AIR QUALITY
IN HONG KONG 2024

Air Science and Modelling Group

Environmental Protection Department

The Government of the
Hong Kong Special Administrative Region

FOR THE YEAR 2024

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KEY FACTS FOR 2024

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_{10}) and sulphur dioxide (SO_2) decreased by 1μg/m^3, while the annual average concentration of ozone (O_3) slightly increased by 1μg/m^3. As for roadside air pollutants, the annual average concentrations of PM_{10} and nitrogen dioxide (NO_2) also slightly decreased by 1μg/m^3, the annual average concentration of SO_2 fell by 2μg/m^3, and the annual average concentration of O_3 decreased by 4μg/m^3.

Overall, Hong Kong's air quality in 2024 broadly aligned with Hong Kong's Air Quality Objectives (AQOs). The annual average concentrations of PM_{10}, fine suspended particulates ($PM_{2.5}$), NO_2 and SO_2 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_2 and regional O_3 pollution remain two major challenges. Despite a 36% decrease in roadside NO_2 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_3 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_3.

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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_2), nitrogen dioxide (NO_2), carbon monoxide (CO), ozone (O_3), respirable suspended particulates (PM_{10}) and fine suspended particulates ($PM_{2.5}$), 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_2)

Sources	SO_2 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_2, followed by fuel combustion equipment and motor vehicles.
Health Impact	Exposure to high levels of SO_2 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_2 levels were monitored at all 18 AQMSs in 2024.

SO_2 Levels Monitoring Results for 2024

- Similar to 2023, SO_2 concentrations remained low in Hong Kong
- The highest 10-minute average is 93 $\mu g/m^3$ at Kwun Tong general station
- The highest 24-hour average is 15 $\mu g/m^3$ at Kwai Chung general station

Figure 2a: Monitoring Results of SO_2 Levels in 2024
(10-Minute Average Statistics)

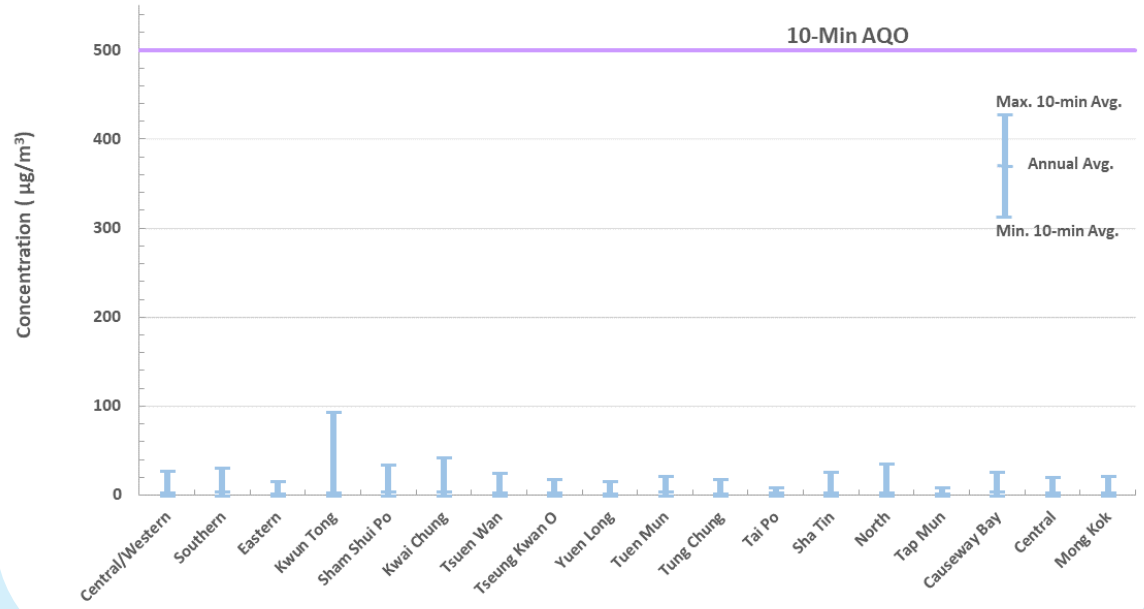
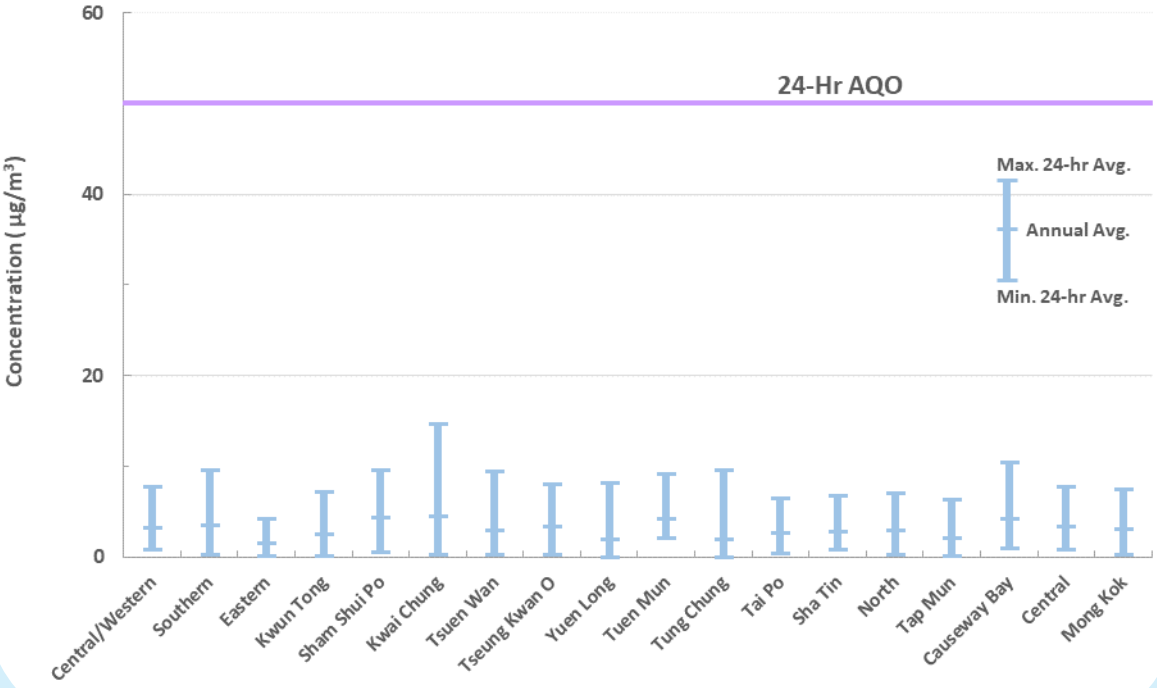


