lower levels, prolonged exposure may also increase the risk of developing chronic respiratory diseases.

### Monitoring

SO<sub>2</sub> levels were monitored at all 18 AQMSs in 2024.

### SO<sub>2</sub> Levels Monitoring Results for 2024

- Similar to 2023, SO<sub>2</sub> concentrations remained low in Hong Kong
- The highest 10-minute average is 93 µg/m<sup>3</sup> at Kwun Tong general station
- The highest 24-hour average is 15 µg/m<sup>3</sup> at Kwai Chung general station

Figure 2a: Monitoring Results of SO<sub>2</sub> Levels in 2024  
(10-Minute Average Statistics)

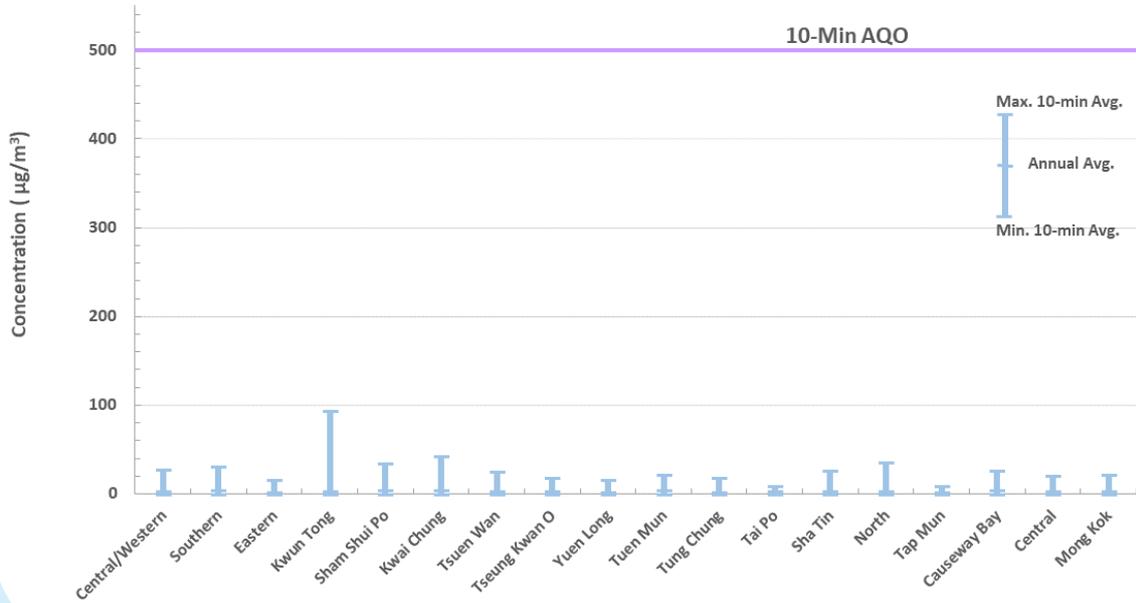
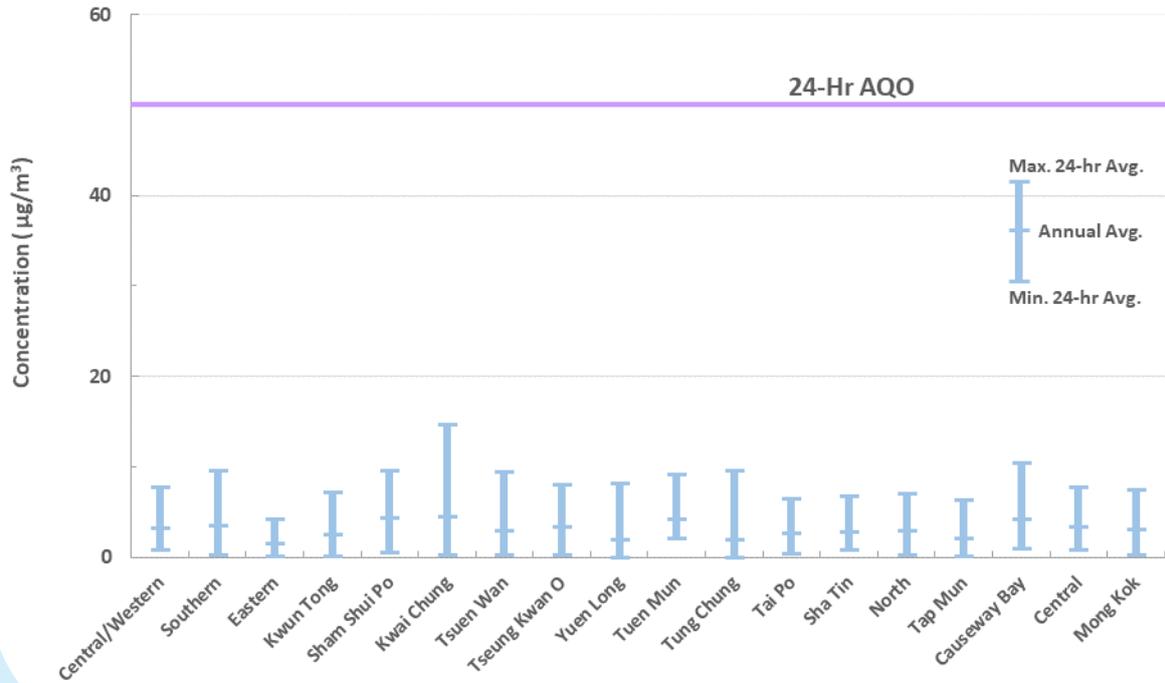


Figure 2b: Monitoring Results of SO<sub>2</sub> Levels in 2024  
(24-Hour Average Statistics)



# Respirable Suspended Particulates (PM<sub>10</sub>)

## Sources

PM<sub>10</sub> refers to those suspended particulates with nominal aerodynamic diameters of 10 micrometres or less. Combustion sources, in particular marine vessels, diesel vehicles and power plants, are the major regional and local sources of ambient PM<sub>10</sub>. Besides, PM<sub>10</sub> can also be formed by photochemical reactions of NO<sub>x</sub> and VOCs as well as atmospheric oxidation of gaseous pollutants, such as SO<sub>2</sub> and NO<sub>x</sub>. To a lesser extent, crustal derived dust and marine aerosols are also sources of PM<sub>10</sub>. In Hong Kong, PM<sub>10</sub> is contributed mainly by the regional sources.

## Health Impact

PM<sub>10</sub> at high levels may cause chronic and acute effects on human health, particularly the pulmonary function, as PM<sub>10</sub> can penetrate deep into the lungs and cause respiratory problems. These effects are uplifted if high PM<sub>10</sub> levels are associated with higher levels of other pollutants, such as SO<sub>2</sub>.

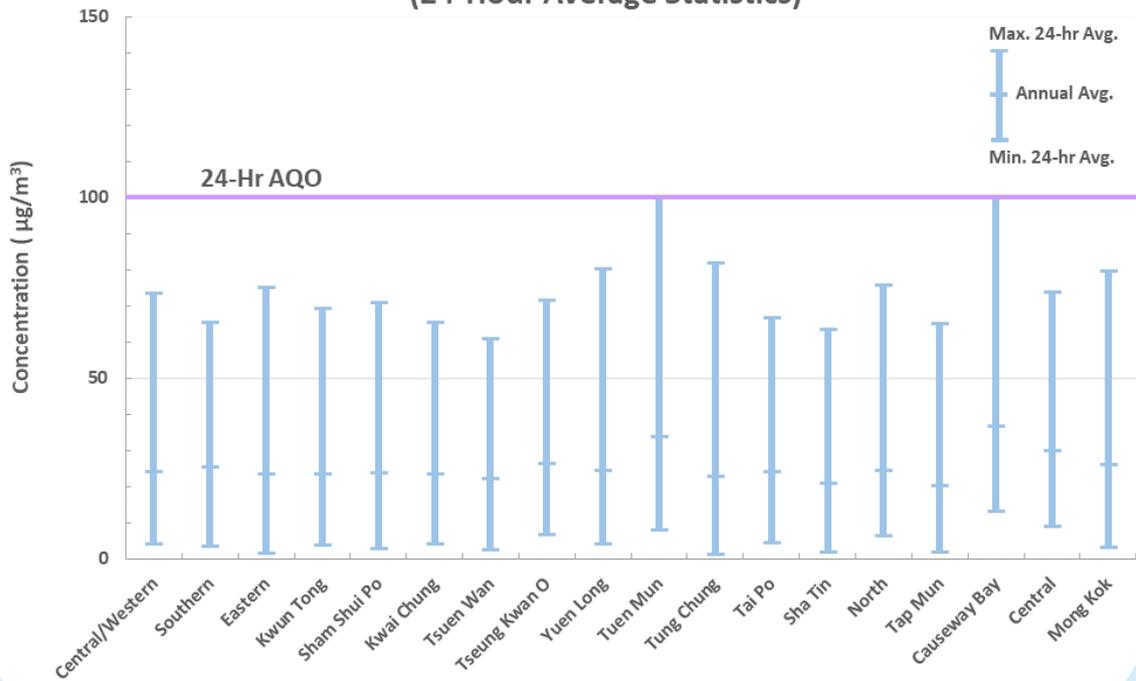
## Monitoring

PM<sub>10</sub> levels were monitored at all 18 AQMSs in 2024. 10 of these stations were also equipped with high-volume samplers to collect particulate samples for chemical analysis.

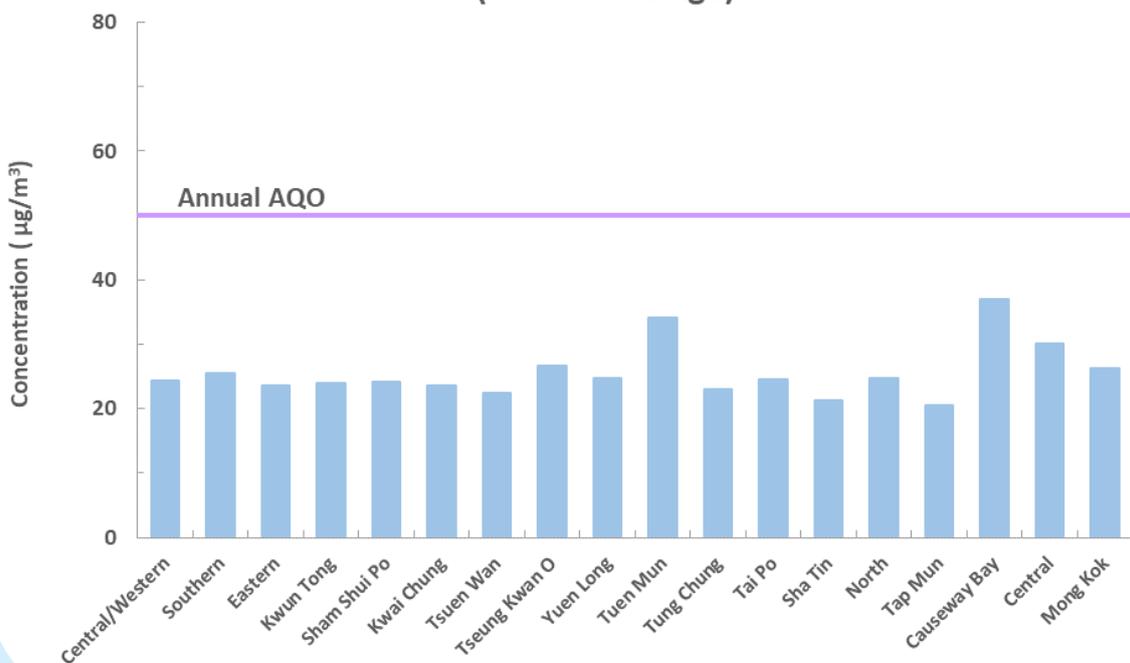
## PM<sub>10</sub> Levels Monitoring Results for 2024

- The highest 24-hour average is 100 µg/m<sup>3</sup> at Tuen Mun general station and Causeway Bay roadside station
- The highest annual average is 37 µg/m<sup>3</sup> at Causeway Bay roadside station

**Figure 3a: Monitoring Results of PM<sub>10</sub> Levels in 2024  
(24-Hour Average Statistics)**



**Figure 3b: Monitoring Results of PM<sub>10</sub> Levels in 2024  
(Annual Average)**



## Fine Suspended Particulates (PM<sub>2.5</sub>)

### Sources

PM<sub>2.5</sub> refers to those suspended particulates with nominal aerodynamic diameters of 2.5 micrometres or less, which is the finer component of PM<sub>10</sub>. PM<sub>2.5</sub> has the same emission sources as PM<sub>10</sub>, which is also mainly contributed by regional sources. Besides, PM<sub>2.5</sub> also causes visibility impairment in air.

### Health Impact

PM<sub>2.5</sub> is able to penetrate to the deepest parts of the lungs because of its small size, hence posing a higher risk to health.

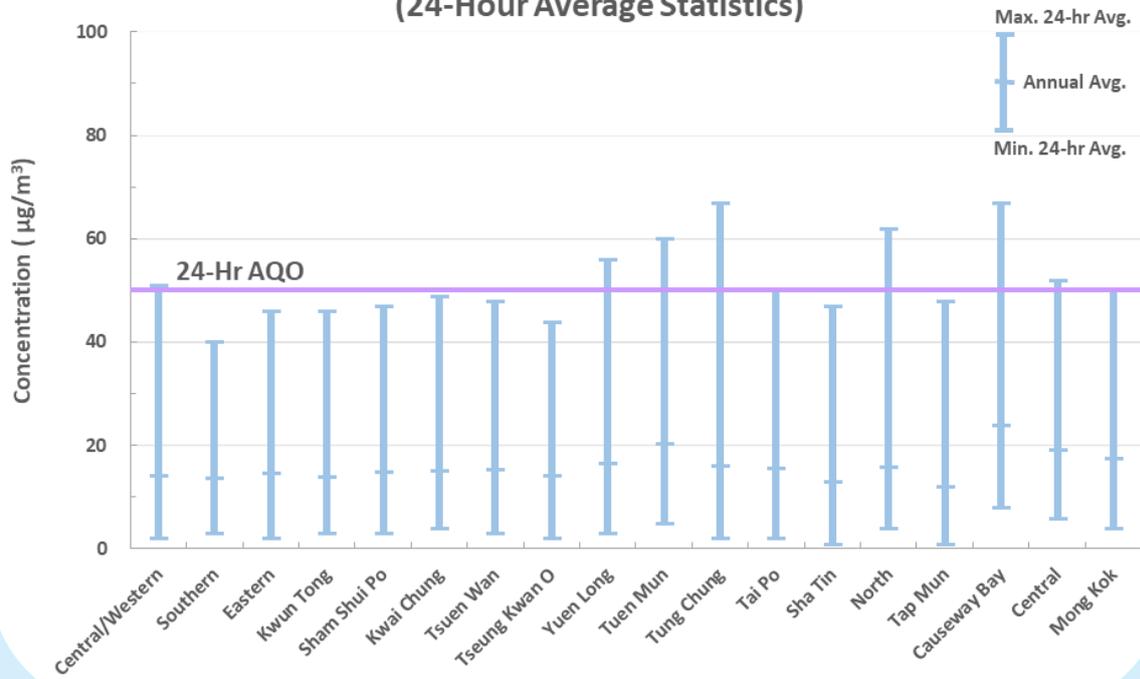
### Monitoring

PM<sub>2.5</sub> levels were monitored at all 18 AQMSs in 2024.

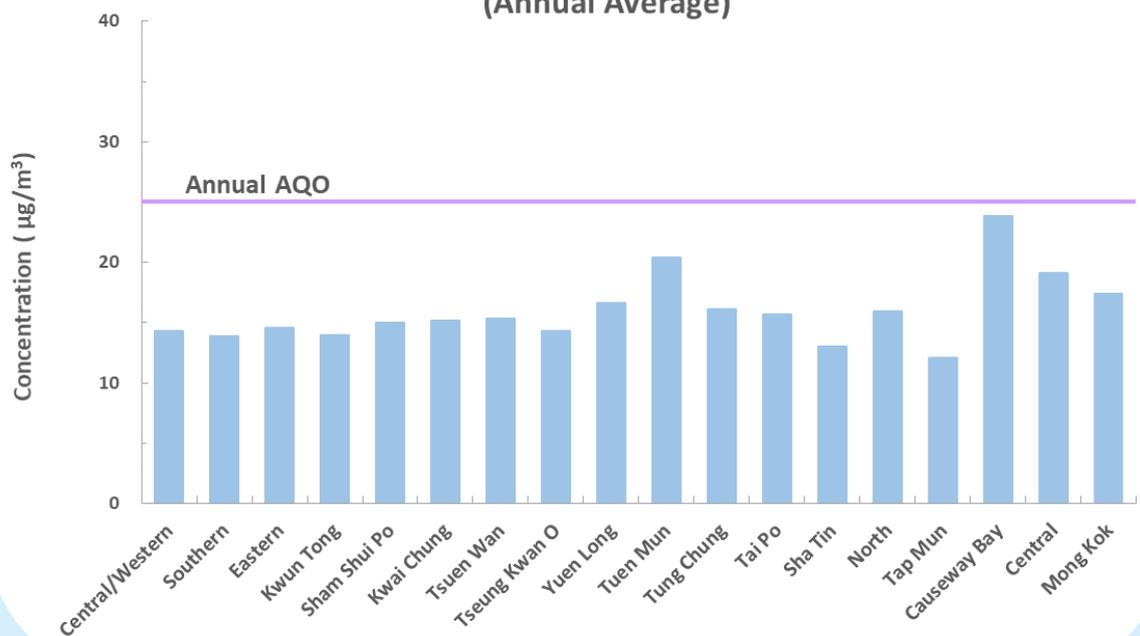
### PM<sub>2.5</sub> Levels Monitoring Results for 2024

- The highest 24-hour average is 67 µg/m<sup>3</sup> at Tung Chung general station and Causeway Bay roadside station
- The highest annual average is 24 µg/m<sup>3</sup> at Causeway Bay roadside station

**Figure 4a: Monitoring Results of PM<sub>2.5</sub> Levels in 2024  
(24-Hour Average Statistics)**



**Figure 4b: Monitoring Results of PM<sub>2.5</sub> Levels in 2024  
(Annual Average)**



# Nitrogen Dioxide (NO<sub>2</sub>)

## Sources

The various chemical species of the oxides of nitrogen are collectively termed nitrogen oxides (NO<sub>x</sub>). From an air pollution standpoint, the most important constituents of NO<sub>x</sub> are nitric oxide (NO) and NO<sub>2</sub>, which are often mentioned as NO<sub>x</sub> collectively. They are usually produced in combustion processes and emitted to the atmosphere. Power stations, marine vessels and motor vehicles are the major emission sources of NO<sub>x</sub> in Hong Kong. NO<sub>x</sub> emissions from motor vehicles have greater impact on roadside air quality. NO<sub>2</sub> is mainly formed from the oxidation of NO emitted from fuel combustion.

## Health Impact

Long-term exposure to NO<sub>2</sub> can lower a person's resistance to respiratory infections and aggravate existing chronic respiratory diseases.

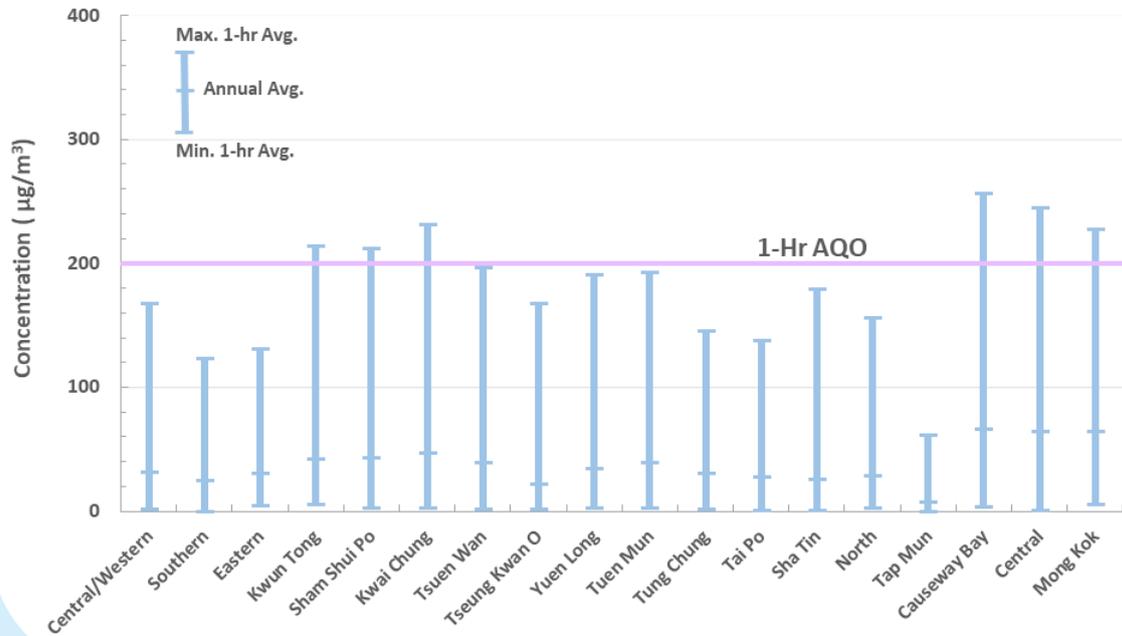
## Monitoring

NO<sub>2</sub> levels were measured at all of the 18 AQMSs in 2024.

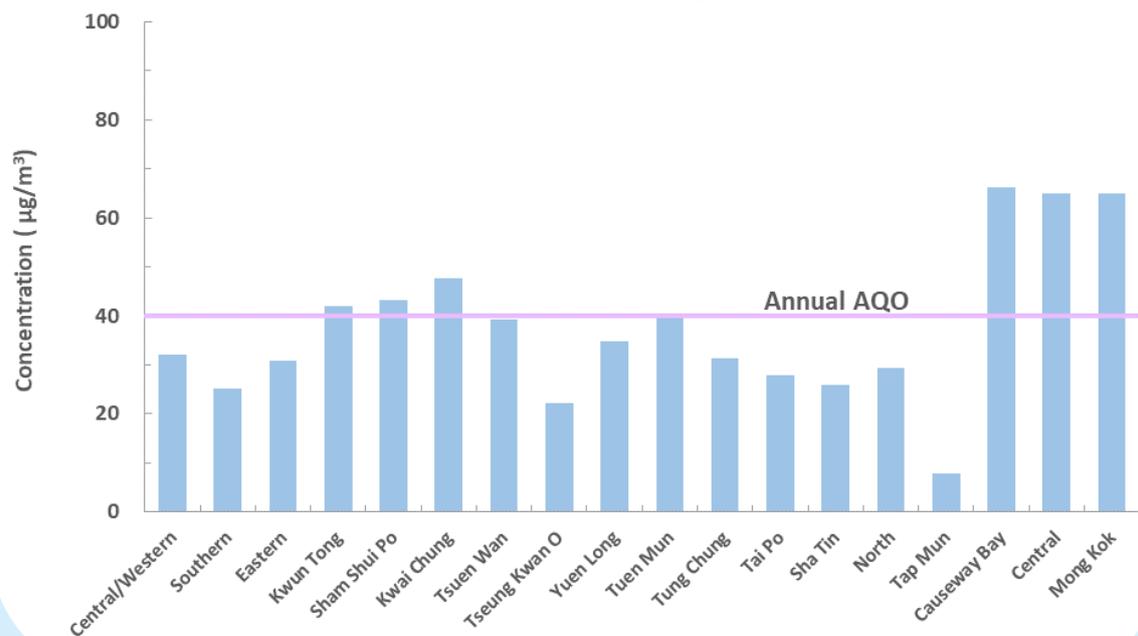
## NO<sub>2</sub> Levels Monitoring Results for 2024

- The highest 1-hour average is 257 µg/m<sup>3</sup> at Causeway Bay roadside station
- The highest annual average is 66 µg/m<sup>3</sup> at Causeway Bay roadside station

**Figure 5a: Monitoring Results of NO<sub>2</sub> Levels in 2024  
(1-Hour Average Statistics)**



**Figure 5b: Monitoring Results of NO<sub>2</sub> Levels in 2024  
(Annual Average)**



# Ozone (O<sub>3</sub>)

## Sources

O<sub>3</sub> is a major constituent of photochemical smog. It is not a pollutant directly emitted from pollution sources but formed by photochemical reactions between NO<sub>x</sub> and volatile organic compounds (VOCs) under sunlight. As it takes several hours for these photochemical reactions to take place, O<sub>3</sub> recorded in one place could be attributed to NO<sub>x</sub> and VOCs emissions from places afar. Hence, O<sub>3</sub> is more a regional air pollution problem.

At the roadside, the NO emitted from motor vehicles readily reacts with O<sub>3</sub> to form NO<sub>2</sub>, thereby removing O<sub>3</sub>. Because of such O<sub>3</sub> scavenging effect, the O<sub>3</sub> concentrations at the roadside stations are significantly lower than those at the general stations.

In Hong Kong, O<sub>3</sub> episode days are mostly associated with hot, fine and calm weather conditions in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA), which favour the formation and accumulation of O<sub>3</sub> via photochemical reactions. Such weather conditions mostly occur in summer and autumn, especially when Hong Kong and the GBA are under the influence of outer subsiding air induced by tropical cyclones located near Taiwan or the Philippines.

## Health Impact

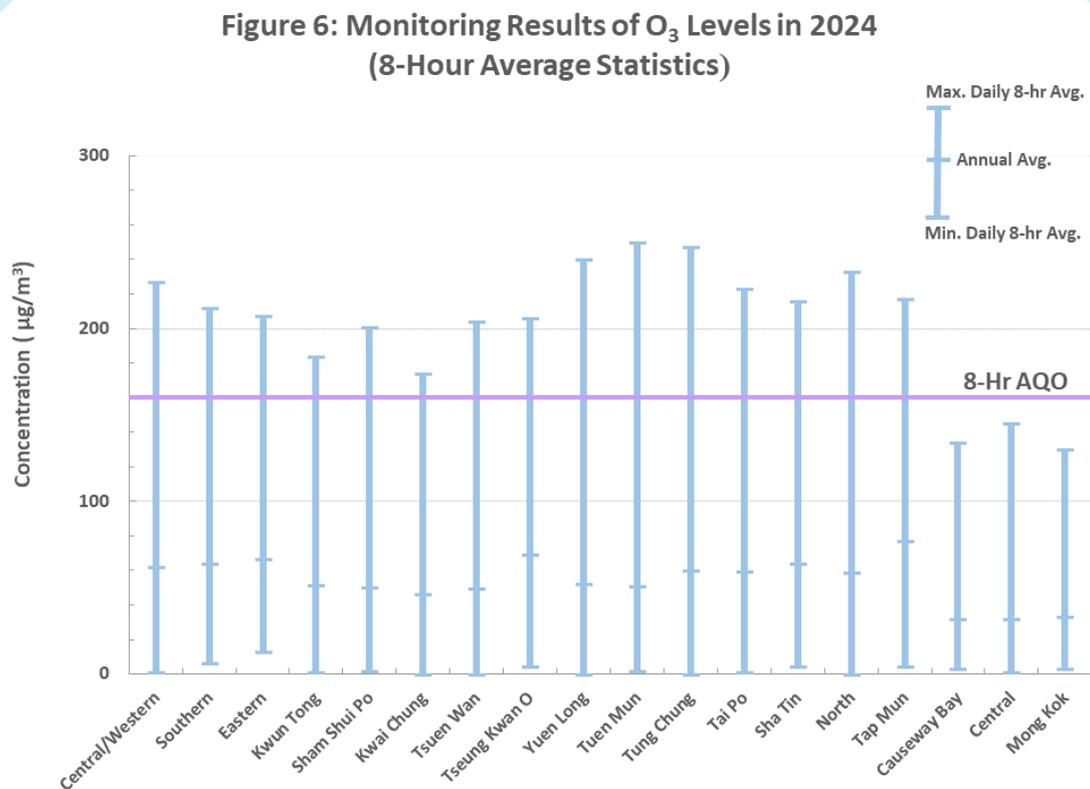
Being a strong oxidant, O<sub>3</sub> can cause irritation to the eyes, nose and throat even at low concentrations. At elevated levels, it can increase a person's susceptibility to respiratory infections and aggravate pre-existing respiratory illnesses such as asthma.