Figure 2b: Monitoring Results of SO_2 Levels in 2024
(24-Hour Average Statistics)



Respirable Suspended Particulates (PM_{10})

Sources

PM_{10} 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_{10}. Besides, PM_{10} can also be formed by photochemical reactions of NO_X and VOCs as well as atmospheric oxidation of gaseous pollutants, such as SO_2 and NO_X. To a lesser extent, crustal derived dust and marine aerosols are also sources of PM_{10}. In Hong Kong, PM_{10} is contributed mainly by the regional sources.

Health Impact

PM_{10} at high levels may cause chronic and acute effects on human health, particularly the pulmonary function, as PM_{10} can penetrate deep into the lungs and cause respiratory problems. These effects are uplifted if high PM_{10} levels are associated with higher levels of other pollutants, such as SO_2.

Monitoring

PM_{10} 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_{10} Levels Monitoring Results for 2024

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

Figure 3a: Monitoring Results of PM_{10} Levels in 2024 (24-Hour Average Statistics)

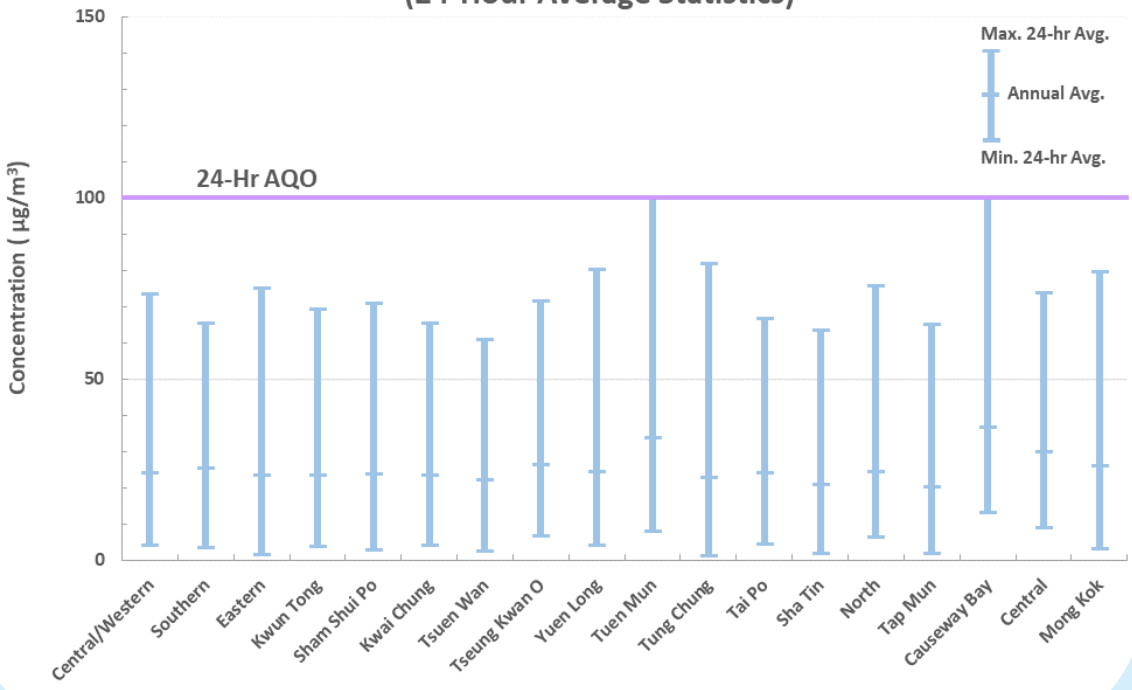
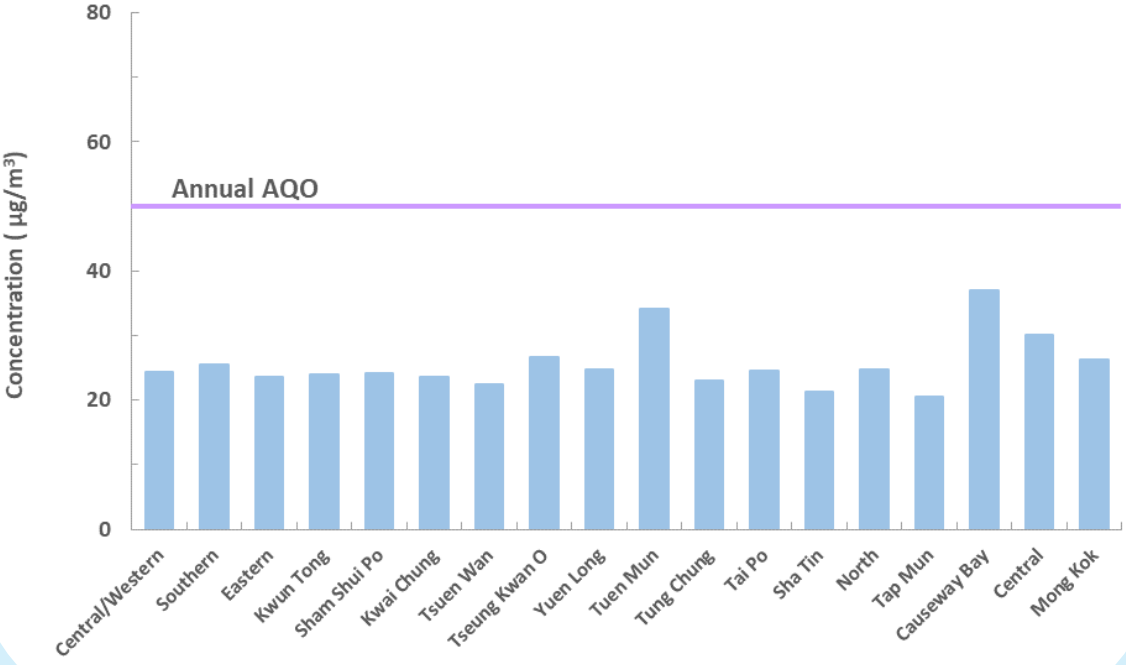


Figure 3b: Monitoring Results of PM_{10} Levels in 2024 (Annual Average)



Fine Suspended Particulates ($PM_{2.5}$)

Sources	$PM_{2.5}$ refers to those suspended particulates with nominal aerodynamic diameters of 2.5 micrometres or less, which is the finer component of PM_{10}. $PM_{2.5}$ has the same emission sources as PM_{10}, which is also mainly contributed by regional sources. Besides, $PM_{2.5}$ also causes visibility impairment in air.
Health Impact	$PM_{2.5}$ is able to penetrate to the deepest parts of the lungs because of its small size, hence posing a higher risk to health.
Monitoring	$PM_{2.5}$ levels were monitored at all 18 AQMSs in 2024.

$PM_{2.5}$ Levels Monitoring Results for 2024

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

Figure 4a: Monitoring Results of $PM_{2.5}$ Levels in 2024 (24-Hour Average Statistics)

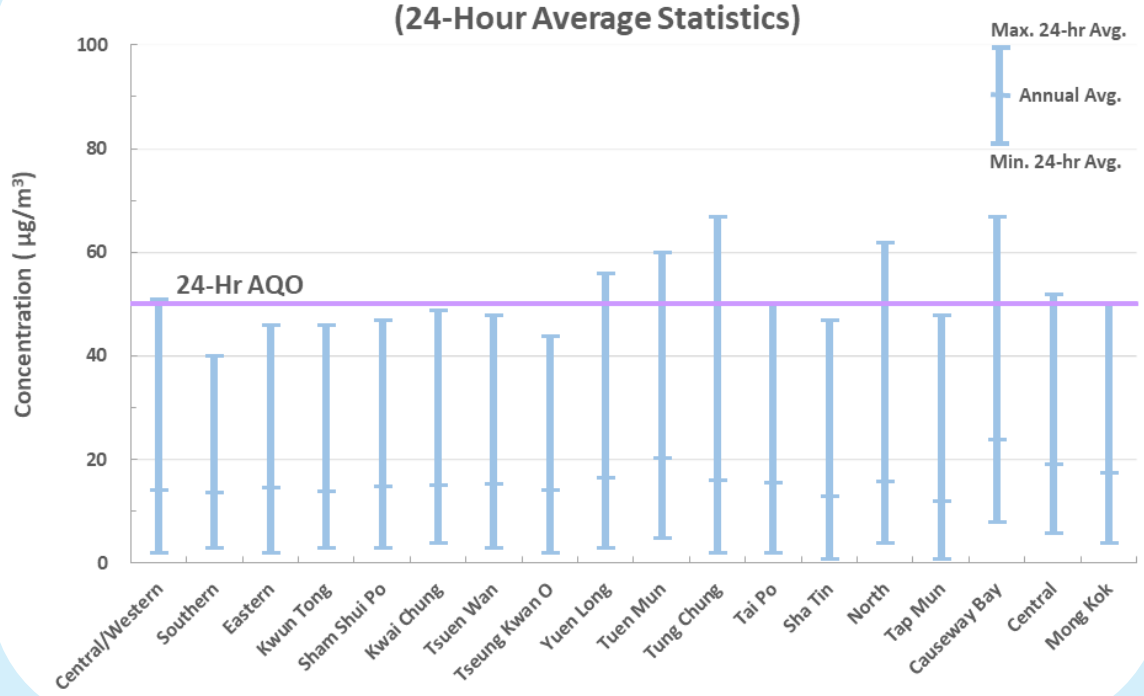
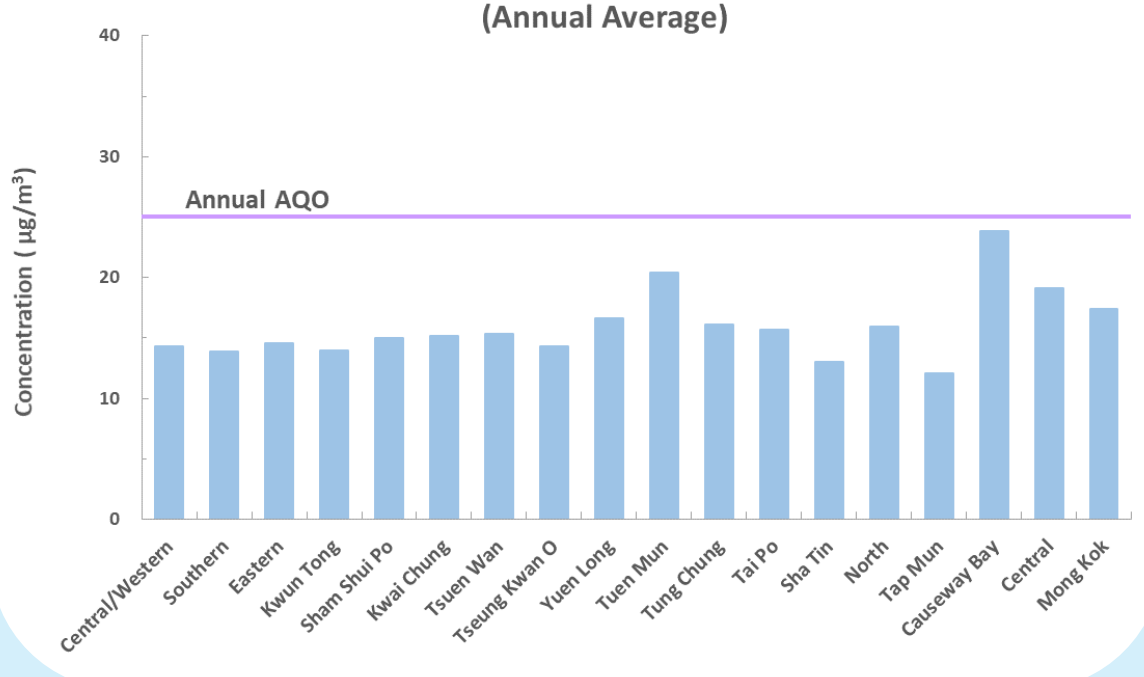