## Monitoring

O<sub>3</sub> levels were monitored at all 18 AQMSs in 2024.

## O<sub>3</sub> Levels Monitoring Results for 2024

- The highest daily 8-hour average is 250  $\mu\text{g}/\text{m}^3$  at Tuen Mun general station



# Carbon Monoxide (CO)

## Sources

CO comes mainly from vehicular emissions although a small amount of it may also come from flue gases of factories and power stations.

## Health Impact

When CO enters the bloodstream, it can reduce oxygen delivery to the body's organs and tissues. Typical symptoms of CO poisoning include shortness of breath, chest pain, headache, and loss of co-ordination. The health threat from CO is more severe for those who suffer from heart diseases.

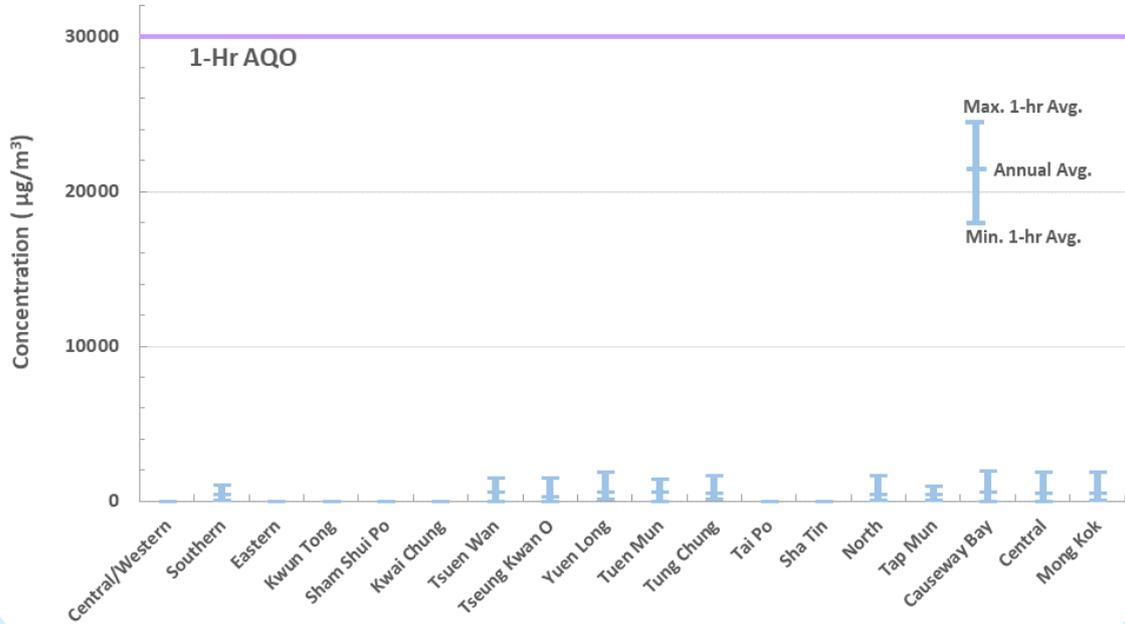
## Monitoring

CO levels were monitored at 11 stations, including 8 general stations (i.e., Southern, Tsuen Wan, Tseung Kwan O, Yuen Long, Tuen Mun, Tung Chung, North and Tap Mun) and all 3 roadside stations in 2024.

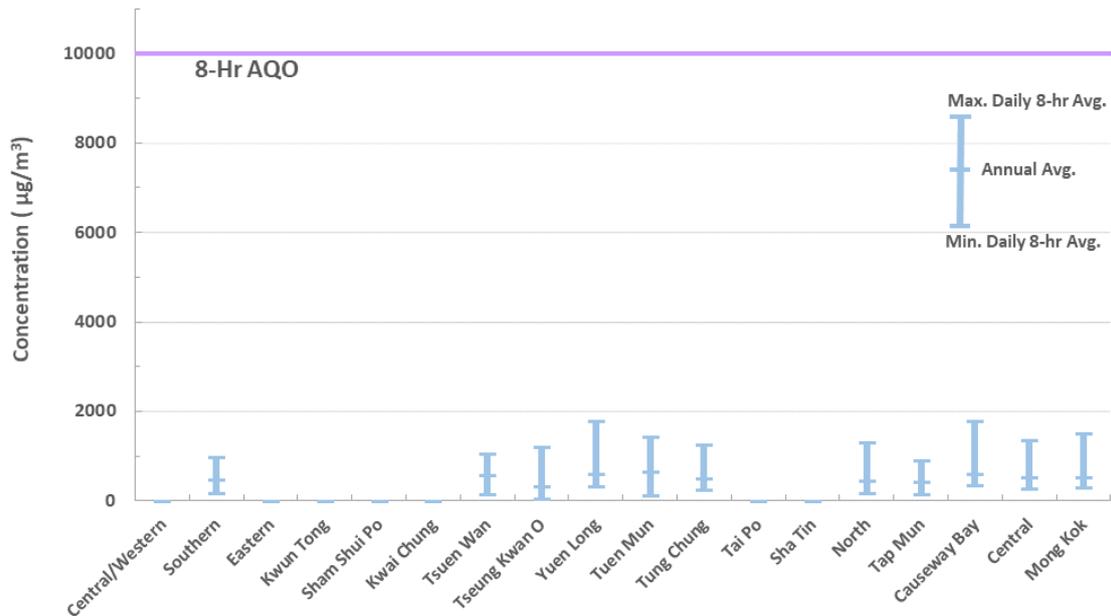
## CO Levels Monitoring Results for 2024

- Similar to 2023, CO concentrations remained low in Hong Kong
- The highest 1-hour average is 1,950  $\mu\text{g}/\text{m}^3$  at Causeway Bay roadside station
- The highest daily 8-hour average is 1,778  $\mu\text{g}/\text{m}^3$  at Yuen Long general station

**Figure 7a: Monitoring Results of CO Levels in 2024  
(1-Hour Average Statistics)**



**Figure 7b: Monitoring Results of CO Levels in 2024  
(8-Hour Average Statistics)**



## Lead (Pb)

### Sources

Pb is a toxic heavy metal which can be found in suspended particulates. In Hong Kong, the sale and supply of leaded petrol, which is a known major source of Pb was banned from 1 April 1999.

### Health Impact

Children, especially young ones, are especially susceptible to the harmful effects of Pb exposure, which can have long-lasting and severe consequences on their brain and nervous system.

Pb exposure can also have serious health implications for adults, including an increased risk of high blood pressure, cardiovascular issues, anaemia, liver and kidney damage.

Pregnant women who are exposed to high levels of Pb are at risk of experiencing miscarriage, stillbirth, premature birth, and low birth weight in their newborns.

### Monitoring

Pb levels were measured at 10 stations, including 9 general stations (i.e., Central/Western, Kwun Tong, Sham Shui Po, Kwai Chung, Tsuen Wan, Tung Chung, Yuen Long, Tuen Mun and Tseung Kwan O) and Mong Kok roadside station in 2024.

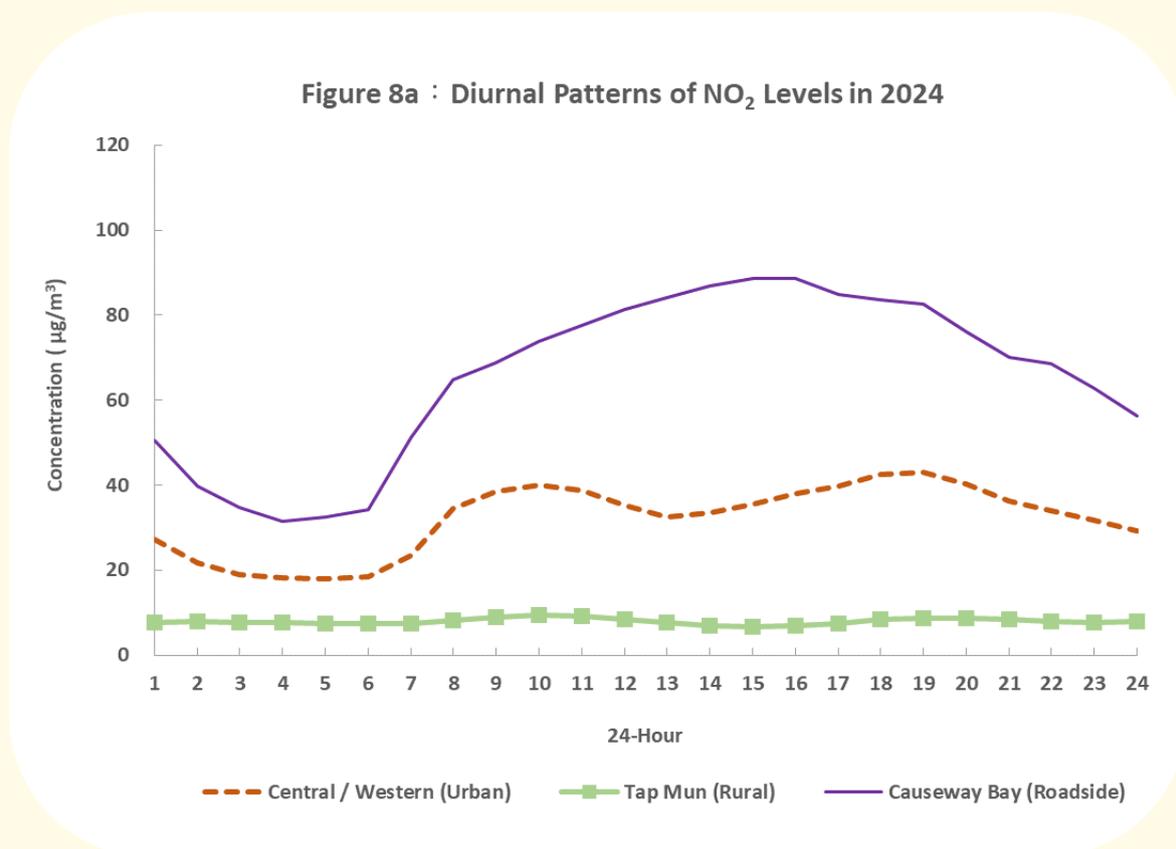
### Pb Levels Monitoring Results for 2024

- Similar to 2023, Pb concentrations continued to linger at very low levels in Hong Kong
- The annual averages ranging from 6 ng/m<sup>3</sup> to 8 ng/m<sup>3</sup>

# Diurnal Patterns of Air Pollutant Levels

The concentrations of most air pollutants generally follow the diurnal pattern of human activities and traffic. For instance, higher levels of NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> are usually observed in the morning and the evening rush hours when there are more traffic and human activities. Likewise, the lowest concentrations often occur from midnight to dawn when the traffic is at its minimum. This type of traffic-induced diurnal pattern is much more distinct for pollutant levels.

## Diurnal Patterns of NO<sub>2</sub> Levels



Diurnal Patterns of PM<sub>10</sub> and PM<sub>2.5</sub> Levels

Figure 8b: Diurnal Patterns of PM<sub>10</sub> Levels in 2024

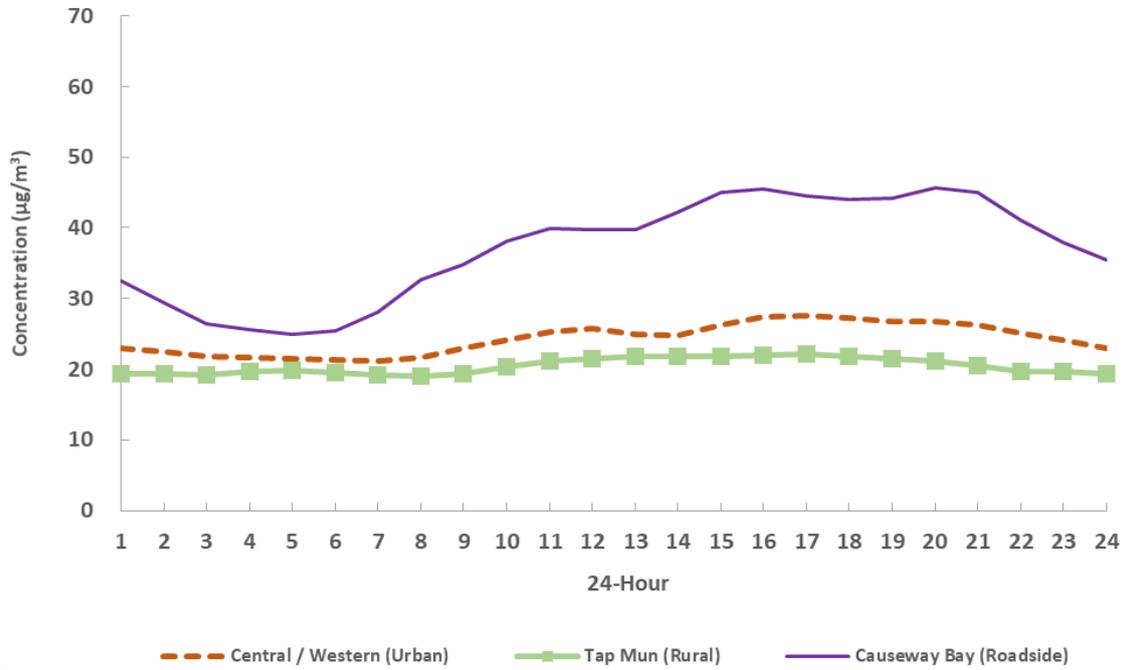
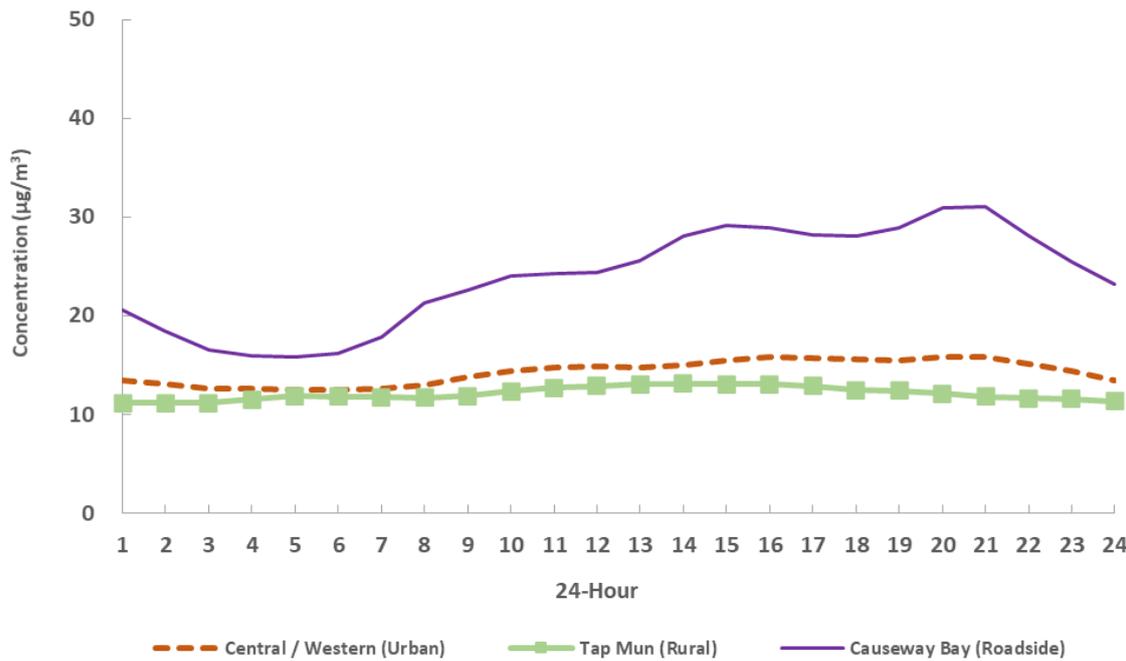


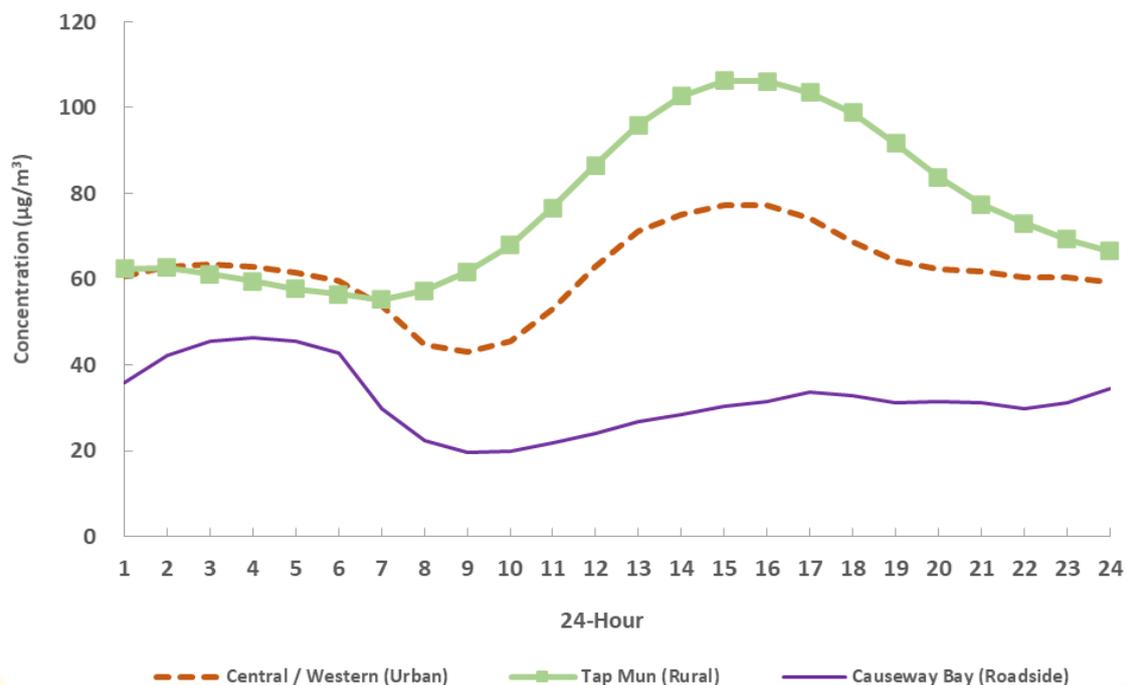
Figure 8c: Diurnal Patterns of PM<sub>2.5</sub> Levels in 2024



The diurnal pattern of O<sub>3</sub> is different from those of NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>. O<sub>3</sub> is formed by photochemical reactions of its precursor pollutants such as NO<sub>x</sub> and VOCs under sunlight. Outside urban centres, the ambient O<sub>3</sub> levels start to build up before noon and peak in the afternoon, when precursor pollutants are accumulated and sunlight is strong. In urban areas and at the roadside, the lowest O<sub>3</sub> concentrations are often observed during rush hours. This is because a large amount of NO from rush-hour traffic acts as an efficient scavenger of O<sub>3</sub>. At the roadside, O<sub>3</sub> levels are significantly lower than those at general stations due to the scavenging effect of NO emissions from vehicles.

### Diurnal Patterns of O<sub>3</sub> Levels

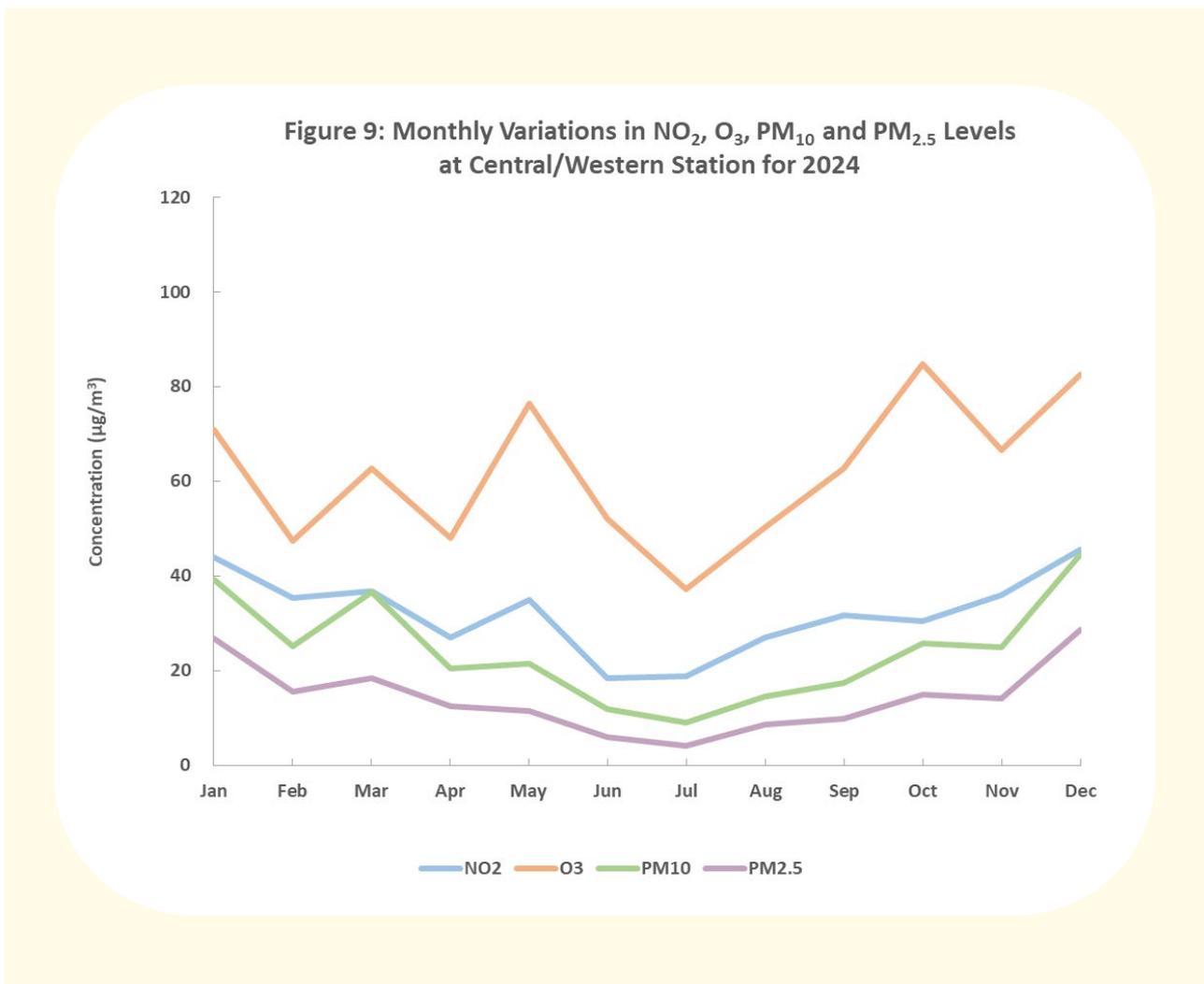
Figure 8d: Diurnal Patterns of O<sub>3</sub> Levels in 2024



# Monthly Variations in Air Pollutant Levels

The concentrations of NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> are in general lower in summer for a number of reasons. The higher temperatures in summer months induce larger mixing heights, which favour the dispersion of pollutants. The rain in summer helps to wash out pollutants more frequently. The south-westerly monsoon in summer also helps to replenish the region with cleaner oceanic air.

As regards O<sub>3</sub>, the highest monthly concentrations usually occur in autumn with more favourable weather conditions (such as strong solar radiation, less rainfall, favourable wind direction, etc.) for O<sub>3</sub> formation via photochemical reactions.



# Long-term Trends in Air Pollutant Levels

**Air quality is influenced by both emissions and meteorological conditions.** Over a short period, for instance a few months to a year, air quality is more subject to variations in weather conditions even though the emission levels are more or less the same, e.g., stronger solar radiation will promote photochemical smog formation, more rainfall will help scrub pollutants from the air, etc. In the long run, however, air quality is primarily affected by emissions. Therefore, **a scientific way to assess air quality changes and the effectiveness of emission control measures is to examine the trend of annual average pollutant concentrations over the years.**

The long-term trends for air pollutants presented in this section are based on their annual average concentrations recorded from the relevant AQMSs categorized into 4 groups of land use types, namely Urban, New Town, Rural and Roadside as defined in **Table 1**.

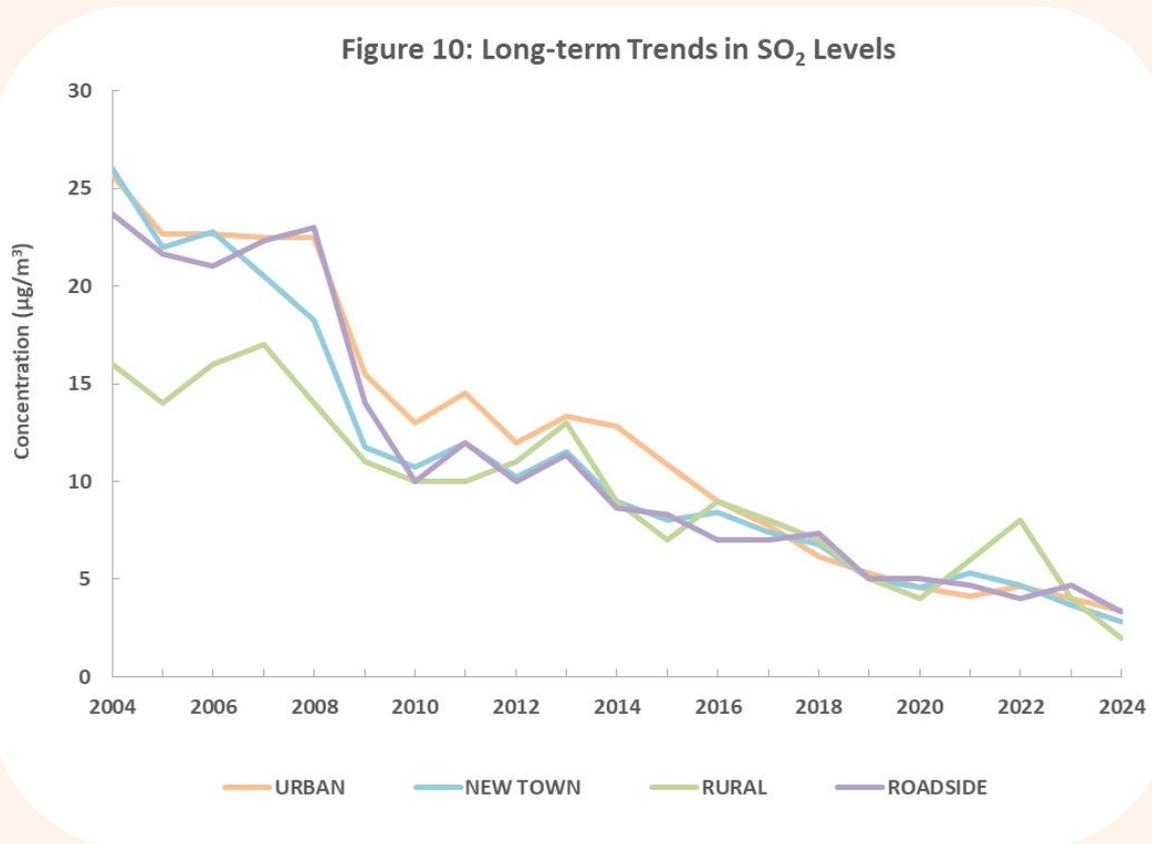
**Table 1: Classification of Air Quality Monitoring Stations by Land Use Types**

| Land Use Type   | Land Use Characteristics  | Air Quality Monitoring Stations   |
|-----------------|---|---|
| <b>Urban</b>    | Densely populated residential areas mixed with some commercial and/or industrial areas                        | <ul style="list-style-type: none"> <li>· Central/Western</li> <li>· Southern</li> <li>· Eastern</li> <li>· Kwun Tong</li> <li>· Sham Shui Po</li> <li>· Kwai Chung</li> <li>· Tsuen Wan</li> <li>· Tseung Kwan O</li> </ul> |
| <b>New Town</b> | Mainly residential areas  | <ul style="list-style-type: none"> <li>· Yuen Long</li> <li>· Tuen Mun</li> <li>· Tung Chung</li> <li>· Tai Po</li> <li>· Sha Tin</li> <li>· North</li> </ul>   |
| <b>Rural</b>    | Rural areas   | <ul style="list-style-type: none"> <li>· Tap Mun ☐ (background station)</li> </ul>  |
| <b>Roadside</b> | Urban roadside in mixed residential/commercial areas with heavy traffic and surrounded by many tall buildings | <ul style="list-style-type: none"> <li>· Causeway Bay</li> <li>· Central</li> <li>· Mong Kok</li> </ul>   |

# Sulphur Dioxide (SO<sub>2</sub>)

## Long-term Trends in SO<sub>2</sub> Levels

SO<sub>2</sub> concentrations in Hong Kong have shown a continuous declining trend as a result of the implementation of various fuel control measures. The annual average SO<sub>2</sub> concentrations at both rural and other types of monitoring stations in 2024 were all at a very low level, in the range of 2 to 3 µg/m<sup>3</sup>.