Figure 4b: Monitoring Results of $PM_{2.5}$ Levels in 2024 (Annual Average)



Nitrogen Dioxide (NO_2)

Sources	The various chemical species of the oxides of nitrogen are collectively termed nitrogen oxides (NO_X). From an air pollution standpoint, the most important constituents of NO_X are nitric oxide (NO) and NO_2, which are often mentioned as NO_X 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_X in Hong Kong. NO_X emissions from motor vehicles have greater impact on roadside air quality. NO_2 is mainly formed from the oxidation of NO emitted from fuel combustion.
Health Impact	Long-term exposure to NO_2 can lower a person's resistance to respiratory infections and aggravate existing chronic respiratory diseases.
Monitoring	NO_2 levels were measured at all of the 18 AQMSs in 2024.

NO_2 Levels Monitoring Results for 2024

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

Figure 5a: Monitoring Results of NO_2 Levels in 2024 (1-Hour Average Statistics)

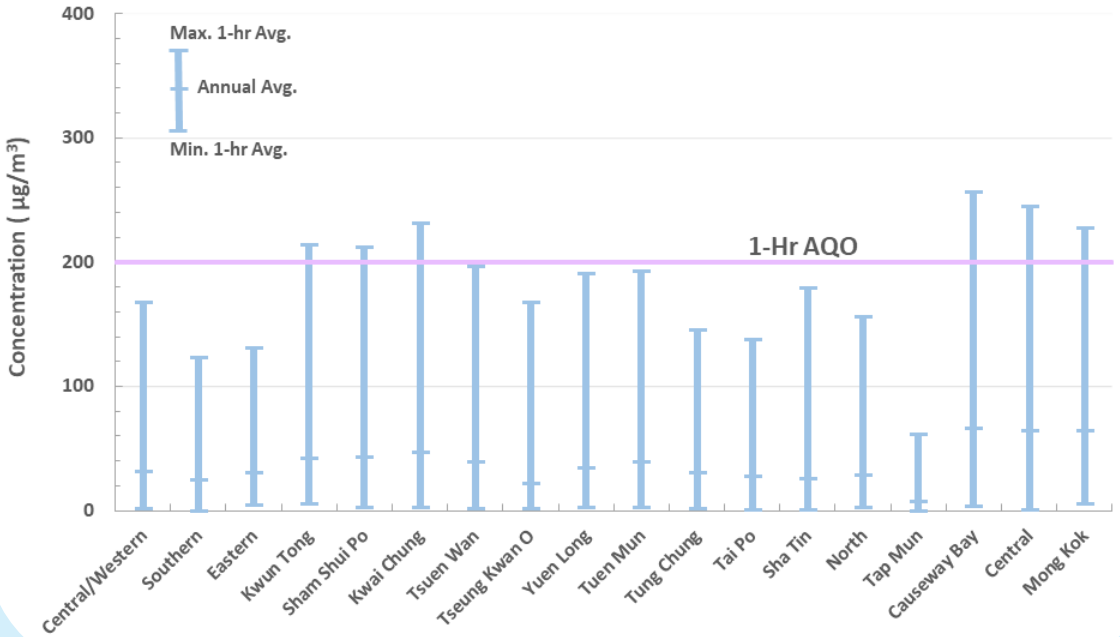
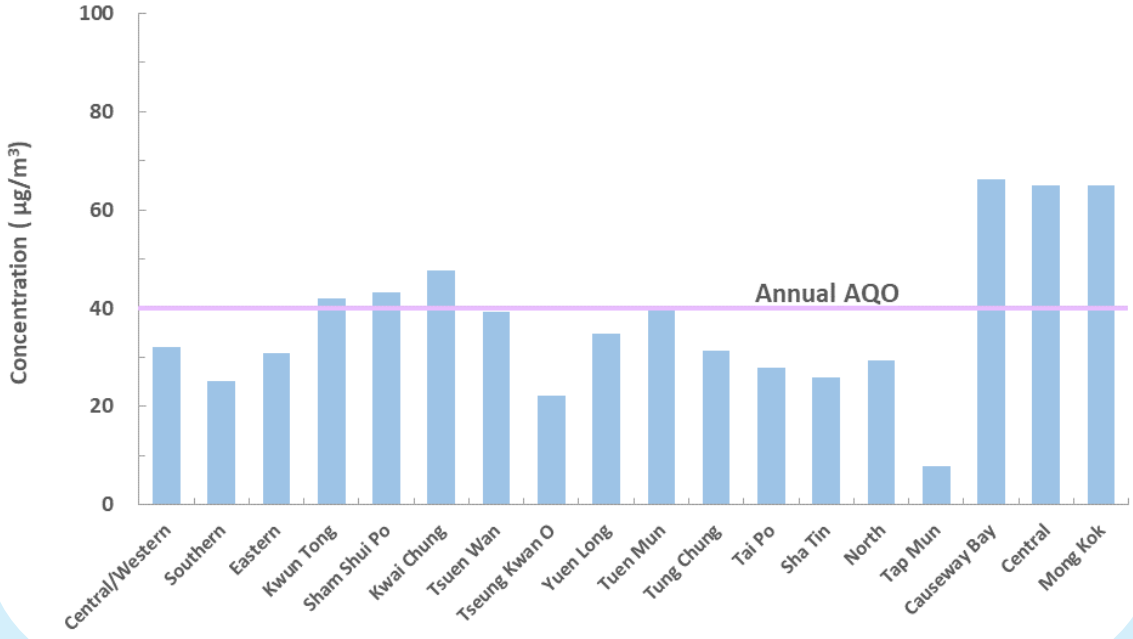