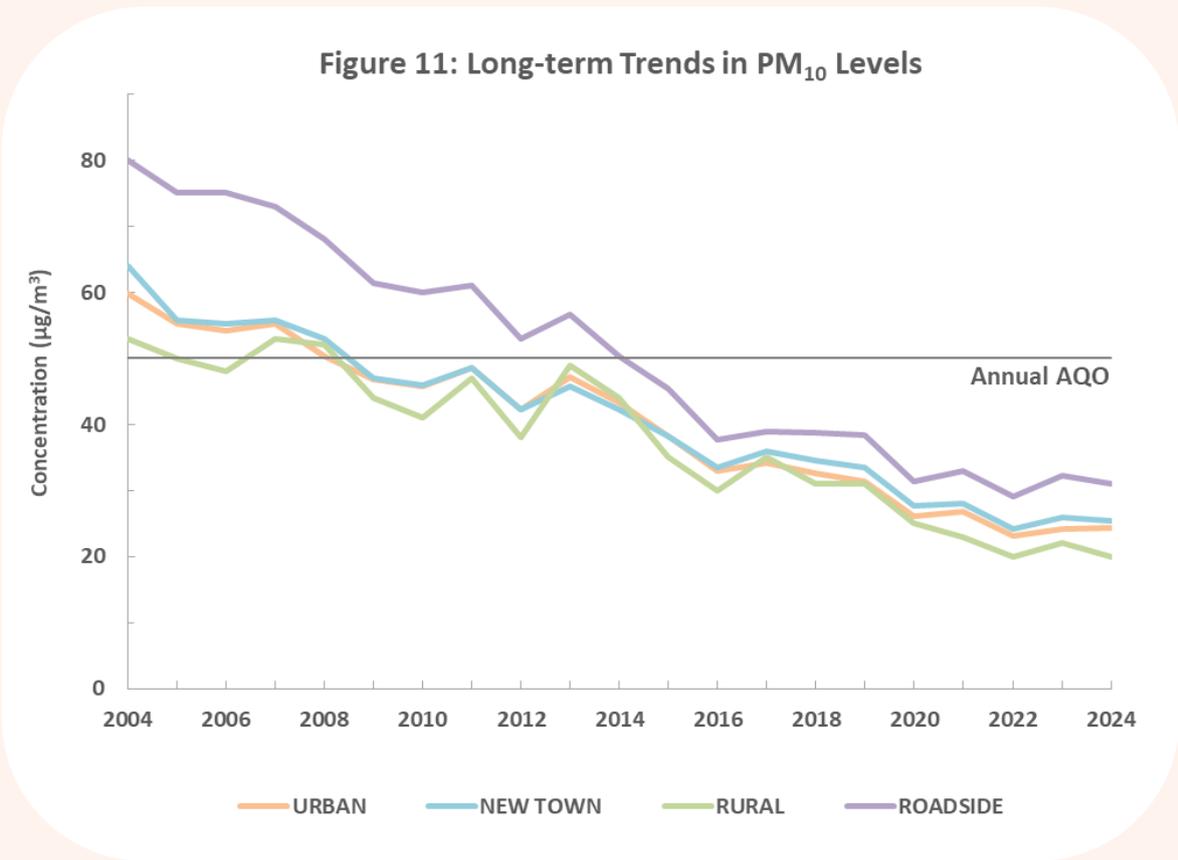


# Respirable Suspended Particulates (PM<sub>10</sub>)

## Long-term Trends in PM<sub>10</sub> Levels

The annual average concentrations of PM<sub>10</sub> have showed a downward trend from 2004 to 2024. Since 2009, the annual average concentrations of ambient PM<sub>10</sub> have consistently decreased to below the annual AQO limit, reflecting a reduction in the regional background PM<sub>10</sub> levels.

As a result of the implementation of various vehicle emission control measures over the past two decades, the annual average concentration of PM<sub>10</sub> at the roadsides in 2024 has been significantly reduced by 61% compared to the 2004 level and has remained below the annual AQO limit since 2014.

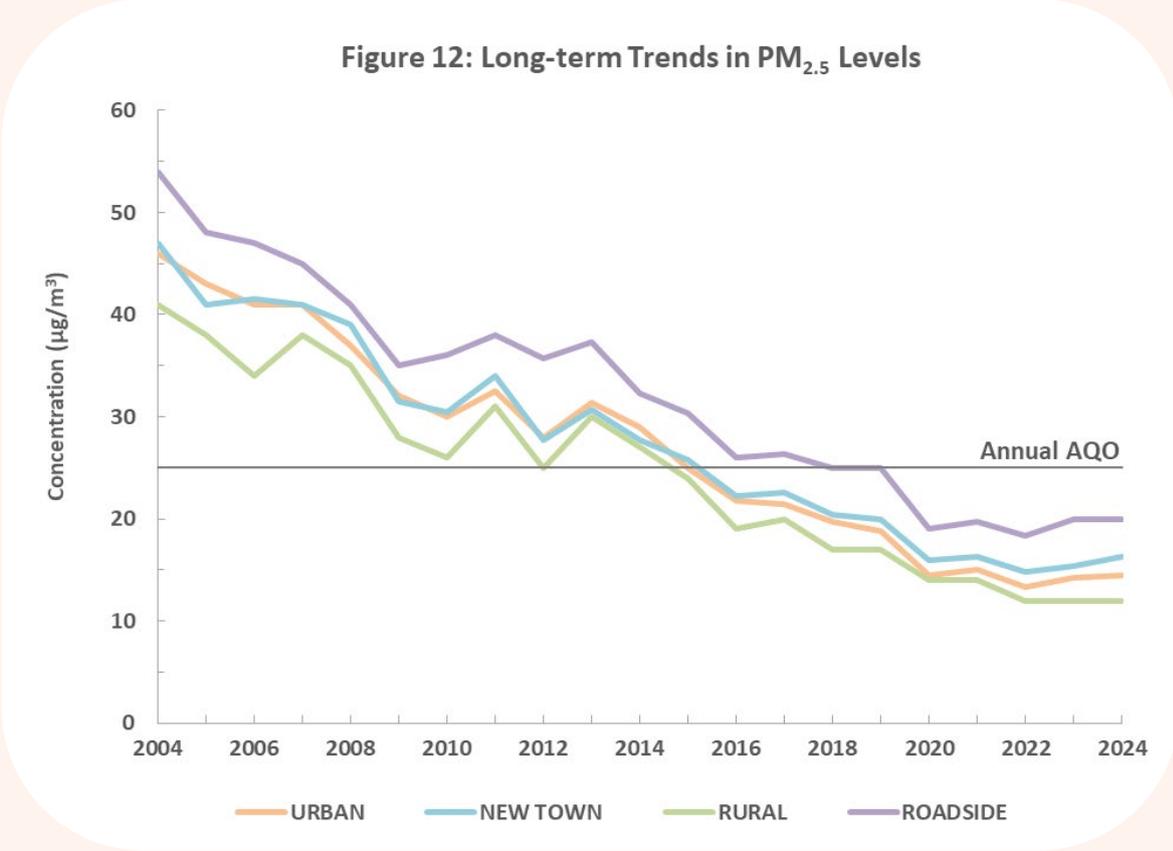


# Fine Suspended Particulates (PM<sub>2.5</sub>)

## Long-term Trends in PM<sub>2.5</sub> Levels

Like PM<sub>10</sub>, the annual average concentrations of PM<sub>2.5</sub> in the territory have shown a downward trend from 2004 to 2024, reflecting a continuous reduction in the regional background PM<sub>2.5</sub> levels.

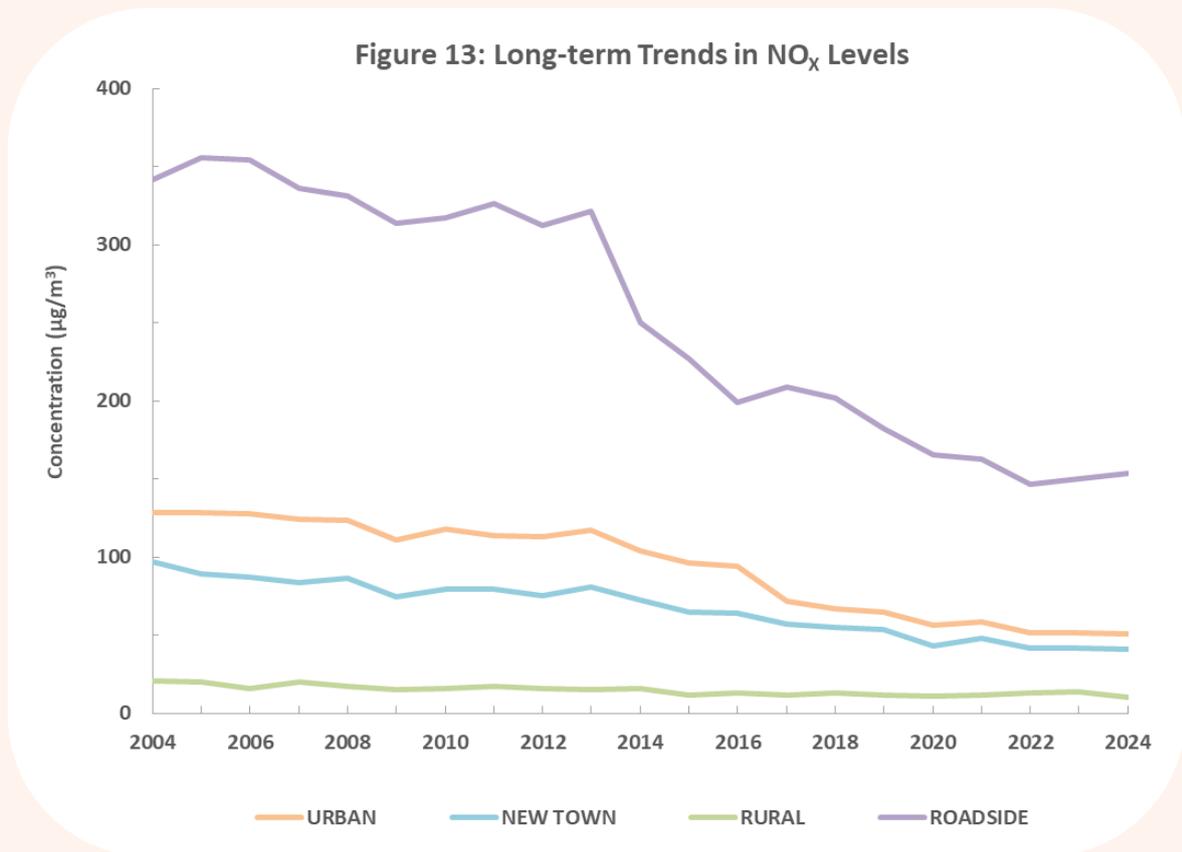
In recent years, there has been a significant improvement in the roadside PM<sub>2.5</sub> level, which has remained below the annual AQO limit since 2018. When compared to 2004, the annual average PM<sub>2.5</sub> concentration at the roadsides in 2024 has reduced by 63%.



## Nitrogen Oxides (NO<sub>x</sub>) and Nitrogen Dioxide (NO<sub>2</sub>)

### Long-term Trends in NO<sub>x</sub> Levels

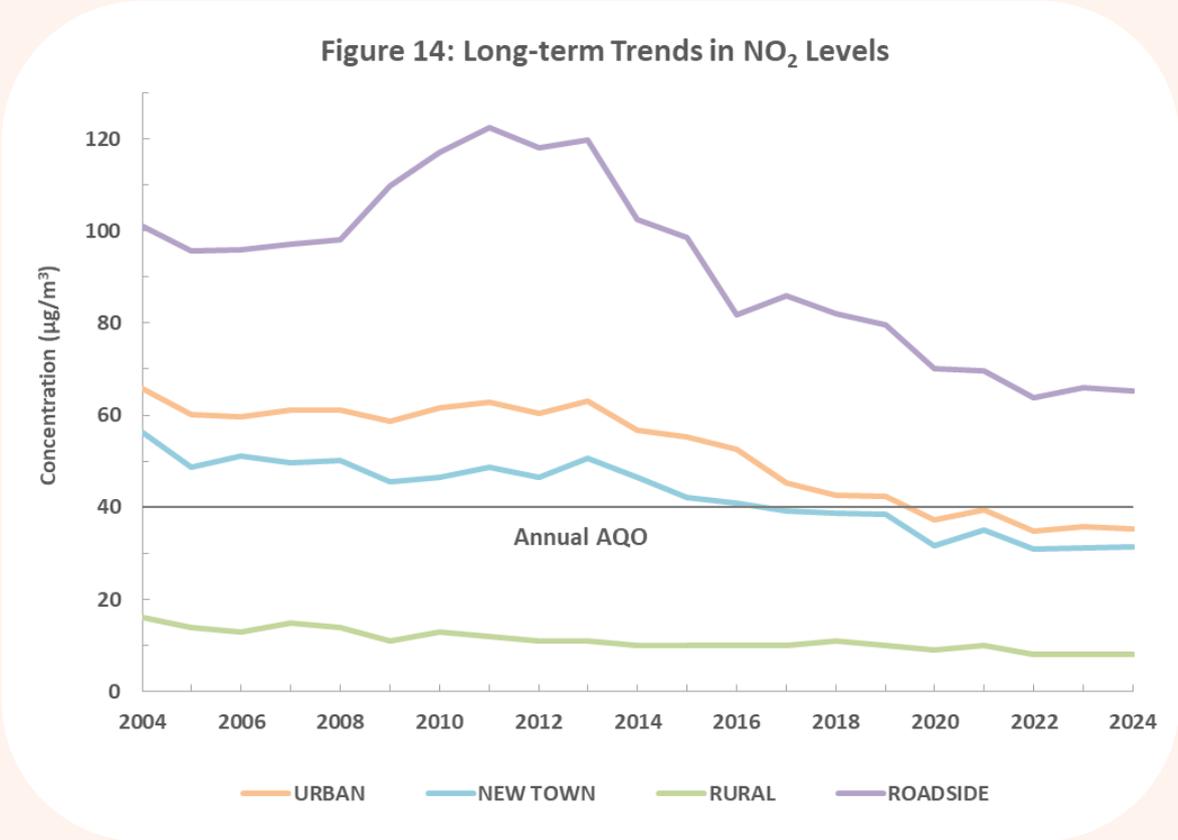
While the background NO<sub>x</sub> concentrations (i.e., rural area in Tap Mun) remained stable, the annual averages concentrations of ambient NO<sub>x</sub> in urban areas and new towns exhibited moderate declining trends between 2004 and 2024. During the same period, the annual average NO<sub>x</sub> concentration at the roadsides showed a more distinct descending trend, reflecting the effectiveness of various vehicle emission control measures implemented over the past decades. The annual average NO<sub>x</sub> concentration at the roadsides in 2024 was 55% lower than in 2004.



### Long-term Trends in NO<sub>2</sub> Levels

NO<sub>2</sub>, a major component of NO<sub>x</sub>, is mainly formed from the oxidation of NO. The oxidation can be promoted by the presence of a large amount of O<sub>3</sub> and VOCs in ambient air. Between 2004 and 2024, the annual average concentrations of NO<sub>2</sub> in urban areas and new towns showed a moderate downward trend.

Roadside NO<sub>2</sub> levels have been more difficult to reduce. However, the increasing trend of its concentrations once recorded in the past, which could be caused by a combination of the ageing of motor vehicles, increase in direct NO<sub>2</sub> emissions from motor vehicles and rise in regional background O<sub>3</sub> concentration promoting the conversion of NO emitted from motor vehicles to NO<sub>2</sub>, was reversed and started to drop from its peak in 2011. The annual average NO<sub>2</sub> concentration at the roadsides recorded in 2024 reduced by 36% compared to the 2004 level.



## Ozone (O<sub>3</sub>)

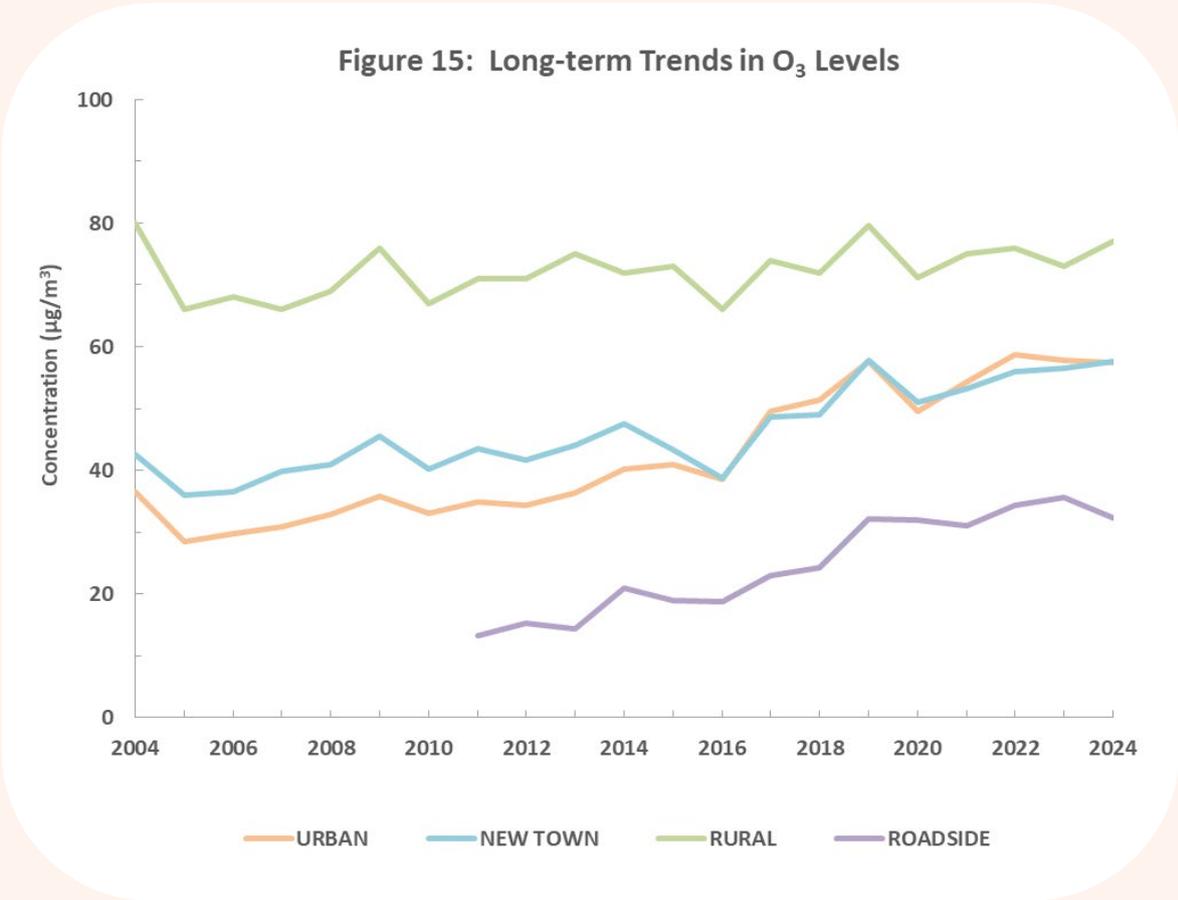
### Brief of O<sub>3</sub> Formation Chemistry and Monitoring Background

O<sub>3</sub> is a complex regional air pollution issue. It is formed when precursors such as NO<sub>x</sub> and VOCs undergo complicated photochemical reactions under sunlight. O<sub>3</sub> can travel long distances and affect areas downwind. On the other hand, O<sub>3</sub> can react with some pollutants like NO emitted from combustion sources (such as motor vehicles) and be scavenged. Hence the O<sub>3</sub> concentrations measured at a particular location would depend on the regional O<sub>3</sub> background level, its local formation as well as the scavenging effect.

As NO emissions from motor vehicles can react with and remove O<sub>3</sub> in the air, areas with heavy traffic normally have lower O<sub>3</sub> levels than areas with light traffic. Tap Mun station started monitoring O<sub>3</sub> in 1998. As Tap Mun station is located in a remote rural area with virtually no local emission, the O<sub>3</sub> concentrations recorded could represent the regional background O<sub>3</sub> levels. This station has consistently recorded higher O<sub>3</sub> levels than those recorded in urban areas, but the gap has been narrowing steadily from over 100% in the early 2000s to about 30% in recent years.

### Long-term Trends in O<sub>3</sub> Levels

The rural annual average O<sub>3</sub> concentration showed a moderate upward trend from the early 2000s whereas the annual average O<sub>3</sub> concentrations in new towns and urban areas have exhibited relatively more distinct rising trends. The rising trend of O<sub>3</sub> levels in Hong Kong, especially those in new towns and urban areas, could be attributed to the moderate increase in the regional O<sub>3</sub> background as well as the reduction in local vehicle emissions, the latter leading to less NO in the air for reaction with O<sub>3</sub>.

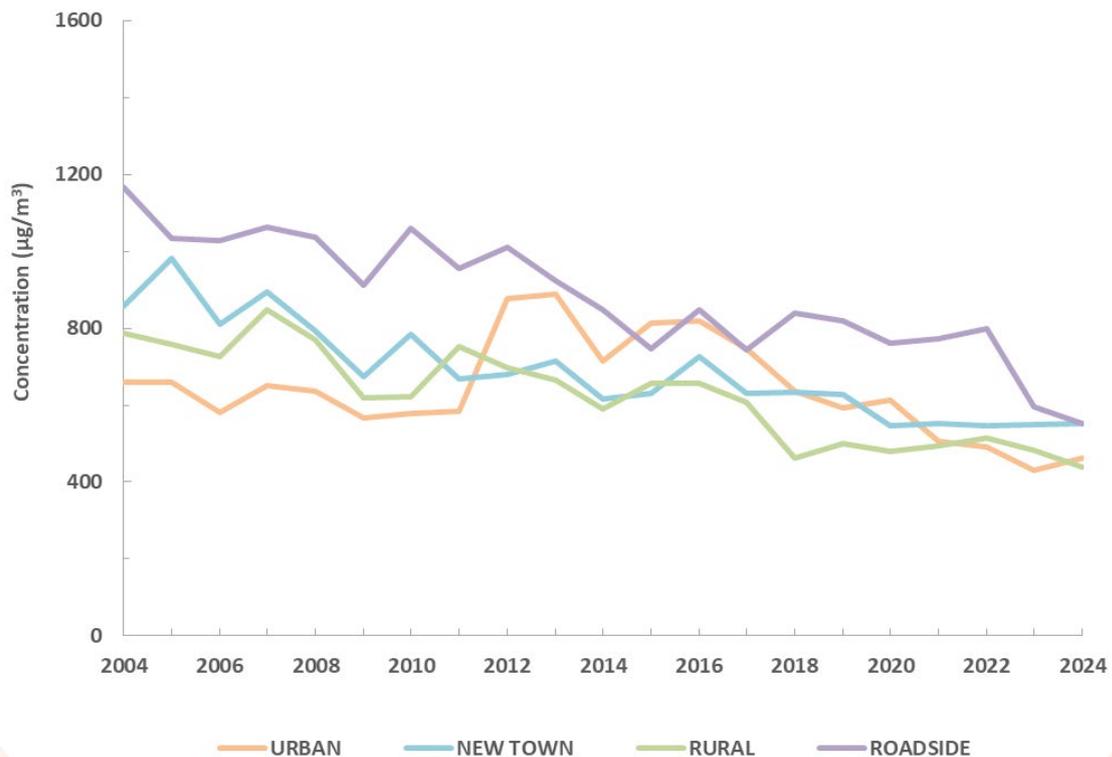


# Carbon Monoxide (CO)

## Long-term Trends in CO Levels

The ambient annual average concentrations of CO in the territory remained at a very low level while the annual average CO concentration at the roadsides had dropped to a level close to the ambient one in recent years.

Figure 16: Long-term Trends in CO Levels

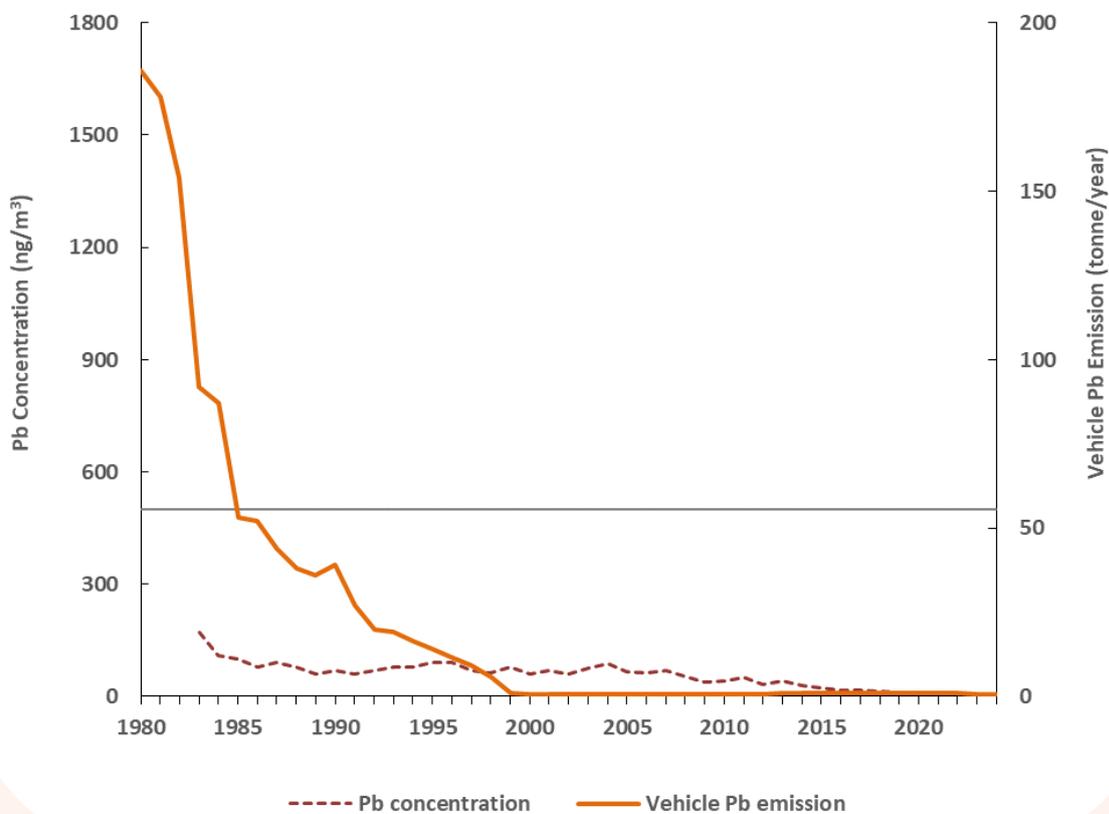


# Lead (Pb)

## Long-term Trends in Pb Levels

The Pb concentrations at the roadside and in ambient air have been lingering at very low levels over the years since the oil companies took voluntary action in reducing the Pb content of petrol in the eighties. Pb emissions from motor vehicles were further reduced as a result of the introduction of unleaded petrol in April 1991 and completely eliminated when the sale and supply of leaded petrol were banned in April 1999.

**Figure 17: Long-term Trends in Vehicle Pb Emission and Pb Levels**



# Appendix A

## Air Quality Monitoring Network and Operation

### A1. Network Operation

The Air Science and Modelling Group of the Environmental Protection Department operates the Air Quality Monitoring Network with 18 air quality monitoring stations (AQMSs) in 2024. [Table A1](#) shows the station site information.

In order to provide good representation of the air quality in areas of high population density, the locations of the 18 AQMSs were carefully chosen by referencing to the United States Environmental Protection Agency's (USEPA) guidelines with practical consideration of the unique congested high-rise development of Hong Kong.



Figure A1: Central/Western monitoring station.

Table A1: AQMSs Site Information

| Monitoring Station | Address   | Area Type  | Sampling Height                            |   | Date Start Operation    |
|--------------------|---|--|--|---|-------------------------|
|                    |   |  | Above P.D.H.K.                             | Above Ground                            |                         |
| Central/Western    | Sai Ying Pun Community Complex                              | <b>Urban:</b>  |  | 16m                                     | Nov 1983 <sup>[1]</sup> |
|                    | 2 High Street, Sai Ying Pun                                 | Mixed residential / commercial                                   | 82m  | (5 floors)                              |                         |
| Southern           | Aberdeen Tennis and Squash Centre                           | <b>Urban:</b>  |  | 18m                                     | Jul 2020                |
|                    | 1 Aberdeen Praya Road, Hong Kong                            | Mixed residential / commercial / industrial                      | 22m  | (2 floors)                              |                         |
| Eastern            | Sai Wan Ho Fire Station                                     | <b>Urban:</b>  |  | 15m                                     | Jan 1999                |
|                    | 20 Wai Hang Street, Sai Wan Ho                              | Residential  | 28m  | (4 floors)                              |                         |
| Kwun Tong          | Kwun Tong Police Station                                    | <b>Urban:</b>  |  | 14.7m                                   | Jul 1983 <sup>[2]</sup> |
|                    | 9 Lei Yue Mun Road, Kwun Tong, Kowloon                      | Mixed residential / commercial / industrial                      | 23m  | (2 floors)                              |                         |
| Sham Shui Po       | Sham Shui Po Police Station                                 | <b>Urban:</b>  |  | 17m                                     | Jul 1984                |
|                    | 37A Yen Chow Street, Sham Shui Po                           | Mixed residential / commercial                                   | 21m  | (4 floors)                              |                         |
| Kwai Chung         | Kwai Chung Police Station                                   | <b>Urban:</b>  |  | 13m                                     | Jul 1988 <sup>[3]</sup> |
|                    | 999 Kwai Chung Road, Kwai Chung                             | Mixed residential / commercial / industrial                      | 19m  | (2 floors)                              |                         |
| Tsuen Wan          | Princess Alexandra Community Centre                         | <b>Urban:</b>  |  | 17m                                     | Aug 1988                |
|                    | 60 Tai Ho Road, Tsuen Wan                                   | Mixed residential / commercial / industrial                      | 21m  | (4 floors)                              |                         |
| Tseung Kwan O      | Tseung Kwan O Sports Centre                                 | <b>Urban:</b>  |  | 16m                                     | Mar 2016                |
|                    | 9 Wan Lung Road, Tseung Kwan O, Sai Kung                    | Residential  | 23m  | (2 floors)                              |                         |
| Yuen Long          | Yuen Long District Office Building                          | <b>New Town:</b>   |  | 25m                                     | Jul 1995                |
|                    | 269 Castle Peak Road, Yuen Long                             | Residential  | 31m  | (6 floors)                              |                         |
| Tuen Mun           | Tuen Mun Public Library                                     | <b>New Town:</b>   |  | 27m                                     | Dec 2013                |
|                    | 1 Tuen Hi Road, Tuen Mun                                    | Residential  | 31m  | (4 floors)                              |                         |
| Tung Chung         | Tung Chung Health Centre                                    | <b>New Town:</b>   |  | 27.5m                                   | Apr 1999                |
|                    | 6 Fu Tung Street, Tung Chung                                | Residential  | 34.5m                                      | (4 floors)                              |                         |
| Tai Po             | Tai Po Govt. Offices Building                               | <b>New Town:</b>   |  | 28m                                     | Feb 1990 <sup>[4]</sup> |
|                    | 1 Ting Kok Road, Tai Po                                     | Residential  | 31m  | (6 floors)                              |                         |
| Sha Tin            | Sha Tin Govt. Secondary School                              | <b>New Town:</b>   |  | 25m                                     | Jul 1991                |
|                    | 11-17 Man Lai Road, Tai Wai, Sha Tin                        | Residential  | 31m  | (6 floors)                              |                         |
| North              | Po Wing Road Sports Centre                                  | <b>New Town:</b>   |  | 22m                                     | Jul 2020                |
|                    | 19 Pak Wo Road, Sheung Shui                                 | Residential  | 33m  | (3 floors)                              |                         |
| Tap Mun            | Tap Mun Police Post   | <b>Background:</b>   |  | 11m                                     | Apr 1998                |
|                    |   | Rural  | 26m  | (3 floors)                              |                         |
| Causeway Bay       | 1 Yee Woo Street, Causeway Bay                              | <b>Urban Roadside:</b>   |  |   | Jan 1998                |
|                    |   | Mixed commercial / residential area surrounded by tall buildings | 6.5m <sup>[5]</sup> / 7m <sup>[6]</sup>    | 3m <sup>[5]</sup> / 3.5m <sup>[6]</sup> |                         |
| Central            | Junction of Des Voeux Road Central and Chater Road, Central | <b>Urban Roadside:</b>   |  |   | Oct 1998                |
|                    |   | Busy commercial / financial area surrounded by tall buildings    | 8.5m                                       | 4.5m                                    |                         |
| Mong Kok           | Junction of Nathan Road and Lai Chi Kok Road, Mong Kok      | <b>Urban Roadside:</b>   |  |   | Apr 1991 <sup>[7]</sup> |
|                    |   | Mixed commercial / residential area surrounded by tall buildings | 8.5m <sup>[5]</sup> / 10.9m <sup>[6]</sup> | 3m <sup>[5]</sup> / 5.4m <sup>[6]</sup> |                         |

Notes: P.D. = Principal Datum

- [1] Central/Western station was relocated to the current address in October 2009.
- [2] Kwun Tong station was relocated to the current address in March 2020.
- [3] Kwai Chung station was relocated to the current address in January 1999.
- [4] Tai Po station was relocated to the current address in February 2006.
- [5] Sampling height for gaseous pollutants.
- [6] Sampling height for suspended particulates.
- [7] Mong Kok station was relocated to the current address in January 2001.



**Figure A2: Instrument for measuring the air pollutants at an AQMS.**

The details of the parameters monitored at each AQMS and a list of equipment employed for measuring the air pollutants are summarised in [Tables A2](#) and [Table A3](#) respectively. In general, the concentrations of gaseous pollutants,  $PM_{10}$  and  $PM_{2.5}$  are measured continuously by automatic analysers. Manually operated high volume samplers using gravimetric methods are also used regularly to measure  $PM_{10}$  concentrations. The concentrations of Pb are measured in the subsequent elemental analysis of the  $PM_{10}$  samples by Government Laboratory using Inductively Coupled Plasma Optical Emission Spectroscopy. In addition, meteorological parameters, including temperature, solar radiation, wind speed and wind direction, are also recorded continuously at each station as appropriate.

Tables A2: Parameters Monitored at each AQMSs in 2024

| Monitoring Station | SO <sub>2</sub> | NO <sub>x</sub> | NO | NO <sub>2</sub> | CO | O <sub>3</sub> | PM <sub>2.5</sub> | PM <sub>10</sub>    |                       | MET <sup>[3]</sup> |
|--------------------|-----------------|-----------------|----|-----------------|----|----------------|-------------------|---------------------|-----------------------|--------------------|
|                    |                 |                 |    |                 |    |                |                   | Cont <sup>[1]</sup> | Hi-Vol <sup>[2]</sup> |                    |
| General Station    | Central/Western | ✓               | ✓  | ✓               | ✓  | ✓              | ✓                 | ✓                   | ✓                     | ✓                  |
|                    | Southern        | ✓               | ✓  | ✓               | ✓  | ✓              | ✓                 | ✓                   | ✓                     | ✓                  |
|                    | Eastern         | ✓               |    |                 | ✓  |                | ✓                 | ✓                   |                       | ✓                  |
|                    | Kwun Tong       | ✓               | ✓  | ✓               | ✓  |                | ✓                 | ✓                   | ✓                     | ✓                  |
|                    | Sham Shui Po    | ✓               | ✓  | ✓               | ✓  |                | ✓                 | ✓                   | ✓                     | ✓                  |
|                    | Kwai Chung      | ✓               | ✓  | ✓               | ✓  |                | ✓                 | ✓                   | ✓                     | ✓                  |
|                    | Tsuen Wan       | ✓               | ✓  | ✓               | ✓  | ✓              | ✓                 | ✓                   | ✓                     | ✓                  |
|                    | Tseung Kwan O   | ✓               | ✓  | ✓               | ✓  | ✓              | ✓                 | ✓                   | ✓                     | ✓                  |
|                    | Yuen Long       | ✓               | ✓  | ✓               | ✓  | ✓              | ✓                 | ✓                   | ✓                     | ✓                  |
|                    | Tuen Mun        | ✓               | ✓  | ✓               | ✓  | ✓              | ✓                 | ✓                   | ✓                     | ✓                  |
|                    | Tung Chung      | ✓               | ✓  | ✓               | ✓  | ✓              | ✓                 | ✓                   | ✓                     | ✓                  |
|                    | Tai Po          | ✓               | ✓  | ✓               | ✓  |                | ✓                 | ✓                   |                       | ✓                  |
|                    | Sha Tin         | ✓               | ✓  | ✓               | ✓  |                | ✓                 | ✓                   |                       | ✓                  |
|                    | North           | ✓               | ✓  | ✓               | ✓  | ✓              | ✓                 | ✓                   | ✓                     | ✓                  |
|                    | Tap Mun         | ✓               | ✓  | ✓               | ✓  | ✓              | ✓                 | ✓                   | ✓                     | ✓                  |
| Roadside Station   | Causeway Bay    | ✓               | ✓  | ✓               | ✓  | ✓              | ✓                 | ✓                   |                       |                    |
|                    | Central         | ✓               | ✓  | ✓               | ✓  | ✓              | ✓                 | ✓                   |                       | ✓                  |
|                    | Mong Kok        | ✓               | ✓  | ✓               | ✓  | ✓              | ✓                 | ✓                   | ✓                     | ✓                  |

Notes:

- [1] "Cont" denotes continuous monitoring.  
 [2] "Hi-Vol" denotes high-volume sampling.  
 [3] "MET" denotes meteorological parameters such as temperature, wind speed, wind direction, etc.

Table A3: List of Equipment Used in Measuring Air Pollutant Concentration

| Pollutants   | Measurement Principle  | Commercial Instrument   |
|--|--|---|
| SO <sub>2</sub>                                    | UV fluorescence  | API T100,<br>API T100U,   |
| NO, NO <sub>2</sub> , NO <sub>x</sub>              | Chemiluminescence  | API 200A, API T200  |
| O <sub>3</sub>                                     | UV absorption  | API 400A,<br>API T400   |
| SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> | Differential Optical Absorption Spectroscopy                         | Opsis AR 500 System   |
| CO   | Non-dispersive infra-red absorption with gas filter correlation      | API T300, API T300U   |
| PM <sub>10</sub>                                   | a) Gravimetric<br>b) Oscillating microbalance<br>c) Beta Attenuation | Tisch PM10+,<br>Thermo Scientific TEOM 1405-DF<br>T-API 602 Beta Plus, Met One BAM 1020 |
| PM <sub>2.5</sub>                                  | a) Oscillating microbalance<br>b) Beta Attenuation                   | Thermo Scientific TEOM 1405-DF,<br>T-API 602 Beta Plus, Met One BAM1020,                |

Wet and dry deposition samples are collected at 3 AQMSs, namely Central/Western, Kwun Tong and Yuen Long. The parameters measured for all wet and dry samples include conductivity, pH, Na<sup>+</sup>, K<sup>+</sup>, NH<sub>4</sub><sup>+</sup>, NO<sub>3</sub><sup>-</sup>, SO<sub>4</sub><sup>2-</sup>, Cl<sup>-</sup>, F<sup>-</sup>, Ca<sup>2+</sup>, Mg<sup>2+</sup>, formate and acetate in the filtrate.

## A2. Data Processing and Dissemination

At each AQMS, signals from the continuous analysers and the meteorological instruments are first stored in a data logger and then sent back to the Data Processing Unit of the Air Science and Modelling Group via dedicated broadband data lines for further processing. The Data Processing Unit adopts a quality policy to ensure that air quality monitoring data are processed in a timely manner and meet the quality requirements as spelt out in the QA/QC Manual. Following checking and validation<sup>A2</sup>, the monitoring data are disseminated to the public in the following manner:

### Real-time Air Quality Monitoring Data

- Hourly Air Quality Health Index (AQHI)
- Hourly concentrations of SO<sub>2</sub>, NO<sub>2</sub>, CO, O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>

### Past Air Quality Monitoring Data

- Past 24-hour AQHI and concentrations of SO<sub>2</sub>, NO<sub>2</sub>, CO, O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>
- Monthly release of the AQHI summary
- Monthly updating of air quality monitoring data in the Environmental Protection Interactive Centre (EPIC) for public access following validation (<https://www.epd.gov.hk/epd/epic/english/epichome.html>)
- Reporting of monitoring data in the annual reports “Air Quality in Hong Kong” and “Environment Hong Kong”
- Ad hoc provision of air quality data to the public, academics and environmental consultants upon request for the purposes of research and air quality assessment



The reporting and forecast of AQHI will help the public, particularly susceptible groups, to decide on taking precautionary measures when necessary. The monitoring results are also regularly used to assist the formulation of air quality management plans and the evaluation of the effectiveness of the current air pollution control programmes.

**Figure A3:** The Data Processing Unit facilitates public access to timely air quality information via various platform, including the AQHI website and app.

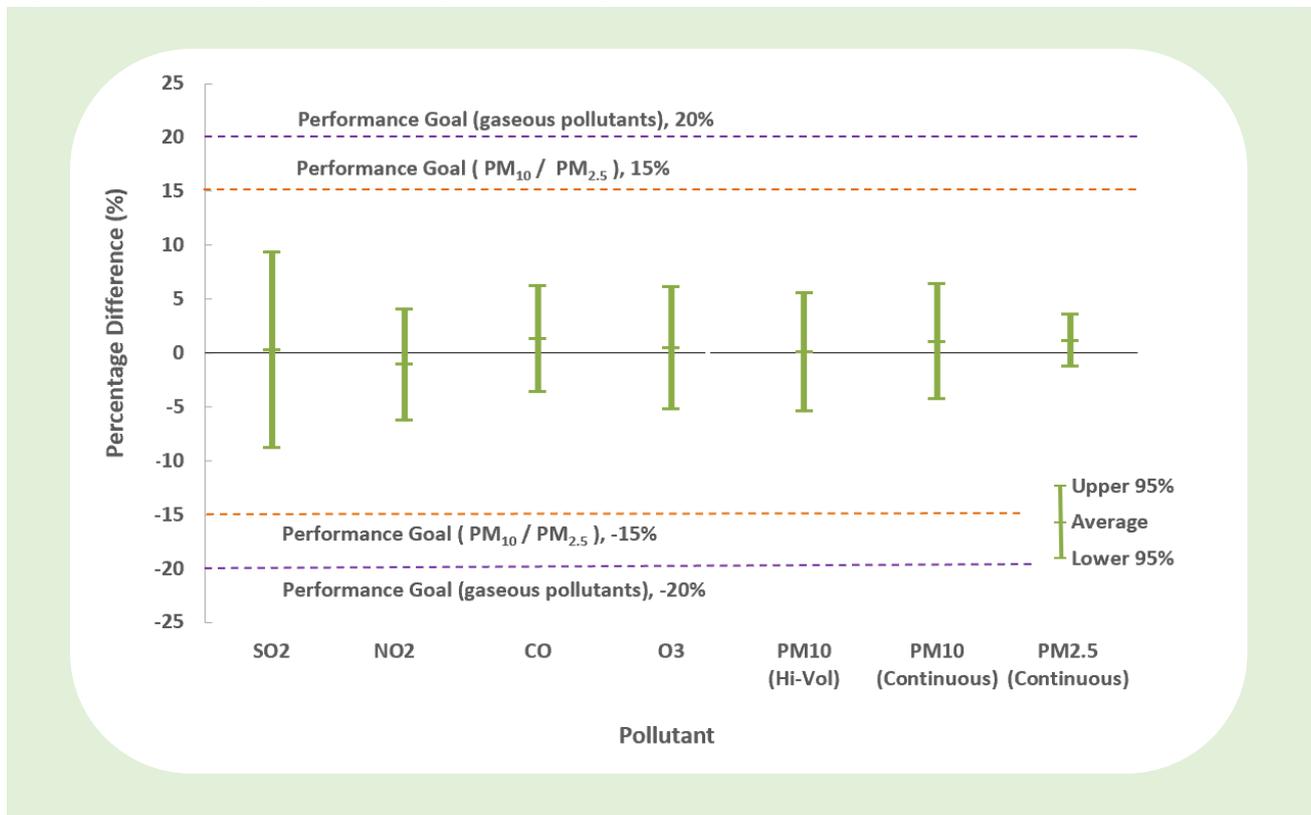
<sup>A2</sup> Real-time and past 24-hour air quality data are reported following preliminary limited validation

### A3. Quality Control and Assurance

To ensure that the air quality data recorded at the air quality monitoring stations are accurate and reliable, the Air Quality Monitoring Network has obtained accreditation under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for measurements of major air pollutants since 1995. A quality management system has been established in accordance with the requirements of HOKLAS and ISO/IEC 17025. A high degree of data accuracy, precision and completeness is attained primarily by (1) the carrying out of a set of quality control and quality assurance (QA/QC) activities detailed in the QA/QC manuals; (2) regular meeting of the monitoring network management; and (3) regular audit and review.

The accuracy of the monitoring network is assessed by Performance Audits. Accuracy is the measurement of deviation from the true value. Performance goal of  $\pm 15\%$  and  $\pm 20\%$  are adopted for suspended particulates ( $PM_{10}$  and  $PM_{2.5}$ ) and gaseous pollutants respectively. In 2024, 457 audit checks were carried out on the stations' analysers and samplers. Based on the 95% probability limits, the accuracy varied from  $-8.8\%$  to  $9.3\%$  for gaseous pollutants, and from  $-5.4\%$  to  $6.4\%$  for particulates<sup>A3</sup>. All parameters were well within the corresponding performance goal as shown in Figure A4.

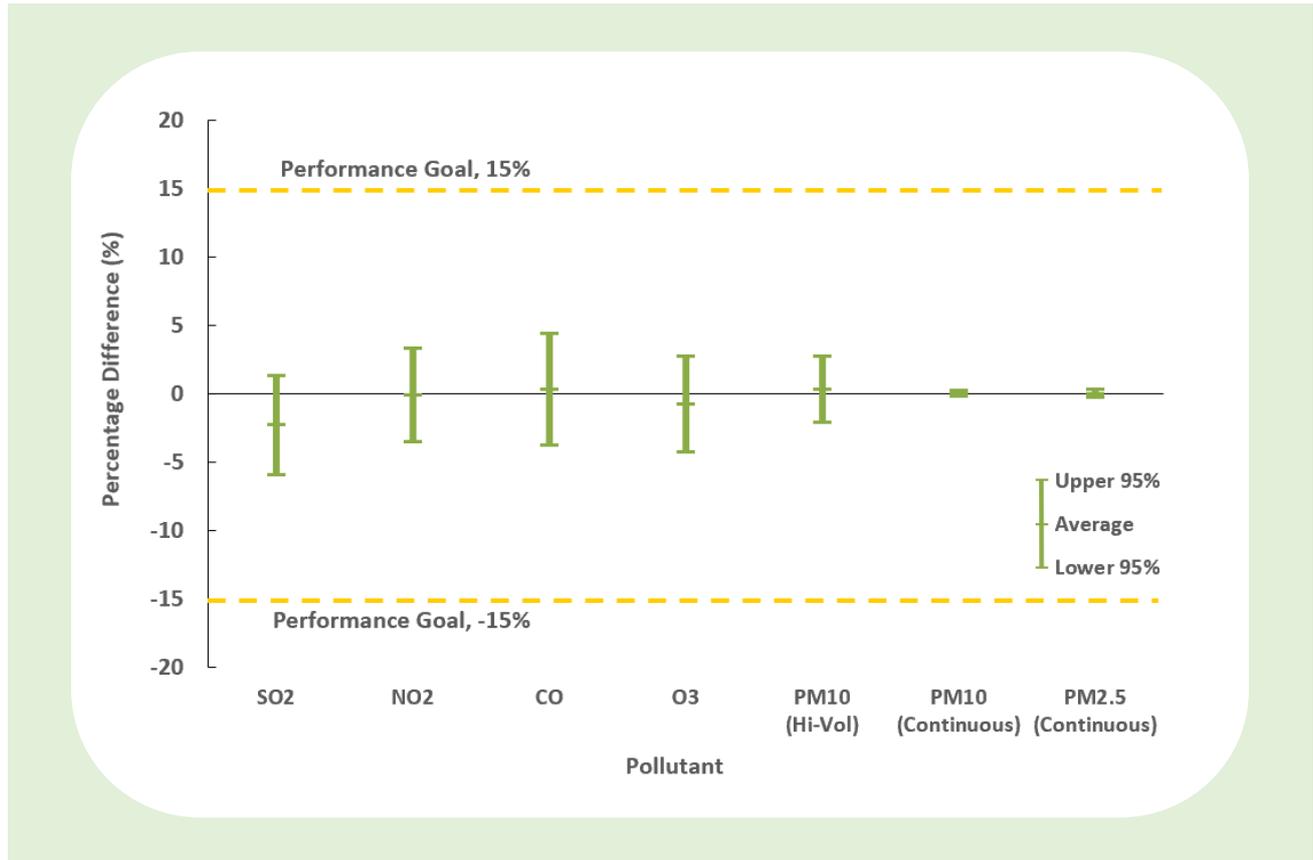
Figure A4: Accuracy of Air Quality Monitoring Network in 2024



<sup>A3</sup> Derived from the accuracy of indicated flowrate of particulates instruments only

The precision of the monitoring network is assessed from the results of precision checks. Precision is the measurement of repeatability or how close repeated measurements are to each other. In 2024, 3525 precision checks were carried out on the analysers and samplers. As shown in **Figure A5** and based on the 95% probability limits, the precision of the network varied between -5.9% and 4.4%, which was again within the performance goal of  $\pm 15\%$  as shown in **Figure A5**.

**Figure A5: Precision of Air Quality Monitoring Network in 2024**



## A4. Toxic Air Pollutants Monitoring Operation

Specialized monitoring equipment have been installed at Tsuen Wan and Central/Western stations to measure the levels of Toxic Air Pollutants (TAPs) in Hong Kong regularly since July 1997. The TAPs being monitored can be broadly classified as volatile organic compounds, dioxins, carbonyl compounds, polycyclic aromatic hydrocarbons (PAHs) and hexavalent chromium. Methods used to analyse the collected samples for the target TAPs are summarised in [Table A4](#). All these methods have stringent QA/QC criteria to ensure data quality. TAP samples are analysed by the HKSAR Government Laboratory.

Among the various TAPs monitored, eight of them are considered more important in terms of their health impacts and their annual averages in 2024 are summarised in [Table C6](#) in [Appendix C](#).

**Table A4: Sampling and Analysis Methods Used in Measuring TAPs**

| Category            | Target Pollutants                         | Sampling and Analysis Method | Sampling Instrument                | Sampling Media   | Sampling Schedule | Sampling Period |
|---------------------|---|------------------------------|------------------------------------|--|-------------------|-----------------|
| VOCs                | Benzene                                   | USEPA Method TO-14A          | Xontech 910A / RM 910A / ATEC 2200 | Canister   | Twice per month   | 24 hours        |
|                     | Perchloroethylene                         |                              |                                    |  |                   |                 |
|                     | 1,3-Butadiene                             |                              |                                    |  |                   |                 |
| Carbonyls           | Formaldehyde                              | USEPA Method TO-11A          | ATEC 2200                          | DNPH coated Sep-Pak cartridge                              | Once per month    | 24 hours        |
| PAHs                | Benzo(a)pyrene                            | USEPA Method TO-13           | Tisch TE-1000                      | Quartz fibre filter and polyurethane foam with XAD-2 resin | Once per month    | 24 hours        |
| Dioxins             | Polychlorinated dibenzo-p-dioxins (PCDDs) | USEPA Method TO-9A           | Tisch TE-1000                      | Quartz fibre filter and polyurethane foam                  | Once per month    | 24 hours        |
|                     | Polychlorinated dibenzofurans (PCDFs)     |                              |                                    |  |                   |                 |
| Hexavalent chromium | Hexavalent chromium                       | CARB SOP MLD 039             | Xonteck 924                        | Bicarbonate impregnated filter                             | Once per month    | 24 hours        |

# Appendix B

## Air Quality Objectives and their Compliance Status

Hong Kong Air Quality Objectives (AQOs) for seven major air pollutants were set at levels to protect public health in 1987 and were reviewed at least once every five years to continuously improve air quality and safeguard public health. A tightened set of AQOs has taken effect from 1 January 2022, which is given in **Table B1**. The compliance status of the new AQOs has been used as the indicator of air quality in different districts in Hong Kong.

**Table B1: Hong Kong's AQOs**

| Pollutant  | Averaging time | Concentration limit <sup>[i]</sup><br>( $\mu\text{g}/\text{m}^3$ ) | Number of exceedances of<br>limit allowed |
|--|----------------|--|---|
| Sulphur dioxide (SO <sub>2</sub> )                       | 10-minute      | 500  | 3   |
|  | 24-hour        | 50   | 3   |
| Respirable suspended<br>particulates (PM <sub>10</sub> ) | 24-hour        | 100  | 9   |
|  | Annual         | 50   | Not applicable                            |
| Fine suspended<br>particulates (PM <sub>2.5</sub> )      | 24-hour        | 50   | 35  |
|  | Annual         | 25   | Not applicable                            |
| Nitrogen dioxide (NO <sub>2</sub> )                      | 1-hour         | 200  | 18  |
|  | Annual         | 40   | Not applicable                            |
| Ozone (O <sub>3</sub> )                                  | 8-hour         | 160  | 9   |
| Carbon monoxide (CO)                                     | 1-hour         | 30,000   | 0   |
|  | 8-hour         | 10,000   | 0   |
| Lead (Pb)  | Annual         | 0.5  | Not applicable                            |

Notes:

- [i] All measurements of the concentration of gaseous air pollutants, i.e., SO<sub>2</sub>, NO<sub>2</sub>, O<sub>3</sub> and CO, are to be adjusted to a reference temperature of 293 Kelvin and a reference pressure of 101.325 kilopascal.

## Compliance with the Short-term AQOs

**Table B2** shows the compliance status with the short-term AQOs (i.e., 10-min, 1-hour, 8-hour and 24-hour AQOs) recorded at each monitoring station in 2024. All 18 air quality monitoring stations (AQMSs) achieved full compliance with the short-term AQOs of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and CO. 7 general stations and all 3 roadside stations adhered to the 8-hour AQO for O<sub>3</sub>. However, 8 general stations – Tseung Kwan O, Yuen Long, Tuen Mun, Tung Chung, Tai Po, Sha Tin, North and Tap Mun - exceeded the 8-hour AQO for O<sub>3</sub>. All AQMSs, except for the Causeway Bay roadside station, met the 1-hour AQO for NO<sub>2</sub>.