Figure 5b: Monitoring Results of NO_2 Levels in 2024 (Annual Average)



Ozone (O_3)

Sources

O_3 is a major constituent of photochemical smog. It is not a pollutant directly emitted from pollution sources but formed by photochemical reactions between NO_X and volatile organic compounds (VOCs) under sunlight. As it takes several hours for these photochemical reactions to take place, O_3 recorded in one place could be attributed to NO_X and VOCs emissions from places afar. Hence, O_3 is more a regional air pollution problem.

At the roadside, the NO emitted from motor vehicles readily reacts with O_3 to form NO_2, thereby removing O_3. Because of such O_3 scavenging effect, the O_3 concentrations at the roadside stations are significantly lower than those at the general stations.

In Hong Kong, O_3 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 O3 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_3 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.

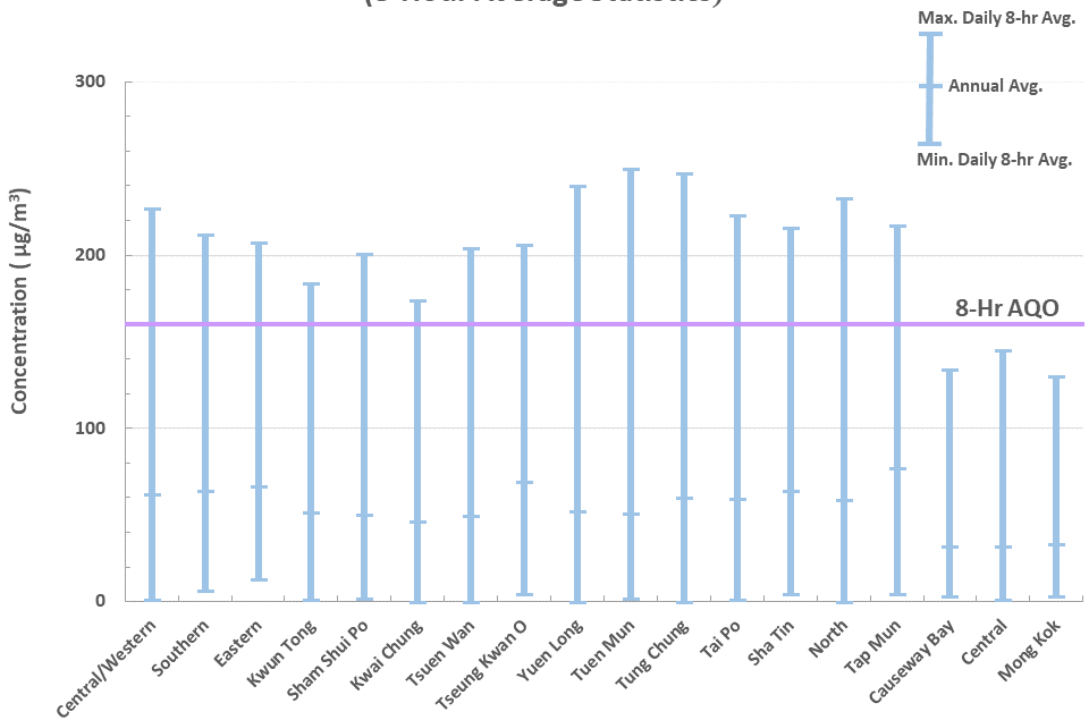
Monitoring

O_3 levels were monitored at all 18 AQMSs in 2024.

O_3 Levels Monitoring Results for 2024

- The highest daily 8-hour average is 250 µg/m^3 at Tuen Mun general station

Figure 6: Monitoring Results of O_3 Levels in 2024
(8-Hour Average Statistics)



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 µg/m^3 at Causeway Bay roadside station
- The highest daily 8-hour average is 1,778 µg/m^3 at Yuen Long general station