Table B2: Summary of Compliance with the Short-Term AQOs in 2024

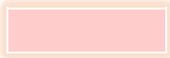
| Monitoring Station |                 | O <sub>3</sub> | NO <sub>2</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> | SO <sub>2</sub> |       | CO   |      |
|--------------------|-----------------|----------------|-----------------|------------------|-------------------|-----------------|-------|------|------|
|                    |                 | 8-hr           | 1-hr            | 24-hr            | 24-hr             | 10-min          | 24-hr | 1-hr | 8-hr |
| General Station    | Central/Western | ✓              | ✓               | ✓                | ✓                 | ✓               | ✓     |      |      |
|                    | Southern        | ✓              | ✓               | ✓                | ✓                 | ✓               | ✓     | ✓    | ✓    |
|                    | Eastern         | ✓              | ✓               | ✓                | ✓                 | ✓               | ✓     |      |      |
|                    | Kwun Tong       | ✓              | ✓               | ✓                | ✓                 | ✓               | ✓     |      |      |
|                    | Sham Shui Po    | ✓              | ✓               | ✓                | ✓                 | ✓               | ✓     |      |      |
|                    | Kwai Chung      | ✓              | ✓               | ✓                | ✓                 | ✓               | ✓     |      |      |
|                    | Tsuen Wan       | ✓              | ✓               | ✓                | ✓                 | ✓               | ✓     | ✓    | ✓    |
|                    | Tseung Kwan O   | ✗              | ✓               | ✓                | ✓                 | ✓               | ✓     | ✓    | ✓    |
|                    | Yuen Long       | ✗              | ✓               | ✓                | ✓                 | ✓               | ✓     | ✓    | ✓    |
|                    | Tuen Mun        | ✗              | ✓               | ✓                | ✓                 | ✓               | ✓     | ✓    | ✓    |
|                    | Tung Chung      | ✗              | ✓               | ✓                | ✓                 | ✓               | ✓     | ✓    | ✓    |
|                    | Tai Po          | ✗              | ✓               | ✓                | ✓                 | ✓               | ✓     |      |      |
|                    | Sha Tin         | ✗              | ✓               | ✓                | ✓                 | ✓               | ✓     |      |      |
|                    | North           | ✗              | ✓               | ✓                | ✓                 | ✓               | ✓     | ✓    | ✓    |
|                    | Tap Mun         | ✗              | ✓               | ✓                | ✓                 | ✓               | ✓     | ✓    | ✓    |
| Roadside Station   | Causeway Bay    | ✓              | ✗               | ✓                | ✓                 | ✓               | ✓     | ✓    | ✓    |
|                    | Central         | ✓              | ✓               | ✓                | ✓                 | ✓               | ✓     | ✓    | ✓    |
|                    | Mong Kok        | ✓              | ✓               | ✓                | ✓                 | ✓               | ✓     | ✓    | ✓    |

## Compliance with the Long-term AQOs

| Monitoring Station |                 | Annual          |                  |                   |    |
|--------------------|-----------------|-----------------|------------------|-------------------|----|
|                    |                 | NO <sub>2</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> | Pb |
| General Station    | Central/Western | ✓               | ✓                | ✓                 | ✓  |
|                    | Southern        | ✓               | ✓                | ✓                 |    |
|                    | Eastern         | ✓               | ✓                | ✓                 |    |
|                    | Kwun Tong       | ✗               | ✓                | ✓                 | ✓  |
|                    | Sham Shui Po    | ✗               | ✓                | ✓                 | ✓  |
|                    | Kwai Chung      | ✗               | ✓                | ✓                 | ✓  |
|                    | Tsuen Wan       | ✓               | ✓                | ✓                 | ✓  |
|                    | Tseung Kwan O   | ✓               | ✓                | ✓                 | ✓  |
|                    | Yuen Long       | ✓               | ✓                | ✓                 | ✓  |
|                    | Tuen Mun        | ✓               | ✓                | ✓                 | ✓  |
|                    | Tung Chung      | ✓               | ✓                | ✓                 | ✓  |
|                    | Tai Po          | ✓               | ✓                | ✓                 |    |
|                    | Sha Tin         | ✓               | ✓                | ✓                 |    |
|                    | North           | ✓               | ✓                | ✓                 |    |
|                    | Tap Mun         | ✓               | ✓                | ✓                 |    |
| Roadside Station   | Causeway Bay    | ✗               | ✓                | ✓                 |    |
|                    | Central         | ✗               | ✓                | ✓                 |    |
|                    | Mong Kok        | ✗               | ✓                | ✓                 | ✓  |

Table B3 shows the compliance status of the long-term (annual) AQOs for all monitoring stations in 2024. All 18 AQMSs met the annual AQOs for PM<sub>10</sub> and PM<sub>2.5</sub>. 12 general stations complied with the annual AQO for NO<sub>2</sub>, while 3 general stations - Kwun Tong, Sham Shui Po and Kwai Chung - along with 3 roadside stations did not meet the annual AQO for NO<sub>2</sub>. Furthermore, all 10 AQMSs measuring Pb levels adhered to the annual AQO for Pb.

Table B3: Summary of Compliance with the Long-Term AQOs in 2024

Notes:  Complied with the AQO,  Exceeded the AQO,  Not measured

# Appendix C

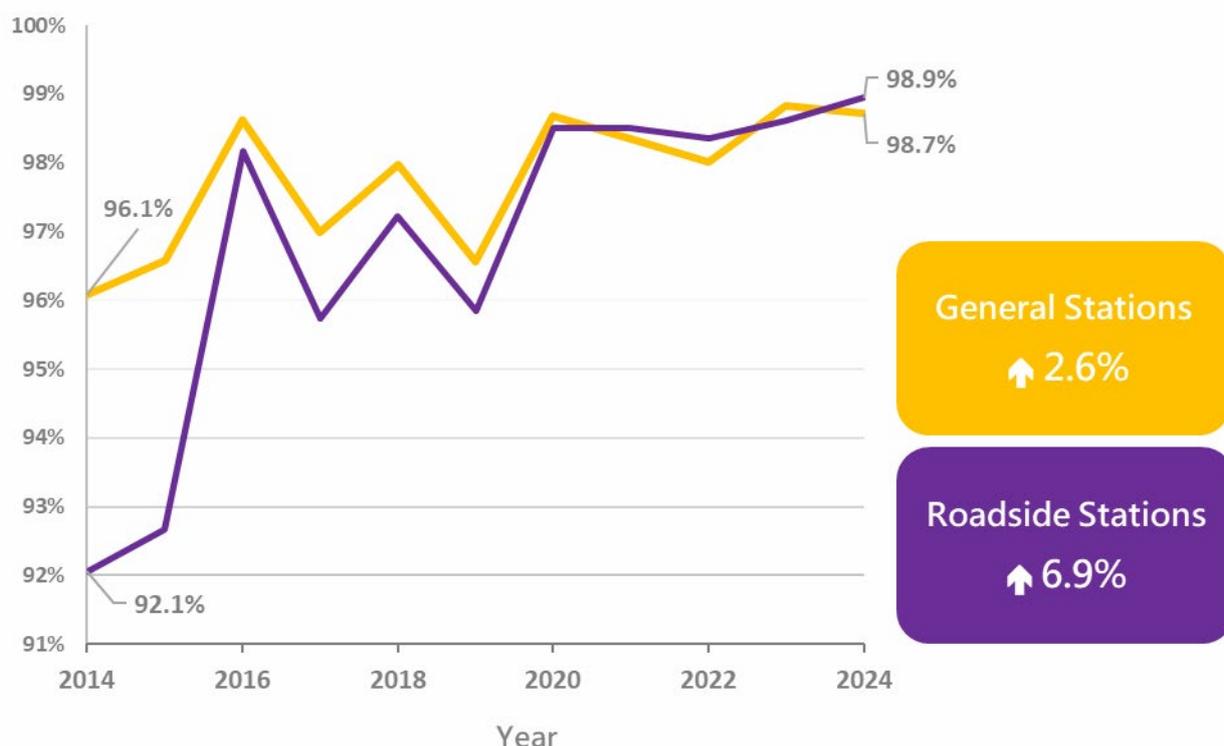
## Health Risks of Air Quality

The effects of air pollution on health hinge on several factors, including the concentrations of air pollutants and the duration of exposure to a polluted environment.

### Short-term Health Risks of Air Quality

The Environmental Protection Department (EPD) launched the **Air Quality Health Index (AQHI)** in 2014, **communicating daily the short-term health risks posed by air pollution** to facilitate the public taking precautionary measures for health protection. Back in 2014 when the AQHI was launched, the percentages of the hourly AQHI below 7 (i.e., low or moderate “health risk” category) at general stations and roadside stations were 96.1% and 92.1% respectively. As at 2024, the relevant figures were improved and raised to 98.7% at general stations and 98.9% at roadside stations respectively, representing lower short-term health risks posed by air pollution (see **Figure C1**).

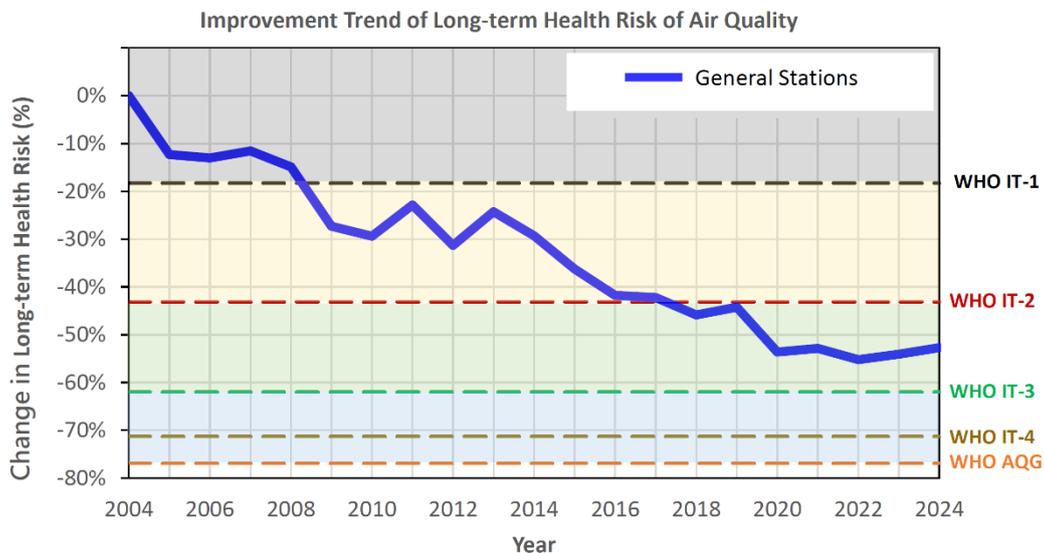
**Figure C1: Percentage of Hourly AQHI Readings Below 7**



## Long-term Health Risks of Air Quality

The EPD has adopted a health risk-based approach to assess the long-term air quality in Hong Kong, which better reflects the impact of air quality on the public. This approach makes reference to the methodology developed by a research team in Hong Kong. **The "long-term health risks of air quality" provides information about the risk of long-term exposure to air pollutants.** Data showed that the long-term health risks posed by air pollution have decreased by 50% over the corresponding period from 2004 to 2024 (see **Figure C2**).

**Figure C2: Improvement Trend of Long-term Health Risks of Air Quality**



**Remark:** The lines of WHO IT-1, IT-2, IT-3, IT-4 and AQG represent the health risks equivalent to the four interim targets and the ultimate targets of World Health Organization Global Air Quality Guidelines 2021 version.

# Appendix D

## Air Quality Statistical Summary for 2024

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#### Notes:

[1] In this Report, the concentrations of gaseous air pollutants are adjusted to a reference temperature of 293K and a reference pressure of 101.325 kPa. The concentrations of particulate matters are measured at real-time temperature and atmospheric pressure during monitoring.

[2]  Concentration exceeded the respective AQO limit value

[3]  Exceedance of the respective AQO

[4]  Allowable number of exceedances of AQO limit value

**Table D1: Compliance with the Short-term Air Quality Objectives in 2024****Sulphur Dioxide (SO<sub>2</sub>) 10-minute AQO**(limit value = 500 µg/m<sup>3</sup> ; allowable no. of exceedances of limit value = 3)

| Monitoring Station | No. of exceedances of AQO | Highest 10-minute Average Concentration (µg/m <sup>3</sup> ) |                 |                 |                 |
|--------------------|---------------------------|--|-----------------|-----------------|-----------------|
|                    |                           | 1 <sup>st</sup>  | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> |
| Central/Western    | 0                         | 27   | 24              | 22              | 22              |
| Southern           | 0                         | 31   | 29              | 28              | 27              |
| Eastern            | 0                         | 16   | 15              | 12              | 11              |
| Kwun Tong          | 0                         | 93   | 43              | 23              | 21              |
| Sham Shui Po       | 0                         | 34   | 33              | 31              | 28              |
| Kwai Chung         | 0                         | 42   | 35              | 34              | 33              |
| Tsuen Wan          | 0                         | 25   | 23              | 23              | 22              |
| Tseung Kwan O      | 0                         | 18   | 15              | 13              | 12              |
| Yuen Long          | 0                         | 16   | 15              | 15              | 14              |
| Tuen Mun           | 0                         | 21   | 19              | 18              | 18              |
| Tung Chung         | 0                         | 18   | 17              | 17              | 15              |
| Tai Po             | 0                         | 9  | 8               | 8               | 8               |
| Sha Tin            | 0                         | 26   | 23              | 22              | 21              |
| North              | 0                         | 36   | 19              | 19              | 18              |
| Tap Mun            | 0                         | 9  | 9               | 9               | 9               |
| Causeway Bay       | 0                         | 26   | 26              | 25              | 23              |
| Central            | 0                         | 20   | 18              | 18              | 17              |
| Mong Kok           | 0                         | 22   | 21              | 20              | 20              |

**Carbon Monoxide (CO) 1-hour AQO**(limit value = 30,000 µg/m<sup>3</sup> ; permit for no exceedance of the limit value)

| Monitoring Station | No. of exceedances of AQO | 1-hour Average Concentration (µg/m <sup>3</sup> ) |
|--------------------|---------------------------|---|
|                    |                           | The highest                                       |
| Southern           | 0                         | 1,060   |
| Tsuen Wan          | 0                         | 1,520   |
| Tseung Kwan O      | 0                         | 1,500   |
| Yuen Long          | 0                         | 1,920   |
| Tuen Mun           | 0                         | 1,470   |
| Tung Chung         | 0                         | 1,670   |
| North              | 0                         | 1,710   |
| Tap Mun            | 0                         | 1,020   |
| Causeway Bay       | 0                         | 1,950   |
| Central            | 0                         | 1,880   |
| Mong Kok           | 0                         | 1,880   |

**Sulphur Dioxide (SO<sub>2</sub>) 24-hour AQO**(limit value = 50 µg/m<sup>3</sup> ; allowable no. of exceedances of limit value = 3)

| Monitoring Station | No. of exceedances of AQO | Highest 24-hour Average Concentration (µg/m <sup>3</sup> ) |                 |                 |                 |
|--------------------|---------------------------|--|-----------------|-----------------|-----------------|
|                    |                           | 1 <sup>st</sup>  | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> |
| Central/Western    | 0                         | 8  | 7               | 7               | 7               |
| Southern           | 0                         | 10   | 9               | 9               | 9               |
| Eastern            | 0                         | 4  | 4               | 4               | 4               |
| Kwun Tong          | 0                         | 7  | 7               | 7               | 7               |
| Sham Shui Po       | 0                         | 10   | 10              | 10              | 10              |
| Kwai Chung         | 0                         | 15   | 12              | 12              | 12              |
| Tsuen Wan          | 0                         | 9  | 9               | 9               | 8               |
| Tseung Kwan O      | 0                         | 8  | 8               | 8               | 8               |
| Yuen Long          | 0                         | 8  | 8               | 7               | 5               |
| Tuen Mun           | 0                         | 9  | 9               | 9               | 9               |
| Tung Chung         | 0                         | 10   | 9               | 9               | 9               |
| Tai Po             | 0                         | 7  | 6               | 6               | 6               |
| Sha Tin            | 0                         | 7  | 6               | 6               | 6               |
| North              | 0                         | 7  | 7               | 7               | 7               |
| Tap Mun            | 0                         | 6  | 6               | 6               | 6               |
| Causeway Bay       | 0                         | 11   | 10              | 10              | 9               |
| Central            | 0                         | 8  | 7               | 7               | 7               |
| Mong Kok           | 0                         | 8  | 7               | 7               | 7               |

**Carbon Monoxide (CO) 8-hour AQO**(limit value = 10,000 µg/m<sup>3</sup> ; permit for no exceedance of the limit value)

| Monitoring Station | No. of exceedances of AQO | Daily 8-hour Average Concentration (µg/m <sup>3</sup> ) |
|--------------------|---------------------------|---|
|                    |                           | The highest   |
| Southern           | 0                         | 971   |
| Tsuen Wan          | 0                         | 1,061   |
| Tseung Kwan O      | 0                         | 1,209   |
| Yuen Long          | 0                         | 1,778   |
| Tuen Mun           | 0                         | 1,424   |
| Tung Chung         | 0                         | 1,256   |
| North              | 0                         | 1,311   |
| Tap Mun            | 0                         | 908   |
| Causeway Bay       | 0                         | 1,776   |
| Central            | 0                         | 1,351   |
| Mong Kok           | 0                         | 1,505   |

## Table D1 (Cont.): Compliance with the Short-term Air Quality Objectives in 2024

### Ozone (O<sub>3</sub>) 8-hour AQO

(limit value = 160 µg/m<sup>3</sup> ; allowable no. of exceedances of limit value = 9)

| Monitoring Station | No. of exceedances of AQO | Highest Daily 8-hour Average Concentration (µg/m <sup>3</sup> ) |                 |                 |                 |                 |                 |                 |                 |                 |                  |
|--------------------|---------------------------|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
|                    |                           | 1 <sup>st</sup>   | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> | 5 <sup>th</sup> | 6 <sup>th</sup> | 7 <sup>th</sup> | 8 <sup>th</sup> | 9 <sup>th</sup> | 10 <sup>th</sup> |
| Central/Western    | 8                         | 227   | 215             | 203             | 182             | 170             | 165             | 164             | 163             | 159             | 157              |
| Southern           | 9                         | 212   | 197             | 192             | 184             | 170             | 168             | 163             | 162             | 161             | 160              |
| Eastern            | 7                         | 207   | 198             | 187             | 180             | 175             | 165             | 162             | 159             | 156             | 155              |
| Kwun Tong          | 4                         | 184   | 178             | 168             | 164             | 153             | 152             | 152             | 151             | 143             | 142              |
| Sham Shui Po       | 3                         | 201   | 185             | 162             | 158             | 158             | 150             | 146             | 145             | 137             | 136              |
| Kwai Chung         | 2                         | 174   | 171             | 157             | 152             | 144             | 143             | 142             | 134             | 132             | 129              |
| Tsuen Wan          | 5                         | 204   | 181             | 173             | 169             | 169             | 158             | 154             | 149             | 148             | 147              |
| Tseung Kwan O      | 16                        | 206   | 192             | 191             | 189             | 180             | 178             | 174             | 171             | 169             | 168              |
| Yuen Long          | 14                        | 240   | 198             | 198             | 187             | 181             | 178             | 178             | 174             | 169             | 168              |
| Tuen Mun           | 15                        | 250   | 209             | 191             | 189             | 185             | 180             | 180             | 180             | 176             | 173              |
| Tung Chung         | 19                        | 247   | 201             | 200             | 198             | 197             | 194             | 191             | 187             | 187             | 186              |
| Tai Po             | 13                        | 223   | 197             | 186             | 178             | 176             | 174             | 173             | 173             | 172             | 171              |
| Sha Tin            | 12                        | 216   | 210             | 193             | 189             | 188             | 185             | 178             | 176             | 171             | 167              |
| North              | 15                        | 233   | 187             | 186             | 185             | 183             | 177             | 177             | 173             | 169             | 169              |
| Tap Mun            | 34                        | 217   | 204             | 198             | 195             | 192             | 191             | 190             | 186             | 186             | 185              |
| Causeway Bay       | 0                         | 134   | 124             | 123             | 117             | 111             | 108             | 107             | 107             | 107             | 105              |
| Central            | 0                         | 145   | 140             | 135             | 126             | 126             | 120             | 120             | 119             | 119             | 116              |
| Mong Kok           | 0                         | 130   | 128             | 125             | 116             | 115             | 114             | 111             | 111             | 111             | 108              |

### Respirable Suspended Particulates (PM<sub>10</sub>) 24-hour AQO

(limit value = 100 µg/m<sup>3</sup> ; allowable no. of exceedances of limit value = 9)

| Monitoring Station | No. of exceedances of AQO | Highest 24-hour Average Concentration (µg/m <sup>3</sup> ) |                 |                 |                 |                 |                 |                 |                 |                 |                  |
|--------------------|---------------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
|                    |                           | 1 <sup>st</sup>  | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> | 5 <sup>th</sup> | 6 <sup>th</sup> | 7 <sup>th</sup> | 8 <sup>th</sup> | 9 <sup>th</sup> | 10 <sup>th</sup> |
| Central/Western    | 0                         | 74   | 71              | 68              | 67              | 66              | 66              | 64              | 63              | 62              | 62               |
| Southern           | 0                         | 66   | 62              | 57              | 57              | 55              | 55              | 54              | 54              | 53              | 52               |
| Eastern            | 0                         | 75   | 75              | 71              | 69              | 64              | 64              | 64              | 62              | 61              | 61               |
| Kwun Tong          | 0                         | 69   | 69              | 68              | 68              | 65              | 60              | 60              | 60              | 58              | 56               |
| Sham Shui Po       | 0                         | 71   | 69              | 67              | 63              | 63              | 63              | 60              | 59              | 59              | 58               |
| Kwai Chung         | 0                         | 66   | 64              | 64              | 62              | 61              | 61              | 59              | 58              | 57              | 56               |
| Tsuen Wan          | 0                         | 61   | 60              | 60              | 58              | 57              | 57              | 55              | 54              | 54              | 53               |
| Tseung Kwan O      | 0                         | 72   | 72              | 68              | 65              | 65              | 62              | 61              | 60              | 60              | 59               |
| Yuen Long          | 0                         | 81   | 77              | 73              | 71              | 70              | 63              | 63              | 62              | 62              | 61               |
| Tuen Mun           | 0                         | 100  | 96              | 87              | 85              | 83              | 80              | 78              | 78              | 76              | 76               |
| Tung Chung         | 0                         | 82   | 67              | 66              | 64              | 63              | 63              | 59              | 59              | 59              | 57               |
| Tai Po             | 0                         | 67   | 67              | 64              | 63              | 62              | 61              | 60              | 60              | 59              | 59               |
| Sha Tin            | 0                         | 64   | 64              | 59              | 59              | 57              | 57              | 55              | 55              | 54              | 53               |
| North              | 0                         | 76   | 74              | 70              | 68              | 67              | 62              | 59              | 58              | 58              | 56               |
| Tap Mun            | 0                         | 65   | 65              | 64              | 61              | 61              | 57              | 55              | 54              | 53              | 53               |
| Causeway Bay       | 0                         | 100  | 90              | 82              | 81              | 78              | 78              | 78              | 77              | 76              | 76               |
| Central            | 0                         | 74   | 74              | 73              | 72              | 70              | 69              | 69              | 68              | 68              | 68               |
| Mong Kok           | 0                         | 80   | 73              | 69              | 68              | 66              | 66              | 65              | 64              | 61              | 60               |

Table D1 (Cont.): Compliance with the Short-term Air Quality Objectives in 2024

Nitrogen Dioxide (NO<sub>2</sub>) 1-hour AQO(limit value = 200 µg/m<sup>3</sup> ; allowable no. of exceedances of limit value = 18)

| Monitoring Station | No. of exceedances of AQO | Highest 1-hour Average Concentration (µg/m <sup>3</sup> ) |                 |                 |                 |                 |                 |                 |                 |                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|--------------------|---------------------------|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                    |                           | 1 <sup>st</sup>   | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> | 5 <sup>th</sup> | 6 <sup>th</sup> | 7 <sup>th</sup> | 8 <sup>th</sup> | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> | 13 <sup>th</sup> | 14 <sup>th</sup> | 15 <sup>th</sup> | 16 <sup>th</sup> | 17 <sup>th</sup> | 18 <sup>th</sup> | 19 <sup>th</sup> |
| Central/Western    | 0                         | 168   | 164             | 163             | 162             | 158             | 150             | 150             | 143             | 142             | 139              | 138              | 138              | 135              | 134              | 133              | 133              | 132              | 132              | 130              |
| Southern           | 0                         | 124   | 122             | 121             | 115             | 112             | 111             | 110             | 108             | 107             | 105              | 104              | 103              | 103              | 102              | 102              | 102              | 101              | 101              | 101              |
| Eastern            | 0                         | 131   | 120             | 117             | 117             | 108             | 106             | 105             | 104             | 102             | 99               | 99               | 97               | 95               | 95               | 94               | 93               | 93               | 93               | 93               |
| Kwun Tong          | 4                         | 214   | 208             | 207             | 201             | 199             | 190             | 181             | 176             | 172             | 167              | 162              | 162              | 154              | 150              | 150              | 148              | 147              | 145              | 144              |
| Sham Shui Po       | 1                         | 212   | 195             | 193             | 188             | 181             | 177             | 174             | 167             | 166             | 164              | 164              | 163              | 161              | 160              | 159              | 158              | 157              | 156              | 155              |
| Kwai Chung         | 6                         | 232   | 228             | 223             | 212             | 212             | 210             | 199             | 192             | 191             | 188              | 187              | 184              | 182              | 179              | 174              | 174              | 173              | 172              | 171              |
| Tsuen Wan          | 0                         | 197   | 191             | 168             | 165             | 155             | 148             | 146             | 144             | 143             | 139              | 132              | 132              | 131              | 131              | 131              | 130              | 129              | 129              | 129              |
| Tseung Kwan O      | 0                         | 168   | 162             | 158             | 149             | 142             | 141             | 138             | 137             | 119             | 116              | 115              | 110              | 108              | 108              | 107              | 107              | 107              | 106              | 105              |
| Yuen Long          | 0                         | 191   | 187             | 179             | 165             | 147             | 143             | 135             | 134             | 133             | 130              | 130              | 130              | 129              | 129              | 128              | 127              | 125              | 125              | 125              |
| Tuen Mun           | 0                         | 193   | 188             | 186             | 185             | 184             | 175             | 173             | 165             | 164             | 162              | 155              | 154              | 154              | 154              | 149              | 149              | 145              | 145              | 144              |
| Tung Chung         | 0                         | 146   | 145             | 139             | 137             | 133             | 131             | 125             | 124             | 122             | 122              | 121              | 118              | 118              | 117              | 117              | 116              | 114              | 114              | 114              |
| Tai Po             | 0                         | 138   | 136             | 132             | 128             | 120             | 117             | 116             | 116             | 115             | 115              | 114              | 114              | 112              | 110              | 109              | 109              | 109              | 108              | 107              |
| Sha Tin            | 0                         | 180   | 179             | 171             | 164             | 161             | 150             | 147             | 145             | 141             | 140              | 138              | 137              | 129              | 127              | 126              | 125              | 123              | 122              | 122              |
| North              | 0                         | 156   | 145             | 145             | 145             | 137             | 137             | 132             | 132             | 130             | 130              | 126              | 122              | 121              | 120              | 120              | 119              | 118              | 117              | 114              |
| Tap Mun            | 0                         | 62  | 48              | 45              | 43              | 42              | 42              | 41              | 41              | 40              | 40               | 40               | 39               | 39               | 39               | 39               | 39               | 39               | 39               | 38               |
| Causeway Bay       | 30                        | 257   | 253             | 247             | 243             | 241             | 238             | 235             | 229             | 225             | 223              | 223              | 221              | 217              | 213              | 212              | 212              | 210              | 210              | 209              |
| Central            | 15                        | 245   | 237             | 232             | 227             | 225             | 225             | 224             | 213             | 211             | 208              | 205              | 204              | 202              | 202              | 202              | 200              | 200              | 195              | 193              |
| Mong Kok           | 13                        | 228   | 225             | 221             | 220             | 219             | 212             | 209             | 208             | 205             | 205              | 204              | 202              | 201              | 199              | 193              | 191              | 189              | 188              | 187              |