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

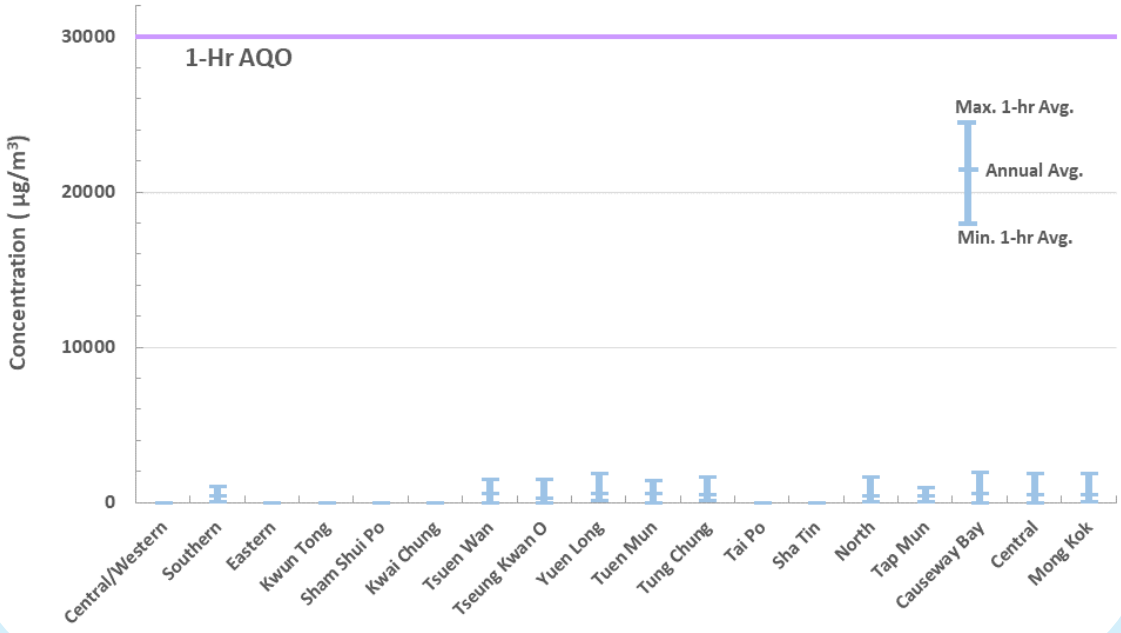
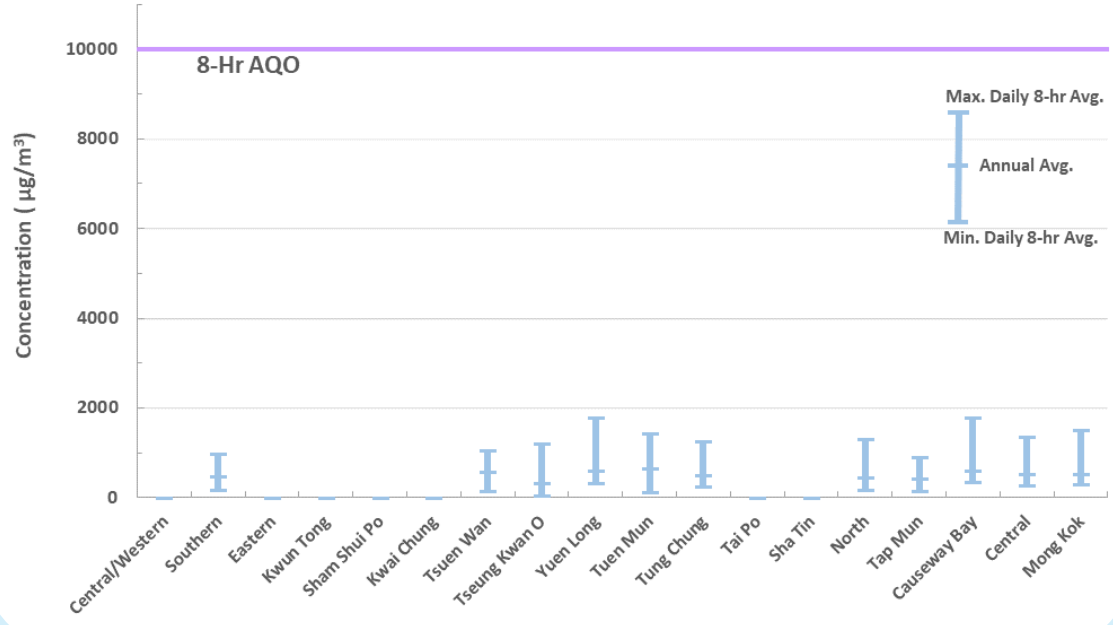


Figure 7b: Monitoring Results of CO Levels in 2024 (8-Hour Average Statistics)



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

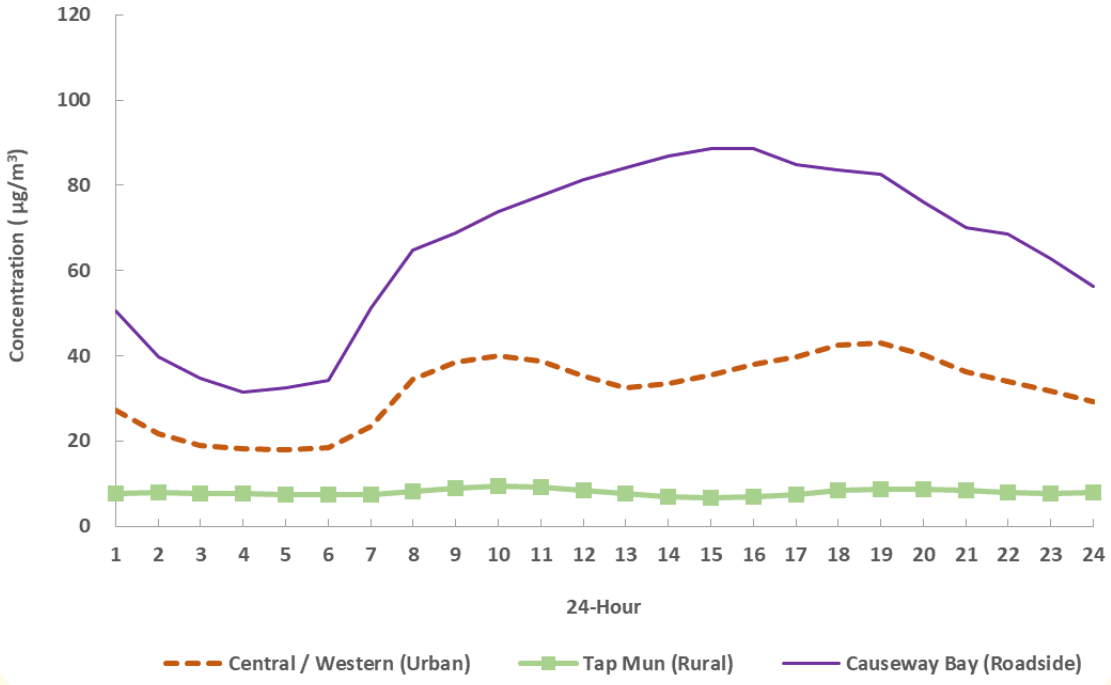
- Similar to 2023, Pb concentrations continued to linger at very low levels in Hong Kong
- The annual averages ranging from 6 ng/m^3 to 8 ng/m^3

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_2, PM_{10} and $PM_{2.5}$ 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_2 Levels

Figure 8a : Diurnal Patterns of NO_2 Levels in 2024



Diurnal Patterns of PM_{10} and $PM_{2.5}$ Levels

Figure 8b: Diurnal Patterns of PM_{10} Levels in 2024

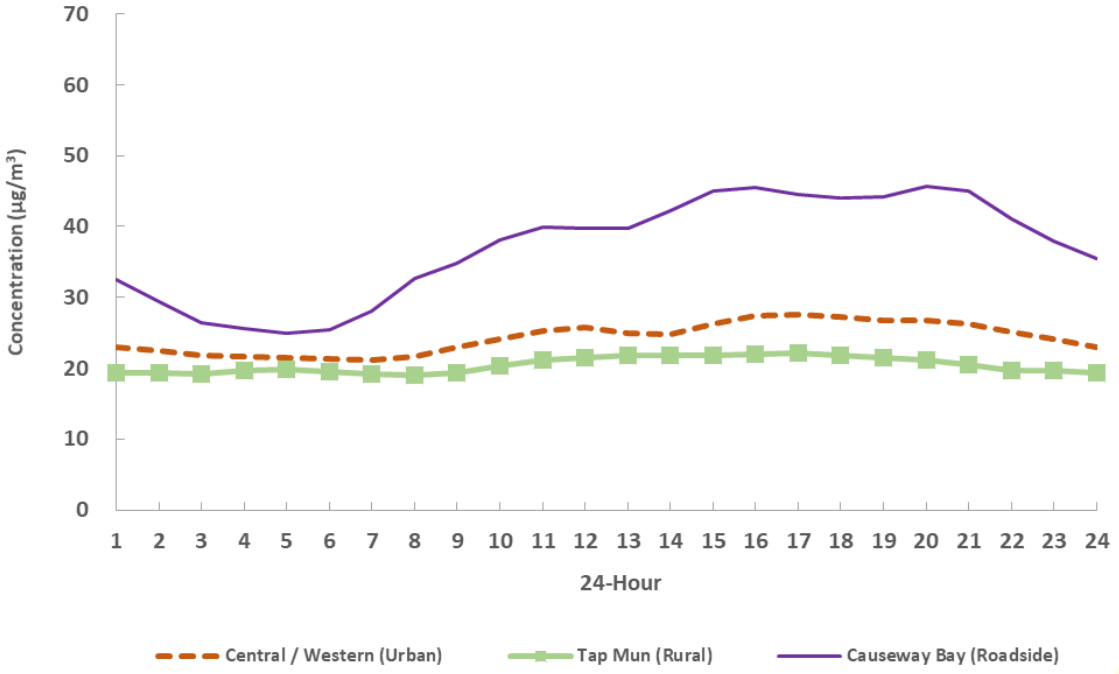
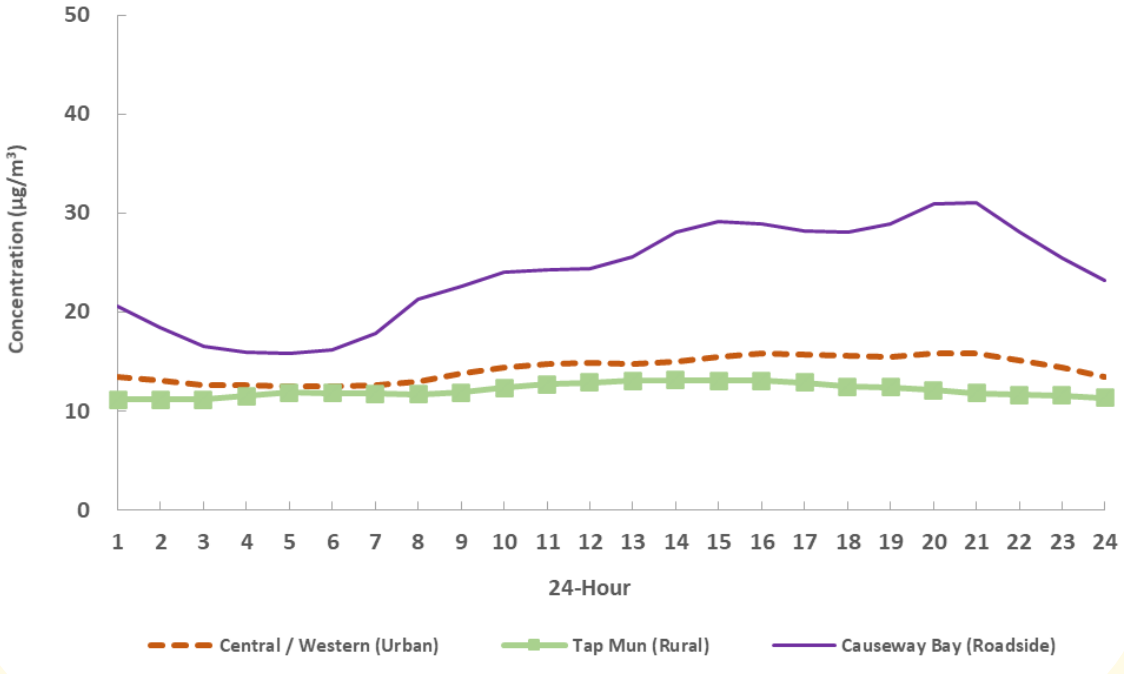