Fine Suspended Particulates (PM<sub>2.5</sub>) 24-hour AQO(limit value = 50 µg/m<sup>3</sup> ; allowable no. of exceedances of limit value = 35)

| Monitoring Station | No. of exceedances of AQO | Highest 24-hour Average Concentration (µg/m <sup>3</sup> ) |                 |                 |                 |                 |                 |                 |                 |                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |    |    |
|--------------------|---------------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----|----|
|                    |                           | 1 <sup>st</sup>  | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> | 5 <sup>th</sup> | 6 <sup>th</sup> | 7 <sup>th</sup> | 8 <sup>th</sup> | 9 <sup>th</sup> | 10 <sup>th</sup> | 11 <sup>th</sup> | 12 <sup>th</sup> | 13 <sup>th</sup> | 14 <sup>th</sup> | 15 <sup>th</sup> | 16 <sup>th</sup> | 17 <sup>th</sup> | 18 <sup>th</sup> | 19 <sup>th</sup> | 20 <sup>th</sup> | 21 <sup>st</sup> | 22 <sup>nd</sup> | 23 <sup>rd</sup> | 24 <sup>th</sup> | 25 <sup>th</sup> | 26 <sup>th</sup> | 27 <sup>th</sup> | 28 <sup>th</sup> | 29 <sup>th</sup> | 30 <sup>th</sup> | 31 <sup>st</sup> | 32 <sup>nd</sup> | 33 <sup>rd</sup> | 34 <sup>th</sup> | 35 <sup>th</sup> | 36 <sup>th</sup> |    |    |
| Central/Western    | 1                         | 51   | 47              | 44              | 42              | 42              | 41              | 41              | 40              | 39              | 38               | 37               | 37               | 37               | 36               | 36               | 36               | 35               | 35               | 35               | 33               | 32               | 32               | 31               | 31               | 31               | 31               | 30               | 30               | 30               | 29               | 29               | 29               | 29               | 29               | 28               | 28               | 28 |    |
| Southern           | 0                         | 40   | 39              | 37              | 37              | 36              | 34              | 33              | 33              | 32              | 31               | 31               | 31               | 31               | 30               | 29               | 28               | 28               | 28               | 27               | 27               | 26               | 26               | 26               | 26               | 26               | 26               | 25               | 25               | 25               | 25               | 25               | 25               | 24               | 24               | 24               | 24               | 23 |    |
| Eastern            | 0                         | 46   | 45              | 43              | 42              | 41              | 41              | 40              | 39              | 38              | 37               | 36               | 35               | 35               | 35               | 34               | 34               | 34               | 34               | 33               | 32               | 32               | 31               | 31               | 31               | 30               | 29               | 29               | 29               | 29               | 29               | 28               | 28               | 28               | 28               | 28               | 27               | 27 |    |
| Kwun Tong          | 0                         | 46   | 46              | 44              | 42              | 42              | 42              | 40              | 38              | 36              | 36               | 35               | 35               | 34               | 33               | 33               | 33               | 33               | 32               | 31               | 31               | 30               | 29               | 29               | 29               | 29               | 29               | 27               | 26               | 26               | 26               | 26               | 26               | 26               | 25               | 24               | 24               | 24 |    |
| Sham Shui Po       | 0                         | 47   | 45              | 42              | 41              | 41              | 40              | 38              | 38              | 38              | 37               | 35               | 35               | 35               | 34               | 34               | 34               | 34               | 34               | 34               | 33               | 30               | 30               | 30               | 29               | 29               | 29               | 29               | 28               | 28               | 28               | 28               | 28               | 28               | 27               | 27               | 27               | 27 |    |
| Kwai Chung         | 0                         | 49   | 45              | 45              | 42              | 42              | 42              | 41              | 40              | 40              | 39               | 39               | 39               | 35               | 34               | 34               | 34               | 33               | 32               | 31               | 31               | 31               | 30               | 30               | 30               | 30               | 30               | 29               | 29               | 29               | 29               | 28               | 28               | 27               | 27               | 27               | 27               |    |    |
| Tsuen Wan          | 0                         | 48   | 43              | 42              | 41              | 41              | 40              | 40              | 39              | 39              | 37               | 36               | 36               | 35               | 35               | 35               | 34               | 34               | 34               | 33               | 33               | 32               | 32               | 31               | 31               | 31               | 30               | 30               | 30               | 29               | 28               | 28               | 28               | 28               | 28               | 28               | 28               |    |    |
| Tseung Kwan O      | 0                         | 44   | 41              | 41              | 40              | 36              | 36              | 36              | 35              | 35              | 34               | 33               | 33               | 32               | 31               | 31               | 31               | 31               | 31               | 30               | 30               | 30               | 29               | 29               | 29               | 29               | 29               | 28               | 28               | 27               | 27               | 27               | 27               | 27               | 26               | 26               | 26               |    |    |
| Yuen Long          | 2                         | 56   | 55              | 49              | 49              | 47              | 47              | 45              | 44              | 44              | 42               | 41               | 41               | 41               | 41               | 39               | 39               | 39               | 38               | 38               | 37               | 36               | 36               | 35               | 35               | 34               | 33               | 32               | 32               | 32               | 32               | 32               | 32               | 31               | 30               | 31               | 30               |    |    |
| Tuen Mun           | 7                         | 60   | 59              | 58              | 54              | 52              | 51              | 51              | 50              | 49              | 49               | 49               | 47               | 47               | 47               | 46               | 46               | 45               | 45               | 43               | 42               | 42               | 41               | 41               | 40               | 39               | 39               | 37               | 37               | 37               | 37               | 37               | 37               | 36               | 36               | 36               | 35               | 35 |    |
| Tung Chung         | 1                         | 67   | 48              | 48              | 48              | 47              | 46              | 46              | 46              | 44              | 44               | 43               | 42               | 42               | 41               | 39               | 39               | 39               | 39               | 39               | 39               | 37               | 36               | 36               | 36               | 35               | 35               | 34               | 34               | 34               | 34               | 34               | 33               | 33               | 32               | 32               | 31               | 31 |    |
| Tai Po             | 0                         | 50   | 45              | 44              | 44              | 44              | 44              | 43              | 42              | 41              | 40               | 40               | 39               | 38               | 38               | 36               | 35               | 34               | 34               | 33               | 33               | 32               | 32               | 32               | 31               | 30               | 30               | 30               | 30               | 29               | 29               | 29               | 29               | 29               | 28               | 28               | 28               | 27 |    |
| Sha Tin            | 0                         | 47   | 41              | 39              | 39              | 38              | 38              | 38              | 37              | 37              | 37               | 36               | 36               | 36               | 33               | 32               | 32               | 32               | 31               | 31               | 30               | 29               | 29               | 29               | 29               | 28               | 28               | 28               | 27               | 27               | 27               | 27               | 26               | 26               | 26               | 26               | 25               | 25 |    |
| North              | 3                         | 62   | 55              | 52              | 46              | 44              | 41              | 39              | 38              | 38              | 37               | 36               | 34               | 33               | 33               | 31               | 30               | 30               | 29               | 29               | 28               | 28               | 28               | 28               | 27               | 27               | 27               | 27               | 27               | 27               | 26               | 26               | 26               | 26               | 26               | 26               | 26               | 25 | 25 |
| Tap Mun            | 0                         | 48   | 45              | 40              | 39              | 38              | 38              | 38              | 37              | 37              | 36               | 35               | 35               | 34               | 34               | 32               | 31               | 31               | 31               | 30               | 29               | 29               | 29               | 28               | 28               | 27               | 27               | 27               | 27               | 26               | 24               | 24               | 24               | 24               | 24               | 23               | 23               | 23 |    |
| Causeway Bay       | 6                         | 67   | 55              | 54              | 53              | 52              | 52              | 50              | 50              | 49              | 48               | 47               | 47               | 47               | 47               | 45               | 45               | 44               | 43               | 43               | 43               | 42               | 42               | 41               | 40               | 39               | 39               | 39               | 39               | 38               | 38               | 38               | 38               | 38               | 38               | 37               | 37               | 37 |    |
| Central            | 2                         | 52   | 51              | 50              | 49              | 49              | 47              | 46              | 46              | 46              | 41               | 40               | 40               | 40               | 39               | 39               | 39               | 38               | 38               | 37               | 37               | 37               | 37               | 37               | 36               | 35               | 35               | 35               | 34               | 34               | 34               | 34               | 33               | 33               | 33               | 32               | 32               | 32 |    |
| Mong Kok           | 0                         | 50   | 48              | 47              | 45              | 42              | 42              | 42              | 41              | 40              | 40               | 40               | 40               | 39               | 38               | 38               | 37               | 37               | 36               | 35               | 35               | 35               | 34               | 33               | 33               | 33               | 33               | 32               | 32               | 31               | 31               | 31               | 31               | 31               | 31               | 31               | 31               | 31 |    |

Table D2: Monthly and Annual Average Concentrations of Air Pollutants in 2024

Sulphur Dioxide (SO<sub>2</sub>) Monthly and Annual Average Concentrations (µg/m<sup>3</sup>)

| Monitoring Station | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Central/Western    | 2   | 2   | 3   | 3   | 3   | 2   | 2   | 3   | 4   | 4   | 4   | 5   | 3      |
| Southern           | 4   | 4   | 4   | 2   | 2   | 2   | 3   | 4   | 3   | 3   | 3   | 8   | 4      |
| Eastern            | 2   | 1   | 1   | 1   | 1   | 1   | 1   | 2   | 2   | 2   | 2   | 3   | 2      |
| Kwun Tong          | 4   | 4   | 4   | 4   | 1   | 1   | 2   | 2   | 2   | 2   | 2   | 3   | 3      |
| Sham Shui Po       | 3   | 2   | 2   | 3   | 4   | 4   | 5   | 4   | 7   | 7   | 4   | 7   | 4      |
| Kwai Chung         | 5   | 4   | 5   | 4   | 3   | 5   | 5   | 8   | 6   | 3   | 2   | 3   | 5      |
| Tsuen Wan          | 4   | 2   | 3   | 6   | 3   | 5   | 4   | 3   | 2   | 2   | 2   | 3   | 3      |
| Tseung Kwan O      | 2   | 4   | 2   | 3   | 3   | 2   | 1   | 3   | 6   | 6   | 5   | 4   | 3      |
| Yuen Long          | 2   | 2   | 2   | 2   | 2   | 3   | 1   | 1   | 2   | 2   | 2   | 3   | 2      |
| Tuen Mun           | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 8   | 4      |
| Tung Chung         | 4   | 3   | 2   | 1   | 1   | 0   | 0   | 3   | 2   | 2   | 2   | 3   | 2      |
| Tai Po             | 2   | 2   | 2   | 3   | 3   | 1   | 1   | 2   | 3   | 5   | 4   | 4   | 3      |
| Sha Tin            | 4   | 4   | 2   | 2   | 2   | 2   | 2   | 4   | 4   | 4   | 2   | 2   | 3      |
| North              | 3   | 3   | 2   | 2   | 3   | 5   | 5   | 2   | 2   | 4   | 3   | 4   | 3      |
| Tap Mun            | 3   | 1   | 1   | 1   | 3   | 2   | 2   | 2   | 2   | 3   | 3   | 4   | 2      |
| Causeway Bay       | 5   | 4   | 4   | 5   | 3   | 3   | 4   | 5   | 4   | 3   | 4   | 6   | 4      |
| Central            | 3   | 3   | 2   | 3   | 3   | 3   | 3   | 3   | 3   | 4   | 4   | 4   | 3      |
| Mong Kok           | 5   | 3   | 3   | 4   | 3   | 2   | 2   | 3   | 3   | 3   | 3   | 3   | 3      |

Nitrogen Oxides (NO<sub>x</sub>) Monthly and Annual Average Concentrations (µg/m<sup>3</sup>)

| Monitoring Station | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Central/Western    | 51  | 49  | 51  | 37  | 43  | 23  | 29  | 39  | 40  | 33  | 43  | 50  | 41     |
| Southern           | 40  | 37  | 38  | 32  | 32  | 25  | 24  | 41  | 29  | 25  | 34  | 41  | 33     |
| Kwun Tong          | 57  | 62  | 63  | 69  | 55  | 59  | 59  | 75  | 65  | 46  | 58  | 66  | 61     |
| Sham Shui Po       | 71  | 63  | 67  | 59  | 63  | 49  | 49  | 72  | 63  | 49  | 56  | 67  | 61     |
| Kwai Chung         | 77  | 68  | 76  | 89  | 67  | 79  | 73  | 114 | 74  | 53  | 66  | 75  | 76     |
| Tsuen Wan          | 57  | 68  | 63  | 63  | 50  | 52  | 50  | 68  | 45  | 38  | 46  | 62  | 55     |
| Tseung Kwan O      | 28  | 27  | 33  | 34  | 22  | 27  | 25  | 41  | 34  | 16  | 22  | 33  | 29     |
| Yuen Long          | 63  | 53  | 46  | 45  | 41  | 39  | 43  | 50  | 47  | 36  | 52  | 65  | 48     |
| Tuen Mun           | 76  | 58  | 55  | 49  | 51  | 40  | 33  | 49  | 46  | 42  | 64  | 77  | 53     |
| Tung Chung         | 55  | 52  | 42  | 28  | 40  | 21  | 22  | 37  | 40  | 35  | 53  | 59  | 40     |
| Tai Po             | 41  | 30  | 35  | 33  | 29  | 29  | 30  | 40  | 34  | 30  | 43  | 53  | 35     |
| Sha Tin            | 39  | 27  | 30  | 30  | 24  | 22  | 26  | 46  | 35  | 23  | 34  | 46  | 32     |
| North              | 47  | 34  | 38  | 36  | 30  | 27  | 28  | 40  | 39  | 33  | 49  | 60  | 38     |
| Tap Mun            | 14  | 11  | 13  | 10  | 8   | 4   | 5   | 11  | 7   | 7   | 12  | 16  | 10     |
| Causeway Bay       | 190 | 192 | 194 | 185 | 147 | 158 | 172 | 227 | 215 | 167 | 193 | 216 | 188    |
| Central            | 141 | 134 | 141 | 132 | 126 | 116 | 126 | 167 | 146 | 134 | 153 | 169 | 141    |
| Mong Kok           | 124 | 122 | 122 | 141 | 122 | 127 | 131 | 155 | 133 | 101 | 179 | 135 | 133    |

Nitrogen Dioxide (NO<sub>2</sub>) Monthly and Annual Average Concentrations (µg/m<sup>3</sup>)(Annual AQO = 40 µg/m<sup>3</sup>)

| Monitoring Station | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Central/Western    | 44  | 35  | 37  | 27  | 35  | 19  | 19  | 27  | 32  | 31  | 36  | 45  | 32     |
| Southern           | 33  | 25  | 29  | 24  | 23  | 18  | 15  | 29  | 22  | 22  | 27  | 35  | 25     |
| Eastern            | 37  | 35  | 37  | 30  | 34  | 23  | 21  | 25  | 29  | 28  | 32  | 38  | 31     |
| Kwun Tong          | 45  | 39  | 42  | 42  | 39  | 37  | 34  | 48  | 46  | 38  | 42  | 53  | 42     |
| Sham Shui Po       | 55  | 42  | 46  | 40  | 47  | 34  | 30  | 45  | 44  | 39  | 41  | 55  | 43     |
| Kwai Chung         | 55  | 42  | 48  | 51  | 44  | 44  | 37  | 60  | 48  | 40  | 44  | 56  | 48     |
| Tsuen Wan          | 47  | 42  | 43  | 42  | 38  | 33  | 30  | 42  | 34  | 32  | 36  | 51  | 39     |
| Tseung Kwan O      | 25  | 21  | 23  | 25  | 18  | 19  | 17  | 29  | 26  | 16  | 20  | 30  | 22     |
| Yuen Long          | 46  | 35  | 34  | 30  | 31  | 25  | 24  | 33  | 34  | 31  | 40  | 52  | 35     |
| Tuen Mun           | 58  | 40  | 42  | 36  | 40  | 30  | 23  | 36  | 35  | 36  | 47  | 61  | 40     |
| Tung Chung         | 41  | 33  | 32  | 21  | 32  | 16  | 15  | 27  | 33  | 32  | 42  | 51  | 31     |
| Tai Po             | 33  | 23  | 28  | 24  | 24  | 21  | 20  | 29  | 27  | 26  | 34  | 45  | 28     |
| Sha Tin            | 32  | 21  | 24  | 23  | 21  | 18  | 18  | 33  | 28  | 21  | 29  | 40  | 26     |
| North              | 38  | 26  | 30  | 26  | 25  | 20  | 18  | 27  | 29  | 29  | 37  | 47  | 29     |
| Tap Mun            | 12  | 7   | 10  | 7   | 5   | 4   | 4   | 9   | 7   | 6   | 10  | 15  | 8      |
| Causeway Bay       | 77  | 63  | 70  | 58  | 64  | 49  | 45  | 64  | 74  | 72  | 70  | 87  | 66     |
| Central            | 73  | 61  | 69  | 57  | 69  | 50  | 43  | 59  | 67  | 70  | 70  | 89  | 65     |
| Mong Kok           | 75  | 60  | 67  | 62  | 72  | 56  | 47  | 64  | 68  | 63  | 66  | 78  | 65     |

Carbon Monoxide (CO) Monthly and Annual Average Concentrations (µg/m<sup>3</sup>)

| Monitoring Station | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Southern           | 535 | 491 | 658 | 505 | 510 | 383 | 345 | 358 | 436 | 503 | 417 | 611 | 480    |
| Tsuen Wan          | 793 | 761 | 786 | 517 | 462 | 374 | 533 | 496 | 485 | 587 | 560 | 689 | 588    |
| Tseung Kwan O      | 478 | 375 | 374 | 249 | 317 | 217 | 106 | 223 | 294 | 404 | 401 | 426 | 322    |
| Yuen Long          | 687 | 662 | 744 | 580 | 457 | 359 | 412 | 492 | 605 | 614 | 636 | 906 | 597    |
| Tuen Mun           | 675 | 640 | 683 | 668 | 734 | 624 | 522 | 541 | 562 | 602 | 671 | 818 | 645    |
| Tung Chung         | 742 | 714 | 478 | 392 | 436 | 330 | 315 | 488 | 502 | 562 | 518 | 673 | 513    |
| North              | 589 | 460 | 472 | 338 | 376 | 335 | 341 | 396 | 525 | 452 | 511 | 695 | 458    |
| Tap Mun            | 482 | 506 | 389 | 303 | 390 | 383 | 388 | 395 | 433 | 493 | 548 | 553 | 438    |
| Causeway Bay       | 829 | 707 | 748 | 635 | 533 | 452 | 464 | 499 | 494 | 494 | 604 | 817 | 607    |
| Central            | 576 | 548 | 539 | 434 | 419 | 331 | 463 | 567 | 526 | 516 | 576 | 748 | 521    |
| Mong Kok           | 697 | 634 | 572 | 448 | 540 | 444 | 309 | 392 | 505 | 512 | 640 | 663 | 529    |

## Table D2 (Cont.): Monthly and Annual Average Concentrations of Air Pollutants in 2024

### Ozone (O<sub>3</sub>) Monthly and Annual Average Concentrations (µg/m<sup>3</sup>)

| Monitoring Station | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Central/Western    | 71  | 47  | 63  | 48  | 76  | 52  | 37  | 50  | 63  | 85  | 67  | 82  | 62     |
| Southern           | 84  | 58  | 73  | 48  | 78  | 43  | 34  | 38  | 61  | 88  | 75  | 89  | 64     |
| Eastern            | 78  | 54  | 69  | 56  | 86  | 56  | 42  | 54  | 63  | 85  | 70  | 87  | 67     |
| Kwun Tong          | 70  | 41  | 55  | 33  | 74  | 36  | 25  | 34  | 47  | 75  | 59  | 69  | 52     |
| Sham Shui Po       | 59  | 40  | 53  | 37  | 65  | 36  | 26  | 32  | 49  | 76  | 60  | 68  | 50     |
| Kwai Chung         | 59  | 40  | 52  | 26  | 64  | 29  | 22  | 22  | 45  | 72  | 54  | 66  | 46     |
| Tsuen Wan          | 60  | 37  | 54  | 50  | 75  | 32  | 22  | 28  | 49  | 73  | 53  | 59  | 50     |
| Tseung Kwan O      | 88  | 62  | 78  | 52  | 93  | 50  | 39  | 46  | 61  | 94  | 77  | 90  | 69     |
| Yuen Long          | 55  | 35  | 58  | 45  | 77  | 44  | 25  | 39  | 53  | 79  | 51  | 62  | 52     |
| Tuen Mun           | 53  | 35  | 55  | 37  | 66  | 36  | 30  | 43  | 56  | 83  | 52  | 64  | 51     |
| Tung Chung         | 54  | 39  | 60  | 46  | 68  | 40  | 35  | 60  | 71  | 99  | 66  | 77  | 60     |
| Tai Po             | 70  | 51  | 65  | 48  | 82  | 46  | 35  | 47  | 62  | 84  | 56  | 66  | 60     |
| Sha Tin            | 70  | 55  | 74  | 53  | 88  | 53  | 38  | 42  | 60  | 92  | 67  | 78  | 64     |
| North              | 67  | 48  | 64  | 50  | 81  | 48  | 37  | 48  | 59  | 83  | 52  | 68  | 59     |
| Tap Mun            | 86  | 66  | 83  | 67  | 99  | 58  | 49  | 54  | 72  | 102 | 83  | 100 | 77     |
| Causeway Bay       | 43  | 29  | 38  | 28  | 51  | 28  | 17  | 18  | 22  | 40  | 30  | 39  | 32     |
| Central            | 42  | 28  | 35  | 23  | 52  | 29  | 17  | 16  | 23  | 44  | 33  | 38  | 32     |
| Mong Kok           | 49  | 28  | 39  | 25  | 48  | 24  | 16  | 20  | 32  | 52  | 19  | 42  | 33     |

### Respirable Suspended Particulates (PM<sub>10</sub>) Monthly and Annual Average Concentrations (µg/m<sup>3</sup>)

(Annual AQO = 50 µg/m<sup>3</sup>)

| Monitoring Station | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Central/Western    | 39  | 25  | 37  | 20  | 21  | 12  | 9   | 14  | 17  | 26  | 25  | 44  | 24     |
| Southern           | 35  | 22  | 31  | 22  | 24  | 20  | 16  | 21  | 22  | 29  | 26  | 37  | 26     |
| Eastern            | 38  | 26  | 39  | 21  | 21  | 13  | 10  | 13  | 15  | 24  | 22  | 40  | 24     |
| Kwun Tong          | 40  | 24  | 31  | 23  | 21  | 14  | 12  | 17  | 18  | 24  | 23  | 41  | 24     |
| Sham Shui Po       | 39  | 24  | 36  | 22  | 22  | 13  | 10  | 16  | 17  | 24  | 23  | 42  | 24     |
| Kwai Chung         | 36  | 24  | 33  | 22  | 20  | 15  | 11  | 18  | 18  | 24  | 22  | 42  | 24     |
| Tsuen Wan          | 35  | 24  | 31  | 20  | 19  | 12  | 10  | 16  | 17  | 23  | 21  | 39  | 22     |
| Tseung Kwan O      | 36  | 28  | 40  | 23  | 27  | 19  | 16  | 22  | 20  | 25  | 26  | 39  | 27     |
| Yuen Long          | 38  | 24  | 32  | 20  | 18  | 11  | 10  | 17  | 19  | 28  | 29  | 49  | 25     |
| Tuen Mun           | 53  | 38  | 44  | 27  | 26  | 18  | 15  | 23  | 24  | 37  | 37  | 63  | 34     |
| Tung Chung         | 36  | 26  | 29  | 18  | 19  | 10  | 7   | 15  | 17  | 27  | 25  | 47  | 23     |
| Tai Po             | 35  | 25  | 36  | 21  | 20  | 13  | 10  | 18  | 19  | 26  | 25  | 45  | 24     |
| Sha Tin            | 35  | 21  | 31  | 18  | 17  | 10  | 8   | 14  | 15  | 23  | 21  | 39  | 21     |
| North              | 30  | 23  | 29  | 19  | 17  | 12  | 13  | 20  | 21  | 32  | 31  | 49  | 25     |
| Tap Mun            | 33  | 19  | 29  | 15  | 19  | 9   | 7   | 13  | 18  | 23  | 21  | 38  | 20     |
| Causeway Bay       | 52  | 38  | 52  | 34  | 33  | 23  | 22  | 27  | 31  | 38  | 36  | 55  | 37     |
| Central            | 45  | 31  | 42  | 27  | 26  | 19  | 15  | 21  | 24  | 30  | 30  | 49  | 30     |
| Mong Kok           | 40  | 29  | 41  | 25  | 25  | 15  | 13  | 16  | 19  | 25  | 25  | 42  | 26     |

### Fine Suspended Particulates (PM<sub>2.5</sub>) Monthly and Annual Average Concentrations (µg/m<sup>3</sup>)

(Annual AQO = 25 µg/m<sup>3</sup>)

| Monitoring Station | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Central/Western    | 27  | 16  | 18  | 12  | 11  | 6   | 4   | 9   | 10  | 15  | 14  | 29  | 14     |
| Southern           | 21  | 11  | 13  | 11  | 11  | 13  | 7   | 11  | 11  | 16  | 15  | 25  | 14     |
| Eastern            | 25  | 17  | 21  | 14  | 12  | 7   | 5   | 9   | 9   | 15  | 13  | 27  | 15     |
| Kwun Tong          | 25  | 14  | 14  | 13  | 11  | 8   | 6   | 11  | 10  | 15  | 13  | 27  | 14     |
| Sham Shui Po       | 25  | 16  | 20  | 15  | 13  | 8   | 6   | 11  | 11  | 15  | 14  | 28  | 15     |
| Kwai Chung         | 23  | 15  | 18  | 14  | 12  | 8   | 6   | 12  | 12  | 16  | 15  | 30  | 15     |
| Tsuen Wan          | 24  | 17  | 19  | 15  | 12  | 7   | 6   | 11  | 12  | 16  | 15  | 29  | 15     |
| Tseung Kwan O      | 23  | 18  | 21  | 16  | 12  | 8   | 5   | 11  | 10  | 13  | 13  | 24  | 14     |
| Yuen Long          | 26  | 17  | 18  | 14  | 12  | 7   | 6   | 12  | 14  | 19  | 20  | 34  | 17     |
| Tuen Mun           | 32  | 23  | 25  | 18  | 15  | 10  | 8   | 13  | 14  | 22  | 23  | 39  | 20     |
| Tung Chung         | 26  | 17  | 18  | 13  | 13  | 7   | 5   | 11  | 12  | 18  | 18  | 34  | 16     |
| Tai Po             | 24  | 16  | 20  | 14  | 12  | 8   | 6   | 11  | 12  | 17  | 17  | 31  | 16     |
| Sha Tin            | 23  | 14  | 16  | 12  | 10  | 6   | 4   | 9   | 9   | 14  | 13  | 27  | 13     |
| North              | 18  | 14  | 16  | 16  | 13  | 9   | 7   | 13  | 14  | 19  | 19  | 33  | 16     |
| Tap Mun            | 21  | 12  | 15  | 9   | 9   | 5   | 3   | 7   | 9   | 15  | 13  | 27  | 12     |
| Causeway Bay       | 34  | 24  | 30  | 22  | 21  | 15  | 14  | 19  | 21  | 25  | 23  | 37  | 24     |
| Central            | 28  | 20  | 24  | 18  | 16  | 11  | 9   | 14  | 16  | 19  | 19  | 33  | 19     |
| Mong Kok           | 27  | 20  | 23  | 17  | 15  | 9   | 7   | 11  | 13  | 18  | 17  | 31  | 17     |

**Table D3: Hourly Statistics of Air Pollutants in 2024**

**Sulphur Dioxide (SO<sub>2</sub>) Hourly Statistics**

| Monitoring Station | Total hours recorded | Data capture rate (%) | Hourly Average Concentration (µg/m <sup>3</sup> ) |    |    |    |    |    |      |    |      |    | Arithmetic mean | The highest |
|--------------------|----------------------|-----------------------|---|----|----|----|----|----|------|----|------|----|-----------------|-------------|
|                    |                      |                       | -----Percentiles-----                             |    |    |    |    |    |      |    |      |    |                 |             |
|                    |                      |                       | 10  | 25 | 50 | 75 | 90 | 95 | 97.5 | 99 | 99.8 |    |                 |             |
| Central/Western    | 8,503                | 96.8                  | 2   | 2  | 3  | 4  | 5  | 6  | 7    | 8  | 12   | 3  | 16              |             |
| Southern           | 8,714                | 99.2                  | 1   | 2  | 3  | 4  | 6  | 8  | 9    | 10 | 13   | 4  | 24              |             |
| Eastern            | 8,666                | 98.7                  | 1   | 1  | 1  | 2  | 3  | 4  | 5    | 6  | 2    | 10 |                 |             |
| Kwun Tong          | 8,480                | 96.5                  | 1   | 1  | 2  | 4  | 5  | 6  | 7    | 9  | 3    | 10 |                 |             |
| Sham Shui Po       | 8,509                | 96.9                  | 2   | 3  | 4  | 6  | 8  | 9  | 10   | 12 | 16   | 4  | 23              |             |
| Kwai Chung         | 8,502                | 96.8                  | 1   | 2  | 4  | 6  | 9  | 11 | 13   | 16 | 21   | 5  | 28              |             |
| Tsuen Wan          | 8,413                | 95.8                  | 1   | 1  | 2  | 4  | 6  | 7  | 8    | 10 | 13   | 3  | 21              |             |
| Tseung Kwan O      | 8,611                | 98.0                  | 1   | 2  | 3  | 6  | 6  | 7  | 7    | 8  | 9    | 3  | 11              |             |
| Yuen Long          | 8,494                | 96.7                  | 1   | 1  | 2  | 3  | 3  | 4  | 5    | 7  | 8    | 2  | 11              |             |
| Tuen Mun           | 8,631                | 98.3                  | 3   | 3  | 4  | 5  | 6  | 8  | 9    | 10 | 11   | 4  | 15              |             |
| Tung Chung         | 8,512                | 96.9                  | 0   | 1  | 2  | 3  | 4  | 6  | 7    | 8  | 11   | 2  | 16              |             |
| Tai Po             | 8,495                | 96.7                  | 1   | 2  | 2  | 4  | 5  | 5  | 6    | 6  | 7    | 3  | 8               |             |
| Sha Tin            | 8,508                | 96.9                  | 1   | 2  | 3  | 4  | 5  | 6  | 6    | 7  | 9    | 3  | 15              |             |
| North              | 8,632                | 98.3                  | 1   | 2  | 3  | 4  | 5  | 6  | 7    | 7  | 8    | 3  | 12              |             |
| Tap Mun            | 8,477                | 96.5                  | 1   | 1  | 2  | 3  | 4  | 5  | 5    | 6  | 7    | 2  | 8               |             |
| Causeway Bay       | 8,427                | 95.9                  | 2   | 3  | 4  | 5  | 7  | 9  | 10   | 12 | 14   | 4  | 20              |             |
| Central            | 8,457                | 96.3                  | 2   | 2  | 3  | 4  | 6  | 7  | 8    | 9  | 11   | 3  | 17              |             |
| Mong Kok           | 8,544                | 97.3                  | 1   | 2  | 3  | 4  | 5  | 6  | 8    | 9  | 13   | 3  | 20              |             |

**Nitrogen Oxides (NO<sub>x</sub>) Hourly Statistics**

| Monitoring Station | Total hours recorded | Data capture rate (%) | Hourly Average Concentration (µg/m <sup>3</sup> ) |    |     |     |     |     |      |     |      |     | Arithmetic mean | The highest |
|--------------------|----------------------|-----------------------|---|----|-----|-----|-----|-----|------|-----|------|-----|-----------------|-------------|
|                    |                      |                       | -----Percentiles-----                             |    |     |     |     |     |      |     |      |     |                 |             |
|                    |                      |                       | 10  | 25 | 50  | 75  | 90  | 95  | 97.5 | 99  | 99.8 |     |                 |             |
| Central/Western    | 8,520                | 97.0                  | 11  | 18 | 32  | 53  | 78  | 100 | 128  | 166 | 242  | 41  | 469             |             |
| Southern           | 8,676                | 98.8                  | 12  | 17 | 26  | 41  | 62  | 81  | 101  | 131 | 181  | 33  | 263             |             |
| Kwun Tong          | 8,382                | 95.4                  | 22  | 34 | 53  | 77  | 107 | 133 | 164  | 203 | 279  | 61  | 384             |             |
| Sham Shui Po       | 8,500                | 96.8                  | 21  | 34 | 54  | 76  | 103 | 130 | 163  | 209 | 276  | 61  | 393             |             |
| Kwai Chung         | 8,502                | 96.8                  | 22  | 38 | 66  | 101 | 142 | 175 | 208  | 253 | 310  | 76  | 484             |             |
| Tsuen Wan          | 8,436                | 96.0                  | 19  | 32 | 48  | 67  | 97  | 125 | 156  | 194 | 258  | 55  | 489             |             |
| Tseung Kwan O      | 8,650                | 98.5                  | 10  | 14 | 20  | 33  | 58  | 78  | 100  | 134 | 196  | 29  | 309             |             |
| Yuen Long          | 8,509                | 96.9                  | 19  | 28 | 41  | 60  | 85  | 106 | 129  | 157 | 216  | 48  | 333             |             |
| Tuen Mun           | 8,595                | 97.8                  | 18  | 28 | 45  | 70  | 98  | 120 | 142  | 176 | 227  | 53  | 303             |             |
| Tung Chung         | 8,511                | 96.9                  | 9   | 16 | 31  | 56  | 84  | 103 | 122  | 149 | 193  | 40  | 244             |             |
| Tai Po             | 8,520                | 97.0                  | 14  | 21 | 31  | 44  | 62  | 75  | 91   | 114 | 167  | 35  | 221             |             |
| Sha Tin            | 8,498                | 96.7                  | 10  | 15 | 24  | 41  | 64  | 82  | 102  | 134 | 171  | 32  | 223             |             |
| North              | 8,667                | 98.7                  | 13  | 19 | 31  | 48  | 73  | 92  | 117  | 148 | 228  | 38  | 408             |             |
| Tap Mun            | 8,463                | 96.3                  | 3   | 5  | 9   | 13  | 18  | 22  | 26   | 33  | 50   | 10  | 100             |             |
| Causeway Bay       | 8,475                | 96.5                  | 52  | 93 | 165 | 256 | 360 | 426 | 483  | 543 | 644  | 188 | 793             |             |
| Central            | 8,480                | 96.5                  | 45  | 76 | 123 | 186 | 260 | 307 | 359  | 414 | 521  | 141 | 770             |             |
| Mong Kok           | 8,498                | 96.7                  | 42  | 79 | 125 | 175 | 227 | 266 | 302  | 343 | 411  | 133 | 481             |             |

**Nitrogen Dioxide (NO<sub>2</sub>) Hourly Statistics**

(1-hour AQO = 200 µg/m<sup>3</sup>; allowable no. of exceedances of limit value = 18. Annual AQO = 40 µg/m<sup>3</sup>)

| Monitoring Station | Total hours recorded | Data capture rate (%) | Hourly Average Concentration (µg/m <sup>3</sup> ) |    |    |    |     |     |      |       |      |    | Arithmetic mean | The highest | No. of exceedances of 1-hr AQO |
|--------------------|----------------------|-----------------------|---|----|----|----|-----|-----|------|-------|------|----|-----------------|-------------|--------------------------------|
|                    |                      |                       | -----Percentiles-----                             |    |    |    |     |     |      |       |      |    |                 |             |                                |
|                    |                      |                       | 10  | 25 | 50 | 75 | 90  | 95  | 97.5 | 99    | 99.8 |    |                 |             |                                |
| Central/Western    | 8,520                | 97.0                  | 10  | 15 | 28 | 44 | 60  | 71  | 84   | 101   | 132  | 32 | 168             | 0           |                                |
| Southern           | 8,676                | 98.8                  | 10  | 14 | 21 | 32 | 45  | 56  | 68   | 82.25 | 101  | 25 | 124             | 0           |                                |
| Eastern            | 8,667                | 98.7                  | 13  | 19 | 29 | 40 | 50  | 58  | 65   | 75    | 93   | 31 | 131             | 0           |                                |
| Kwun Tong          | 8,382                | 95.4                  | 19  | 28 | 39 | 52 | 67  | 80  | 95   | 113   | 145  | 42 | 214             | 4           |                                |
| Sham Shui Po       | 8,500                | 96.8                  | 19  | 27 | 39 | 55 | 71  | 84  | 97   | 117   | 156  | 43 | 212             | 1           |                                |
| Kwai Chung         | 8,502                | 96.8                  | 18  | 29 | 44 | 60 | 79  | 94  | 112  | 136   | 172  | 48 | 232             | 6           |                                |
| Tsuen Wan          | 8,436                | 96.0                  | 16  | 26 | 36 | 48 | 65  | 77  | 90   | 105   | 129  | 39 | 197             | 0           |                                |
| Tseung Kwan O      | 8,650                | 98.5                  | 9   | 12 | 17 | 27 | 42  | 55  | 69   | 86    | 106  | 22 | 168             | 0           |                                |
| Yuen Long          | 8,509                | 96.9                  | 16  | 22 | 31 | 44 | 59  | 71  | 82   | 97    | 125  | 35 | 191             | 0           |                                |
| Tuen Mun           | 8,595                | 97.8                  | 15  | 23 | 36 | 52 | 71  | 84  | 97   | 115   | 145  | 40 | 193             | 0           |                                |
| Tung Chung         | 8,511                | 96.9                  | 8   | 14 | 26 | 44 | 62  | 74  | 84   | 97    | 114  | 31 | 146             | 0           |                                |
| Tai Po             | 8,520                | 97.0                  | 12  | 17 | 25 | 35 | 48  | 56  | 65   | 80    | 108  | 28 | 138             | 0           |                                |
| Sha Tin            | 8,498                | 96.7                  | 9   | 13 | 21 | 34 | 49  | 60  | 74   | 89    | 122  | 26 | 180             | 0           |                                |
| North              | 8,667                | 98.7                  | 12  | 17 | 26 | 37 | 52  | 63  | 73   | 87    | 116  | 29 | 156             | 0           |                                |
| Tap Mun            | 8,463                | 96.3                  | 2   | 4  | 7  | 11 | 15  | 18  | 22   | 27    | 39   | 8  | 62              | 0           |                                |
| Causeway Bay       | 8,475                | 96.5                  | 29  | 44 | 63 | 84 | 106 | 120 | 139  | 166   | 210  | 66 | 257             | 30          |                                |
| Central            | 8,480                | 96.5                  | 29  | 42 | 60 | 82 | 105 | 123 | 140  | 162   | 195  | 65 | 245             | 15          |                                |
| Mong Kok           | 8,498                | 96.7                  | 30  | 45 | 62 | 81 | 103 | 117 | 131  | 153   | 188  | 65 | 228             | 13          |                                |

**Carbon Monoxide (CO) Hourly Statistics**

(1-hour AQO = 30,000 µg/m<sup>3</sup>; permit for no exceedance of the limit value)

| Monitoring Station | Total hours recorded | Data capture rate (%) | Hourly Average Concentration (µg/m <sup>3</sup> ) |     |     |     |     |       |       |       |       |     | Arithmetic mean | The highest | No. of exceedances of 1-hr AQO |
|--------------------|----------------------|-----------------------|---|-----|-----|-----|-----|-------|-------|-------|-------|-----|-----------------|-------------|--------------------------------|
|                    |                      |                       | -----Percentiles-----                             |     |     |     |     |       |       |       |       |     |                 |             |                                |
|                    |                      |                       | 10  | 25  | 50  | 75  | 90  | 95    | 97.5  | 99    | 99.8  |     |                 |             |                                |
| Southern           | 8,714                | 99.2                  | 300   | 370 | 460 | 580 | 680 | 750   | 810   | 889   | 970   | 480 | 1,060           | 0           |                                |
| Tsuen Wan          | 8,451                | 96.2                  | 360   | 450 | 570 | 720 | 840 | 910   | 970   | 1,030 | 1,090 | 588 | 1,520           | 0           |                                |
| Tseung Kwan O      | 8,680                | 98.8                  | 130   | 210 | 310 | 420 | 530 | 590   | 640   | 710   | 880   | 322 | 1,500           | 0           |                                |
| Yuen Long          | 8,487                | 96.6                  | 350   | 450 | 580 | 720 | 860 | 950   | 1,020 | 1,120 | 1,290 | 597 | 1,920           | 0           |                                |
| Tuen Mun           | 8,606                | 98.0                  | 480   | 540 | 630 | 730 | 830 | 900   | 960   | 1,030 | 1,178 | 645 | 1,470           | 0           |                                |
| Tung Chung         | 8,523                | 97.0                  | 290   | 380 | 500 | 620 | 740 | 830   | 900   | 980   | 1,120 | 513 | 1,670           | 0           |                                |
| North              | 8,701                | 99.1                  | 260   | 330 | 430 | 550 | 680 | 790   | 890   | 1,020 | 1,386 | 458 | 1,710           | 0           |                                |
| Tap Mun            | 8,395                | 95.6                  | 270   | 340 | 420 | 520 | 630 | 720   | 760   | 820   | 880   | 438 | 1,020           | 0           |                                |
| Causeway Bay       | 8,507                | 96.8                  | 330   | 430 | 570 | 750 | 950 | 1,060 | 1,160 | 1,270 | 1,570 | 607 | 1,950           | 0           |                                |
| Central            | 8,480                | 96.5                  | 280   | 380 | 500 | 640 | 780 | 870   | 960   | 1,092 | 1,310 | 521 | 1,880           | 0           |                                |
| Mong Kok           | 8,531                | 97.1                  | 310   | 410 | 520 | 640 | 750 | 820   | 880   | 960   | 1,237 | 529 | 1,880           | 0           |                                |

Table D3 (Cont.): Hourly Statistics of Air Pollutants in 2024

Ozone (O<sub>3</sub>) Hourly Statistics

| Monitoring Station | Total hours recorded | Data capture rate (%) | Hourly Average Concentration (µg/m <sup>3</sup> ) |    |    |       |     |     |      |     |      |    | Arithmetic mean | The highest |
|--------------------|----------------------|-----------------------|---|----|----|-------|-----|-----|------|-----|------|----|-----------------|-------------|
|                    |                      |                       | -----Percentiles-----                             |    |    |       |     |     |      |     |      |    |                 |             |
|                    |                      |                       | 10  | 25 | 50 | 75    | 90  | 95  | 97.5 | 99  | 99.8 |    |                 |             |
| Central/Western    | 8,683                | 98.9                  | 21  | 37 | 56 | 84    | 110 | 125 | 140  | 158 | 193  | 62 | 299             |             |
| Southern           | 8,711                | 99.2                  | 22  | 34 | 57 | 89    | 116 | 133 | 146  | 163 | 191  | 64 | 285             |             |
| Eastern            | 8,667                | 98.7                  | 30.6  | 43 | 60 | 88    | 111 | 124 | 135  | 149 | 182  | 67 | 268             |             |
| Kwun Tong          | 8,391                | 95.5                  | 14  | 23 | 44 | 75    | 100 | 116 | 130  | 148 | 178  | 52 | 230             |             |
| Sham Shui Po       | 8,442                | 96.1                  | 14  | 25 | 44 | 71    | 95  | 109 | 121  | 139 | 171  | 50 | 271             |             |
| Kwai Chung         | 8,441                | 96.1                  | 8   | 18 | 40 | 68    | 93  | 108 | 121  | 134 | 162  | 46 | 216             |             |
| Tsuen Wan          | 8,451                | 96.2                  | 11  | 23 | 43 | 70    | 97  | 115 | 130  | 149 | 184  | 50 | 250             |             |
| Tseung Kwan O      | 8,724                | 99.3                  | 23  | 37 | 62 | 97.25 | 126 | 142 | 155  | 170 | 198  | 69 | 223             |             |
| Yuen Long          | 8,452                | 96.2                  | 11  | 24 | 43 | 73    | 105 | 125 | 144  | 167 | 213  | 52 | 297             |             |
| Tuen Mun           | 8,506                | 96.8                  | 11  | 23 | 41 | 71    | 103 | 124 | 144  | 175 | 231  | 51 | 330             |             |
| Tung Chung         | 8,494                | 96.7                  | 14  | 32 | 53 | 83    | 112 | 131 | 153  | 187 | 238  | 60 | 351             |             |
| Tai Po             | 8,687                | 98.9                  | 16  | 29 | 51 | 84    | 115 | 133 | 150  | 167 | 203  | 60 | 260             |             |
| Sha Tin            | 8,431                | 96.0                  | 17  | 34 | 57 | 89    | 122 | 140 | 155  | 171 | 206  | 64 | 261             |             |
| North              | 8,663                | 98.6                  | 14  | 29 | 51 | 82    | 115 | 131 | 147  | 167 | 199  | 59 | 287             |             |
| Tap Mun            | 8,459                | 96.3                  | 31  | 46 | 69 | 103   | 134 | 153 | 168  | 188 | 212  | 77 | 251             |             |
| Causeway Bay       | 8,671                | 98.7                  | 8   | 14 | 24 | 44    | 68  | 83  | 95   | 108 | 126  | 32 | 158             |             |
| Central            | 8,680                | 98.8                  | 5   | 11 | 24 | 46    | 71  | 87  | 102  | 117 | 141  | 32 | 215             |             |
| Mong Kok           | 8,613                | 98.1                  | 8   | 13 | 25 | 47    | 68  | 82  | 95   | 109 | 130  | 33 | 156             |             |

Respirable Suspended Particulates (PM<sub>10</sub>) Hourly Statistics(Annual AQO = 50 µg/m<sup>3</sup>)

| Monitoring Station | Total hours recorded | Data capture rate (%) | Hourly Average Concentration (µg/m <sup>3</sup> ) |    |    |    |    |    |      |    |      |    | Arithmetic mean | The highest |
|--------------------|----------------------|-----------------------|---|----|----|----|----|----|------|----|------|----|-----------------|-------------|
|                    |                      |                       | -----Percentiles-----                             |    |    |    |    |    |      |    |      |    |                 |             |
|                    |                      |                       | 10  | 25 | 50 | 75 | 90 | 95 | 97.5 | 99 | 99.8 |    |                 |             |
| Central/Western    | 8,626                | 98.2                  | 7   | 12 | 21 | 32 | 47 | 57 | 65   | 74 | 88   | 24 | 158             |             |
| Southern           | 8,391                | 95.5                  | 12  | 17 | 23 | 32 | 42 | 50 | 57   | 65 | 74   | 26 | 109             |             |
| Eastern            | 8,661                | 98.6                  | 8   | 12 | 20 | 31 | 44 | 53 | 63   | 73 | 91   | 24 | 135             |             |
| Kwun Tong          | 8,694                | 99.0                  | 9   | 14 | 21 | 30 | 43 | 52 | 61   | 70 | 85   | 24 | 109             |             |
| Sham Shui Po       | 8,657                | 98.6                  | 8   | 14 | 21 | 31 | 44 | 54 | 62   | 70 | 81   | 24 | 125             |             |
| Kwai Chung         | 8,604                | 98.0                  | 8   | 14 | 21 | 30 | 42 | 53 | 61   | 69 | 79   | 24 | 128             |             |
| Tsuen Wan          | 8,641                | 98.4                  | 8   | 13 | 20 | 29 | 41 | 51 | 58   | 66 | 81   | 22 | 133             |             |
| Tseung Kwan O      | 8,466                | 96.4                  | 12  | 17 | 24 | 33 | 45 | 54 | 61   | 72 | 95   | 27 | 145             |             |
| Yuen Long          | 8,618                | 98.1                  | 7   | 12 | 20 | 33 | 48 | 58 | 65   | 75 | 108  | 25 | 130             |             |
| Tuen Mun           | 8,484                | 96.6                  | 12  | 19 | 30 | 45 | 62 | 73 | 82   | 94 | 124  | 34 | 185             |             |
| Tung Chung         | 8,686                | 98.9                  | 6   | 11 | 19 | 30 | 45 | 56 | 66   | 80 | 100  | 23 | 130             |             |
| Tai Po             | 8,606                | 98.0                  | 8   | 13 | 22 | 32 | 44 | 54 | 61   | 69 | 88   | 24 | 148             |             |
| Sha Tin            | 8,605                | 98.0                  | 6   | 11 | 19 | 28 | 40 | 50 | 58   | 64 | 72   | 21 | 108             |             |
| North              | 8,089                | 92.1                  | 9   | 14 | 22 | 32 | 44 | 52 | 61   | 72 | 84   | 25 | 131             |             |
| Tap Mun            | 8,550                | 97.3                  | 6   | 10 | 17 | 27 | 40 | 50 | 58   | 65 | 73   | 20 | 88              |             |
| Causeway Bay       | 8,572                | 97.6                  | 16.1  | 24 | 34 | 47 | 61 | 72 | 83   | 95 | 119  | 37 | 160             |             |
| Central            | 8,577                | 97.6                  | 13  | 18 | 27 | 38 | 53 | 63 | 71   | 80 | 92   | 30 | 133             |             |
| Mong Kok           | 8,552                | 97.4                  | 9   | 15 | 23 | 35 | 47 | 57 | 66   | 76 | 91   | 26 | 140             |             |

Fine Suspended Particulates (PM<sub>2.5</sub>) Hourly Statistics(Annual AQO = 25 µg/m<sup>3</sup>)

| Monitoring Station | Total hours recorded | Data capture rate (%) | Hourly Average Concentration (µg/m <sup>3</sup> ) |    |    |    |    |    |      |    |      |    | Arithmetic mean | The highest |
|--------------------|----------------------|-----------------------|---|----|----|----|----|----|------|----|------|----|-----------------|-------------|
|                    |                      |                       | -----Percentiles-----                             |    |    |    |    |    |      |    |      |    |                 |             |
|                    |                      |                       | 10  | 25 | 50 | 75 | 90 | 95 | 97.5 | 99 | 99.8 |    |                 |             |
| Central/Western    | 8,627                | 98.2                  | 3   | 7  | 12 | 19 | 29 | 36 | 42   | 48 | 60   | 14 | 137             |             |
| Southern           | 8,383                | 95.4                  | 4   | 7  | 12 | 18 | 26 | 32 | 37   | 42 | 51   | 14 | 81              |             |
| Eastern            | 8,662                | 98.6                  | 4   | 7  | 12 | 19 | 28 | 35 | 40   | 46 | 54   | 15 | 84              |             |
| Kwun Tong          | 8,694                | 99.0                  | 5   | 8  | 12 | 18 | 26 | 33 | 39   | 46 | 55   | 14 | 69              |             |
| Sham Shui Po       | 8,657                | 98.6                  | 5   | 8  | 13 | 19 | 29 | 35 | 40   | 46 | 54   | 15 | 75              |             |
| Kwai Chung         | 8,604                | 98.0                  | 5   | 8  | 13 | 19 | 27 | 36 | 41   | 47 | 56   | 15 | 74              |             |
| Tsuen Wan          | 8,641                | 98.4                  | 5   | 8  | 13 | 20 | 29 | 36 | 41   | 47 | 56   | 15 | 79              |             |
| Tseung Kwan O      | 8,466                | 96.4                  | 4   | 7  | 12 | 19 | 27 | 33 | 38   | 44 | 52   | 14 | 82              |             |
| Yuen Long          | 8,618                | 98.1                  | 5   | 8  | 13 | 22 | 33 | 40 | 46   | 52 | 68   | 17 | 81              |             |
| Tuen Mun           | 8,490                | 96.7                  | 7   | 11 | 18 | 27 | 37 | 45 | 51   | 59 | 75   | 20 | 113             |             |
| Tung Chung         | 8,685                | 98.9                  | 4   | 8  | 13 | 21 | 32 | 40 | 47   | 58 | 82   | 16 | 116             |             |
| Tai Po             | 8,607                | 98.0                  | 5   | 8  | 14 | 21 | 29 | 36 | 42   | 48 | 55   | 16 | 85              |             |
| Sha Tin            | 8,605                | 98.0                  | 3   | 6  | 11 | 17 | 26 | 33 | 39   | 44 | 51   | 13 | 65              |             |
| North              | 8,088                | 92.1                  | 6   | 9  | 14 | 20 | 28 | 34 | 40   | 49 | 63   | 16 | 94              |             |
| Tap Mun            | 8,550                | 97.3                  | 2   | 5  | 10 | 17 | 25 | 32 | 38   | 43 | 50   | 12 | 57              |             |
| Causeway Bay       | 8,572                | 97.6                  | 10  | 15 | 22 | 30 | 40 | 47 | 54   | 62 | 83   | 24 | 112             |             |
| Central            | 8,577                | 97.6                  | 8   | 11 | 17 | 24 | 34 | 41 | 47   | 53 | 63   | 19 | 82              |             |
| Mong Kok           | 8,552                | 97.4                  | 6   | 10 | 15 | 23 | 32 | 39 | 44   | 51 | 59   | 17 | 83              |             |

**Table D4: Daily Variations in Air Pollutant Levels in 2024**

**Sulphur Dioxide (SO<sub>2</sub>) Levels Daily Variations (µg/m<sup>3</sup>)**

| Monitoring Station | 24-Hour |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--------------------|---------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                    | 1       | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Central/Western    | 3       | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |
| Southern           | 3       | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 3  | 3  | 3  | 3  | 3  |
| Eastern            | 2       | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| Kwun Tong          | 2       | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 2  | 2  | 2  |
| Sham Shui Po       | 4       | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5  | 5  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  |
| Kwai Chung         | 4       | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 4  | 4  | 4  |
| Tsuen Wan          | 3       | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 4  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |
| Tseung Kwan O      | 3       | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |
| Yuen Long          | 2       | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| Tuen Mun           | 4       | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 4  | 4  | 4  | 4  |
| Tung Chung         | 2       | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2  | 3  | 3  | 3  | 3  | 3  | 3  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| Tai Po             | 2       | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 2  |
| Sha Tin            | 3       | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |
| North              | 3       | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |
| Tap Mun            | 2       | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2  | 3  | 3  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| Causeway Bay       | 3       | 3 | 3 | 2 | 2 | 3 | 3 | 4 | 5 | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 4  | 4  | 4  | 4  |
| Central            | 3       | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 3  | 3  | 3  | 3  |
| Mong Kok           | 3       | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 3  | 3  | 3  |

**Nitrogen Oxides (NO<sub>x</sub>) Levels Daily Variations (µg/m<sup>3</sup>)**

| Monitoring Station | 24-Hour |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|--------------------|---------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                    | 1       | 2  | 3  | 4  | 5  | 6  | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  |
| Central/Western    | 33      | 27 | 23 | 22 | 23 | 23 | 29  | 47  | 56  | 60  | 56  | 49  | 43  | 43  | 44  | 47  | 48  | 49  | 49  | 46  | 42  | 40  | 38  | 36  |
| Southern           | 25      | 20 | 18 | 16 | 17 | 23 | 33  | 44  | 49  | 48  | 47  | 43  | 37  | 36  | 36  | 37  | 40  | 41  | 38  | 34  | 31  | 28  | 28  | 27  |
| Kwun Tong          | 48      | 39 | 31 | 28 | 27 | 37 | 63  | 86  | 84  | 81  | 73  | 67  | 62  | 64  | 66  | 71  | 73  | 74  | 73  | 68  | 59  | 57  | 59  | 55  |
| Sham Shui Po       | 42      | 35 | 32 | 30 | 31 | 35 | 49  | 68  | 82  | 82  | 75  | 70  | 67  | 70  | 73  | 76  | 81  | 81  | 75  | 68  | 59  | 56  | 53  | 46  |
| Kwai Chung         | 51      | 39 | 36 | 36 | 36 | 42 | 65  | 97  | 114 | 111 | 95  | 87  | 83  | 85  | 89  | 93  | 96  | 101 | 102 | 88  | 73  | 66  | 64  | 58  |
| Tsuen Wan          | 40      | 31 | 27 | 25 | 24 | 30 | 44  | 63  | 78  | 76  | 70  | 65  | 62  | 62  | 64  | 65  | 68  | 71  | 75  | 69  | 59  | 53  | 51  | 47  |
| Tseung Kwan O      | 31      | 27 | 21 | 19 | 25 | 30 | 42  | 40  | 30  | 26  | 25  | 23  | 22  | 22  | 24  | 27  | 29  | 32  | 35  | 34  | 33  | 33  | 32  | 32  |
| Yuen Long          | 39      | 33 | 28 | 26 | 27 | 31 | 53  | 69  | 63  | 54  | 50  | 46  | 43  | 47  | 50  | 56  | 59  | 61  | 61  | 57  | 54  | 52  | 47  | 47  |
| Tuen Mun           | 43      | 37 | 32 | 29 | 30 | 35 | 50  | 74  | 75  | 71  | 63  | 57  | 51  | 50  | 52  | 54  | 59  | 65  | 69  | 66  | 60  | 56  | 53  | 48  |
| Tung Chung         | 33      | 30 | 27 | 24 | 24 | 26 | 33  | 48  | 51  | 51  | 52  | 48  | 48  | 46  | 46  | 46  | 45  | 46  | 47  | 43  | 40  | 37  | 38  | 37  |
| Tai Po             | 29      | 26 | 23 | 20 | 20 | 23 | 38  | 54  | 52  | 43  | 37  | 34  | 32  | 31  | 31  | 33  | 38  | 42  | 45  | 44  | 39  | 39  | 38  | 33  |
| Sha Tin            | 30      | 27 | 24 | 21 | 22 | 25 | 36  | 45  | 42  | 37  | 32  | 28  | 25  | 24  | 26  | 28  | 31  | 34  | 38  | 39  | 38  | 37  | 36  | 34  |
| Tap Mun            | 31      | 27 | 23 | 23 | 24 | 32 | 49  | 64  | 55  | 45  | 40  | 36  | 33  | 33  | 33  | 35  | 38  | 43  | 48  | 46  | 44  | 44  | 39  | 36  |
| North              | 9       | 10 | 9  | 9  | 9  | 9  | 9   | 11  | 12  | 13  | 13  | 11  | 10  | 9   | 9   | 9   | 9   | 10  | 10  | 10  | 10  | 10  | 9   | 9   |
| Causeway Bay       | 116     | 80 | 67 | 59 | 59 | 65 | 135 | 211 | 238 | 247 | 251 | 254 | 260 | 263 | 255 | 247 | 238 | 242 | 244 | 216 | 189 | 200 | 175 | 140 |
| Central            | 94      | 77 | 65 | 59 | 58 | 64 | 94  | 145 | 199 | 184 | 179 | 179 | 163 | 151 | 170 | 182 | 182 | 194 | 206 | 172 | 149 | 135 | 126 | 115 |
| Mong Kok           | 95      | 59 | 54 | 49 | 49 | 53 | 90  | 125 | 154 | 156 | 155 | 157 | 156 | 169 | 175 | 185 | 194 | 192 | 188 | 158 | 142 | 141 | 135 | 114 |

**Nitrogen Dioxide (NO<sub>2</sub>) Levels Daily Variations (µg/m<sup>3</sup>)**

| Monitoring Station | 24-Hour |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--------------------|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                    | 1       | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Central/Western    | 27      | 22 | 19 | 18 | 18 | 18 | 24 | 34 | 39 | 40 | 39 | 35 | 33 | 33 | 35 | 38 | 40 | 42 | 43 | 40 | 36 | 34 | 32 | 29 |
| Southern           | 20      | 17 | 15 | 14 | 14 | 18 | 23 | 28 | 31 | 31 | 31 | 29 | 27 | 27 | 28 | 29 | 33 | 34 | 32 | 29 | 26 | 24 | 23 | 22 |
| Eastern            | 25      | 21 | 18 | 16 | 17 | 20 | 28 | 36 | 39 | 37 | 35 | 34 | 31 | 32 | 34 | 37 | 40 | 40 | 40 | 36 | 33 | 31 | 30 | 28 |
| Kwun Tong          | 36      | 30 | 25 | 22 | 22 | 27 | 39 | 48 | 47 | 47 | 45 | 43 | 42 | 44 | 46 | 50 | 53 | 54 | 54 | 50 | 44 | 43 | 43 | 40 |
| Sham Shui Po       | 34      | 28 | 24 | 25 | 24 | 27 | 35 | 44 | 48 | 48 | 46 | 45 | 45 | 47 | 50 | 54 | 58 | 61 | 59 | 55 | 48 | 44 | 42 | 37 |
| Kwai Chung         | 36      | 29 | 26 | 25 | 25 | 28 | 37 | 48 | 54 | 54 | 52 | 51 | 51 | 54 | 58 | 61 | 65 | 67 | 66 | 59 | 50 | 46 | 44 | 40 |
| Tsuen Wan          | 32      | 25 | 21 | 20 | 19 | 23 | 32 | 39 | 43 | 43 | 42 | 41 | 42 | 43 | 45 | 48 | 51 | 54 | 56 | 53 | 46 | 42 | 40 | 37 |
| Tseung Kwan O      | 25      | 22 | 18 | 15 | 18 | 20 | 25 | 25 | 22 | 20 | 19 | 18 | 17 | 17 | 18 | 20 | 22 | 25 | 28 | 30 | 29 | 27 | 27 | 27 |
| Yuen Long          | 30      | 28 | 24 | 22 | 22 | 24 | 33 | 38 | 37 | 34 | 32 | 30 | 30 | 33 | 34 | 37 | 42 | 46 | 48 | 47 | 44 | 41 | 39 | 36 |
| Tuen Mun           | 36      | 32 | 28 | 25 | 26 | 28 | 36 | 44 | 45 | 44 | 41 | 39 | 37 | 38 | 40 | 42 | 47 | 53 | 56 | 53 | 49 | 45 | 43 | 39 |
| Tung Chung         | 27      | 25 | 22 | 20 | 20 | 21 | 25 | 31 | 33 | 33 | 35 | 34 | 35 | 35 | 36 | 37 | 37 | 39 | 40 | 37 | 34 | 32 | 31 | 30 |
| Tai Po             | 25      | 23 | 20 | 18 | 18 | 20 | 27 | 33 | 33 | 29 | 26 | 25 | 24 | 24 | 24 | 26 | 30 | 35 | 38 | 37 | 34 | 33 | 32 | 29 |
| Sha Tin            | 26      | 23 | 21 | 19 | 19 | 21 | 26 | 30 | 28 | 26 | 23 | 21 | 20 | 19 | 21 | 22 | 26 | 30 | 34 | 35 | 34 | 32 | 31 | 29 |
| North              | 26      | 23 | 21 | 20 | 20 | 23 | 31 | 36 | 34 | 31 | 29 | 27 | 25 | 26 | 26 | 28 | 31 | 36 | 40 | 38 | 36 | 35 | 32 | 29 |
| Tap Mun            | 8       | 8  | 8  | 8  | 7  | 7  | 8  | 8  | 9  | 9  | 9  | 8  | 8  | 7  | 7  | 7  | 8  | 9  | 9  | 8  | 8  | 8  | 8  | 8  |
| Causeway Bay       | 51      | 40 | 35 | 32 | 32 | 34 | 51 | 65 | 69 | 74 | 78 | 81 | 84 | 87 | 89 | 89 | 85 | 84 | 83 | 76 | 70 | 69 | 63 | 56 |
| Central            | 49      | 43 | 38 | 35 | 35 | 37 | 47 | 61 | 71 | 70 | 72 | 74 | 74 | 75 | 81 | 85 | 86 | 87 | 87 | 80 | 73 | 66 | 62 | 57 |
| Mong Kok           | 52      | 39 | 35 | 33 | 33 | 34 | 47 | 58 | 65 | 67 | 69 | 72 | 75 | 80 | 84 | 89 | 91 | 90 | 88 | 79 | 73 | 69 | 65 | 60 |

**Carbon Monoxide (CO) Levels Daily Variations (µg/m<sup>3</sup>)**

| Monitoring Station | 24-Hour |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|--------------------|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                    | 1       | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  |
| Southern           | 462     | 448 | 444 | 440 | 444 | 455 | 474 | 503 | 514 | 504 | 497 | 488 | 480 | 482 | 482 | 491 | 499 | 501 | 496 | 490 | 485 | 482 | 474 | 474 |
| Tsuen Wan          | 548     | 538 | 530 | 524 | 528 | 544 | 589 | 637 | 644 | 624 | 605 | 588 | 584 | 586 | 584 | 581 | 587 | 602 | 627 | 637 | 627 | 609 | 597 | 572 |
| Tseung Kwan O      | 326     | 311 | 305 | 312 | 299 | 309 | 339 | 345 | 330 | 317 | 311 | 300 | 298 | 296 | 298 | 299 | 307 | 321 | 339 | 356 | 353 | 352 | 352 | 341 |
| Yuen Long          | 596     | 579 | 567 | 556 | 558 | 561 | 605 | 633 | 615 | 594 | 587 | 580 | 577 | 579 | 575 | 577 | 587 | 602 | 623 | 645 | 648 | 635 | 624 | 614 |
| Tuen Mun           | 625     | 614 | 603 | 584 | 623 | 652 | 656 | 694 | 684 | 663 | 653 | 644 | 641 | 636 | 631 | 631 | 635 | 645 | 668 | 675 | 675 | 664 | 654 | 642 |
| Tung Chung         | 505     | 486 | 484 | 482 | 481 | 494 | 503 | 520 | 523 | 517 | 523 | 518 | 523 | 528 | 520 | 521 | 516 | 520 | 526 | 526 | 524 | 520 | 523 | 518 |
| North              | 438     | 427 | 418 | 414 | 412 | 427 | 469 | 485 | 465 | 441 | 435 | 417 | 415 | 409 | 418 | 425 | 443 | 479 | 537 | 540 | 554 | 548 | 512 | 456 |
| Tap Mun            | 433     | 440 | 436 | 434 | 435 | 437 | 440 | 450 | 453 | 440 | 443 | 442 | 443 | 442 | 438 | 434 | 433 | 433 | 432 | 430 | 431 | 430 | 431 | 431 |
| Causeway Bay       | 560     | 539 | 506 | 492 | 470 | 449 | 475 | 564 | 617 | 676 | 659 | 630 | 642 | 644 | 645 | 654 | 646 | 680 | 698 | 725 | 694 |     |     |     |

Table D4 (Cont.): Daily Variations in Air Pollutant Levels in 2024

Ozone (O<sub>3</sub>) Levels Daily Variations (µg/m<sup>3</sup>)

| Monitoring Station | 24-Hour |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |    |    |    |    |    |    |    |
|--------------------|---------|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|----|----|----|----|----|----|----|
|                    | 1       | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14  | 15  | 16  | 17  | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Central/Western    | 61      | 63 | 63 | 63 | 61 | 60 | 54 | 45 | 43 | 46 | 53 | 63 | 71 | 75  | 77  | 77  | 74  | 69 | 64 | 62 | 62 | 60 | 60 | 59 |
| Southern           | 59      | 61 | 61 | 61 | 60 | 55 | 50 | 49 | 49 | 54 | 60 | 68 | 75 | 80  | 83  | 83  | 79  | 75 | 69 | 65 | 62 | 61 | 60 | 59 |
| Eastern            | 66      | 67 | 68 | 68 | 66 | 62 | 54 | 48 | 47 | 53 | 61 | 68 | 76 | 80  | 82  | 81  | 77  | 74 | 71 | 69 | 68 | 67 | 66 | 65 |
| Kwun Tong          | 49      | 53 | 55 | 56 | 53 | 48 | 38 | 33 | 35 | 39 | 47 | 55 | 62 | 64  | 66  | 65  | 61  | 57 | 54 | 52 | 53 | 51 | 49 | 49 |
| Sham Shui Po       | 51      | 54 | 55 | 54 | 53 | 50 | 41 | 35 | 34 | 38 | 45 | 53 | 59 | 62  | 63  | 63  | 57  | 52 | 48 | 47 | 49 | 49 | 49 | 50 |
| Kwai Chung         | 47      | 51 | 51 | 50 | 49 | 45 | 38 | 31 | 30 | 34 | 41 | 48 | 54 | 57  | 58  | 57  | 53  | 47 | 44 | 44 | 46 | 45 | 44 | 46 |
| Tsuen Wan          | 48      | 52 | 53 | 53 | 52 | 47 | 39 | 34 | 34 | 39 | 46 | 53 | 59 | 64  | 66  | 66  | 62  | 56 | 47 | 44 | 45 | 45 | 44 | 45 |
| Tseung Kwan O      | 59      | 59 | 61 | 61 | 57 | 54 | 50 | 51 | 56 | 63 | 71 | 79 | 86 | 91  | 94  | 94  | 91  | 84 | 77 | 71 | 67 | 64 | 61 | 59 |
| Yuen Long          | 46      | 45 | 46 | 45 | 43 | 40 | 33 | 31 | 35 | 44 | 54 | 64 | 73 | 77  | 81  | 79  | 72  | 63 | 55 | 48 | 46 | 44 | 43 | 42 |
| Tuen Mun           | 45      | 47 | 48 | 47 | 46 | 42 | 35 | 30 | 33 | 39 | 48 | 58 | 67 | 75  | 78  | 78  | 72  | 60 | 51 | 47 | 45 | 44 | 44 | 45 |
| Tung Chung         | 55      | 54 | 54 | 54 | 53 | 50 | 46 | 42 | 44 | 49 | 55 | 64 | 72 | 79  | 84  | 85  | 82  | 73 | 63 | 60 | 57 | 56 | 53 | 53 |
| Tai Po             | 51      | 50 | 50 | 50 | 48 | 45 | 39 | 35 | 41 | 52 | 62 | 72 | 80 | 85  | 88  | 88  | 82  | 74 | 64 | 59 | 58 | 54 | 51 | 51 |
| Sha Tin            | 54      | 55 | 55 | 53 | 52 | 50 | 45 | 42 | 48 | 56 | 66 | 76 | 84 | 90  | 92  | 91  | 87  | 79 | 70 | 64 | 60 | 57 | 55 | 54 |
| North              | 52      | 51 | 51 | 50 | 48 | 44 | 37 | 35 | 40 | 49 | 59 | 70 | 79 | 83  | 87  | 86  | 81  | 73 | 64 | 60 | 57 | 53 | 53 | 52 |
| Tap Mun            | 62      | 63 | 61 | 60 | 58 | 56 | 55 | 57 | 62 | 68 | 77 | 87 | 96 | 103 | 106 | 106 | 104 | 99 | 92 | 84 | 77 | 73 | 69 | 67 |
| Causeway Bay       | 36      | 42 | 45 | 46 | 45 | 43 | 30 | 22 | 20 | 20 | 22 | 24 | 27 | 28  | 30  | 32  | 34  | 33 | 31 | 32 | 31 | 30 | 31 | 35 |
| Central            | 37      | 41 | 43 | 44 | 43 | 39 | 31 | 22 | 18 | 21 | 24 | 28 | 33 | 36  | 35  | 33  | 31  | 28 | 25 | 27 | 29 | 31 | 31 | 33 |
| Mong Kok           | 37      | 44 | 43 | 46 | 45 | 43 | 31 | 24 | 22 | 24 | 27 | 30 | 34 | 35  | 35  | 34  | 30  | 29 | 27 | 29 | 30 | 30 | 31 | 33 |

Respirable Suspended Particulates (PM<sub>10</sub>) Levels Daily Variations (µg/m<sup>3</sup>)

| Monitoring Station | 24-Hour |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--------------------|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                    | 1       | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Central/Western    | 23      | 22 | 22 | 22 | 21 | 21 | 21 | 22 | 23 | 24 | 25 | 26 | 25 | 25 | 26 | 27 | 28 | 27 | 27 | 27 | 26 | 25 | 24 | 23 |
| Southern           | 25      | 24 | 24 | 24 | 24 | 24 | 24 | 23 | 24 | 26 | 26 | 26 | 26 | 26 | 27 | 28 | 28 | 29 | 28 | 26 | 26 | 25 | 25 | 25 |
| Eastern            | 22      | 22 | 22 | 22 | 22 | 21 | 21 | 22 | 22 | 23 | 25 | 25 | 25 | 24 | 26 | 27 | 27 | 26 | 25 | 25 | 24 | 24 | 23 | 22 |
| Kwun Tong          | 23      | 22 | 22 | 21 | 21 | 21 | 21 | 22 | 23 | 23 | 24 | 25 | 25 | 24 | 26 | 27 | 27 | 27 | 26 | 27 | 26 | 24 | 24 | 23 |
| Sham Shui Po       | 22      | 21 | 21 | 20 | 20 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 25 | 25 | 27 | 28 | 28 | 28 | 27 | 28 | 27 | 25 | 23 | 22 |
| Kwai Chung         | 22      | 21 | 21 | 21 | 21 | 20 | 20 | 21 | 23 | 24 | 24 | 24 | 25 | 25 | 26 | 27 | 27 | 27 | 26 | 25 | 24 | 23 | 22 | 22 |
| Tsuen Wan          | 21      | 20 | 19 | 19 | 19 | 18 | 19 | 19 | 20 | 21 | 22 | 23 | 24 | 24 | 25 | 26 | 26 | 26 | 25 | 26 | 26 | 24 | 23 | 22 |
| Tseung Kwan O      | 26      | 26 | 26 | 26 | 25 | 25 | 25 | 25 | 25 | 25 | 26 | 26 | 26 | 27 | 28 | 29 | 29 | 29 | 29 | 29 | 28 | 28 | 27 | 27 |
| Yuen Long          | 24      | 23 | 22 | 22 | 21 | 21 | 21 | 22 | 23 | 24 | 25 | 25 | 26 | 26 | 27 | 28 | 28 | 27 | 28 | 27 | 26 | 25 | 25 | 25 |
| Tuen Mun           | 32      | 32 | 30 | 30 | 30 | 29 | 28 | 30 | 31 | 33 | 35 | 36 | 36 | 36 | 37 | 38 | 39 | 39 | 38 | 38 | 38 | 36 | 34 | 33 |
| Tung Chung         | 21      | 21 | 20 | 20 | 20 | 19 | 19 | 20 | 21 | 22 | 23 | 25 | 25 | 27 | 28 | 29 | 28 | 27 | 25 | 24 | 23 | 23 | 22 | 22 |
| Tai Po             | 24      | 23 | 23 | 23 | 23 | 22 | 22 | 23 | 24 | 24 | 25 | 25 | 25 | 25 | 25 | 25 | 26 | 26 | 26 | 27 | 27 | 26 | 25 | 25 |
| Sha Tin            | 21      | 21 | 20 | 20 | 20 | 19 | 20 | 21 | 21 | 21 | 21 | 21 | 21 | 20 | 21 | 22 | 22 | 23 | 22 | 23 | 23 | 22 | 22 | 21 |
| North              | 24      | 24 | 24 | 23 | 22 | 22 | 21 | 22 | 23 | 23 | 24 | 25 | 26 | 26 | 27 | 27 | 26 | 26 | 26 | 26 | 27 | 26 | 25 | 24 |
| Tap Mun            | 19      | 19 | 19 | 20 | 20 | 20 | 19 | 19 | 19 | 20 | 21 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 21 | 20 | 20 | 19 | 19 |
| Causeway Bay       | 33      | 29 | 26 | 26 | 25 | 25 | 28 | 33 | 35 | 38 | 40 | 40 | 40 | 42 | 45 | 45 | 44 | 44 | 44 | 46 | 45 | 41 | 38 | 35 |
| Central            | 28      | 26 | 26 | 25 | 25 | 24 | 26 | 27 | 29 | 31 | 32 | 32 | 32 | 33 | 34 | 35 | 34 | 34 | 33 | 34 | 34 | 33 | 31 | 29 |
| Mong Kok           | 24      | 22 | 21 | 21 | 20 | 20 | 21 | 23 | 24 | 26 | 27 | 28 | 28 | 29 | 30 | 31 | 31 | 31 | 31 | 33 | 33 | 29 | 26 | 25 |

Fine Suspended Particulates (PM<sub>2.5</sub>) Levels Daily Variations (µg/m<sup>3</sup>)

| Monitoring Station | 24-Hour |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--------------------|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                    | 1       | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Central/Western    | 13      | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 15 | 16 | 16 | 15 | 14 | 13 |
| Southern           | 13      | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 16 | 16 | 15 | 15 | 14 | 14 | 14 | 13 |
| Eastern            | 14      | 14 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 16 | 15 | 15 | 15 | 14 | 14 |
| Kwun Tong          | 13      | 13 | 12 | 12 | 12 | 12 | 13 | 13 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | 15 | 14 | 14 | 13 |
| Sham Shui Po       | 14      | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 15 | 15 | 15 | 16 | 15 | 16 | 16 | 17 | 17 | 17 | 17 | 17 | 17 | 16 | 15 | 14 |
| Kwai Chung         | 14      | 14 | 13 | 13 | 13 | 13 | 13 | 14 | 15 | 15 | 15 | 15 | 16 | 16 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 16 | 15 | 14 |
| Tsuen Wan          | 15      | 14 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 17 | 17 | 17 | 17 | 17 | 18 | 18 | 17 | 16 | 15 |
| Tseung Kwan O      | 14      | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 15 | 14 | 14 |
| Yuen Long          | 16      | 16 | 16 | 15 | 15 | 15 | 15 | 16 | 16 | 17 | 17 | 17 | 17 | 17 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 17 | 17 |
| Tuen Mun           | 20      | 20 | 19 | 18 | 18 | 18 | 18 | 19 | 20 | 20 | 20 | 20 | 20 | 20 | 21 | 21 | 21 | 22 | 22 | 22 | 22 | 23 | 21 | 21 |
| Tung Chung         | 15      | 15 | 15 | 15 | 14 | 14 | 14 | 14 | 15 | 15 | 16 | 16 | 17 | 18 | 19 | 19 | 19 | 18 | 17 | 17 | 17 | 16 | 16 | 16 |
| Tai Po             | 15      | 15 | 15 | 15 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 16 | 16 |
| Sha Tin            | 13      | 13 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 13 | 14 | 14 | 14 | 13 | 13 |    |
| North              | 16      | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 16 | 16 | 17 | 17 | 16 | 16 | 16 | 17 | 17 | 16 | 16 | 16 |
| Tap Mun            | 11      | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 12 | 12 | 12 | 12 | 12 | 11 | 11 |
| Causeway Bay       | 21      | 18 | 16 | 16 | 16 | 16 | 18 | 21 | 23 | 24 | 24 | 24 | 26 | 28 | 29 | 29 | 28 | 28 | 29 | 31 | 31 | 28 | 25 | 23 |
| Central            | 17      | 16 | 16 | 16 | 16 | 15 | 17 | 17 | 18 | 19 | 19 | 20 | 20 | 22 | 21 | 22 | 21 | 21 | 21 | 22 | 23 | 22 | 20 | 18 |
| Mong Kok           | 16      | 15 | 14 | 13 | 13 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 19 | 20 | 19 | 20 | 19 | 19 | 20 | 23 | 23 | 20 | 18 | 16 |

Table D5: Total Wet and Dry Deposition in 2024

## Wet Deposition

| Wet Deposition (tonne/ha) |   | Monitoring Station |           |           |
|---------------------------|---|--------------------|-----------|-----------|
|                           |   | Central / Western  | Kwun Tong | Yuen Long |
| Wet Deposition (tonne/ha) |   | 21,781             | 24,192    | 16,767    |
| Weighted Mean pH          | Based on volume-weighted mean hydrogen ion concentrations ([H <sup>+</sup> ]) | 5.23               | 5.09      | 5.22      |
|                           | Based on volume-weighted mean pH  | 5.42               | 5.42      | 5.46      |
| Number of Samples         |   | 114                | 124       | 107       |
| Filtrate (kg/ha)          | NH <sub>4</sub> <sup>+</sup>  | 5.71               | 7.96      | 5.87      |
|                           | NO <sub>3</sub> <sup>-</sup>  | 18.55              | 26.40     | 15.23     |
|                           | SO <sub>4</sub> <sup>2-</sup>   | 13.56              | 21.83     | 10.15     |
|                           | Cl <sup>-</sup>   | 21.63              | 31.09     | 8.28      |
|                           | F <sup>-</sup>  | 0.55               | 0.61      | 0.43      |
|                           | Na <sup>+</sup>   | 12.31              | 17.27     | 5.15      |
|                           | K <sup>+</sup>  | 5.41               | 6.03      | 4.16      |
|                           | Formate   | 3.73               | 4.55      | 3.55      |
|                           | Acetate   | 3.62               | 4.29      | 3.35      |
|                           | Ca <sup>2+</sup>  | 2.34               | 3.14      | 2.16      |
| Mg <sup>2+</sup>          | 1.53  | 2.23               | 0.68      |           |

Notes: The weighted mean pH is calculated from the pH values measured by the Government Laboratory

## Dry Deposition

| Number of Samples |                               | Monitoring Station |           |           |
|-------------------|-------------------------------|--------------------|-----------|-----------|
|                   |                               | Central / Western  | Kwun Tong | Yuen Long |
| Number of Samples |                               | 22                 | 22        | 22        |
| Filtrate (kg/ha)  | NH <sub>4</sub> <sup>+</sup>  | 0.17               | 0.23      | 0.10      |
|                   | NO <sub>3</sub> <sup>-</sup>  | 7.67               | 7.07      | 7.71      |
|                   | SO <sub>4</sub> <sup>2-</sup> | 2.74               | 2.63      | 2.51      |
|                   | Cl <sup>-</sup>               | 8.26               | 6.86      | 3.64      |
|                   | F <sup>-</sup>                | 0.03               | 0.03      | 0.04      |
|                   | Na <sup>+</sup>               | 5.64               | 4.21      | 2.25      |
|                   | K <sup>+</sup>                | 0.53               | 0.41      | 0.30      |
|                   | Formate                       | 0.14               | 0.14      | 0.18      |
|                   | Acetate                       | 0.17               | 0.18      | 0.23      |
|                   | Ca <sup>2+</sup>              | 3.12               | 3.14      | 3.90      |
| Mg <sup>2+</sup>  | 0.67                          | 0.57               | 0.36      |           |

Table D6: Ambient Levels of Toxic Air Pollutants in 2024

| Toxic Air Pollutants   | Annual Average Concentration <sup>[1]</sup> |                 |                         | Unit              |
|------------------------|---|-----------------|-------------------------|-------------------|
|                        | Monitoring Station                          |                 | Unit                    |                   |
|                        | Tsuen Wan                                   | Central/Western |                         |                   |
| Heavy Metals           | Hexavalent chromium                         | 0.11            | 0.11                    | ng/m <sup>3</sup> |
|                        | Lead <sup>[2]</sup>                         | 6               | 6                       | ng/m <sup>3</sup> |
| Organic Substances     | Benzene                                     | 0.8             | 0.74                    | µg/m <sup>3</sup> |
|                        | Benzo[a]pyrene                              | 0.06            | 0.04                    | ng/m <sup>3</sup> |
|                        | 1,3-Butadiene                               | 0.05            | 0.04                    | µg/m <sup>3</sup> |
|                        | Formaldehyde                                | 3.25            | 3.68                    | µg/m <sup>3</sup> |
|                        | Perchloroethylene                           | 0.75            | 0.26                    | µg/m <sup>3</sup> |
| Dioxins <sup>[3]</sup> | 0.012                                       | 0.018           | pg I-TEQ/m <sup>3</sup> |                   |

## Notes:

- [1] For TAP concentrations that are lower than the method detection limit (MDL), one half of the MDL is used in calculating the annual averages.
- [2] For lead, the reported figures are the respective 2024 annual average concentrations in the elemental analysis of respirable suspended particulates.
- [3] The ambient level of dioxins is expressed here as toxic equivalent (I-TEQ) concentration of 2,3,7,8-Tetrachlorodibenzodioxin (TCDD) based on the International Toxic Equivalency Factors (I-TEF) of the North Atlantic Treaty Organization (NATO/CCMS).

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2024

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