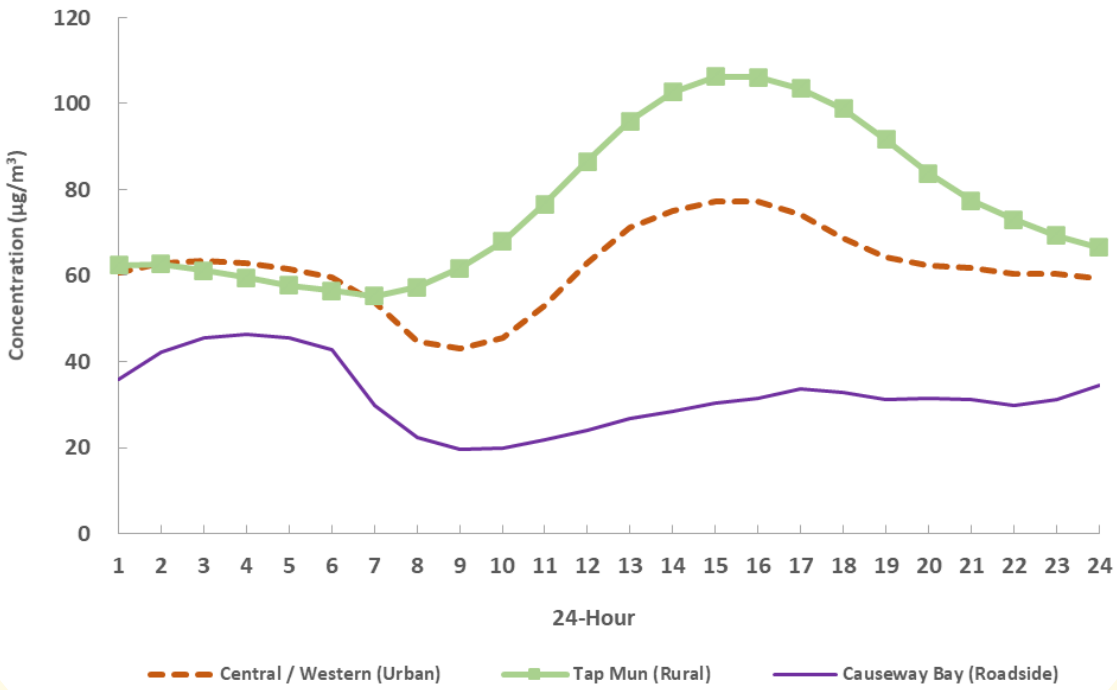
Figure 8c: Diurnal Patterns of $PM_{2.5}$ Levels in 2024



The diurnal pattern of O_3 is different from those of NO_2, PM_{10} and $PM_{2.5}$. O_3 is formed by photochemical reactions of its precursor pollutants such as NO_X and VOCs under sunlight. Outside urban centres, the ambient O_3 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_3 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_3. At the roadside, O_3 levels are significantly lower than those at general stations due to the scavenging effect of NO emissions from vehicles.

Diurnal Patterns of O_3 Levels

Figure 8d: Diurnal Patterns of O_3 Levels in 2024

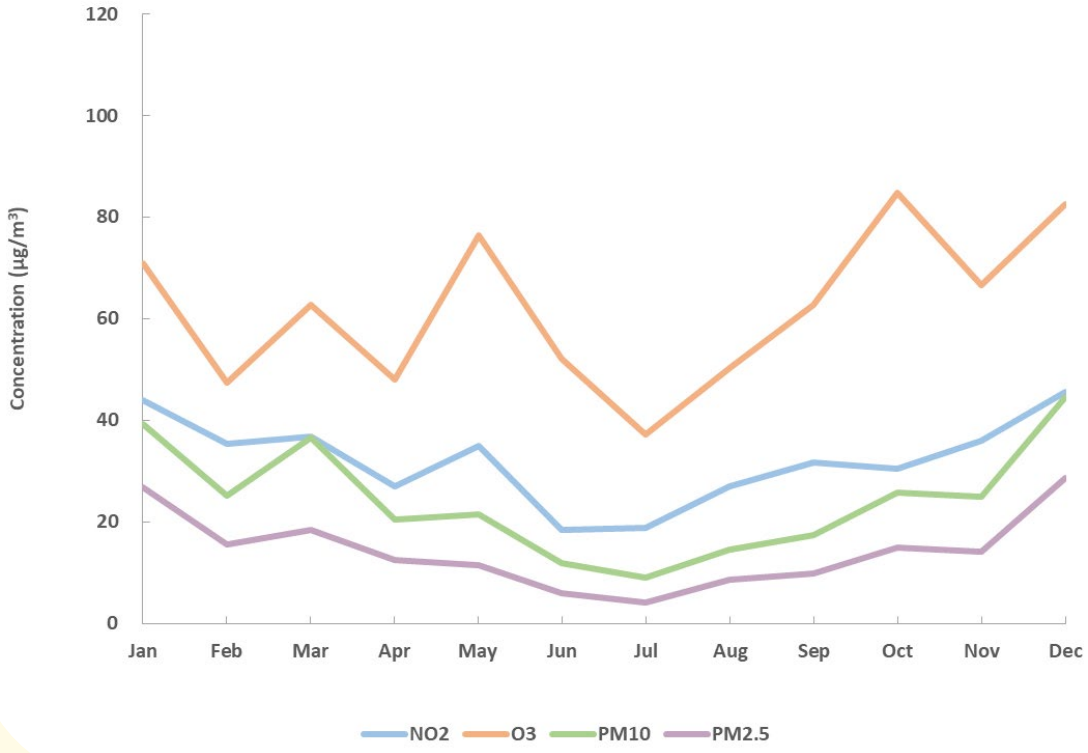


Monthly Variations in Air Pollutant Levels

The concentrations of NO_2, PM_{10} and $PM_{2.5}$ 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_3, 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_3 formation via photochemical reactions.

Figure 9: Monthly Variations in NO_2, O_3, PM_{10} and $PM_{2.5}$ Levels at Central/Western Station for 2024



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

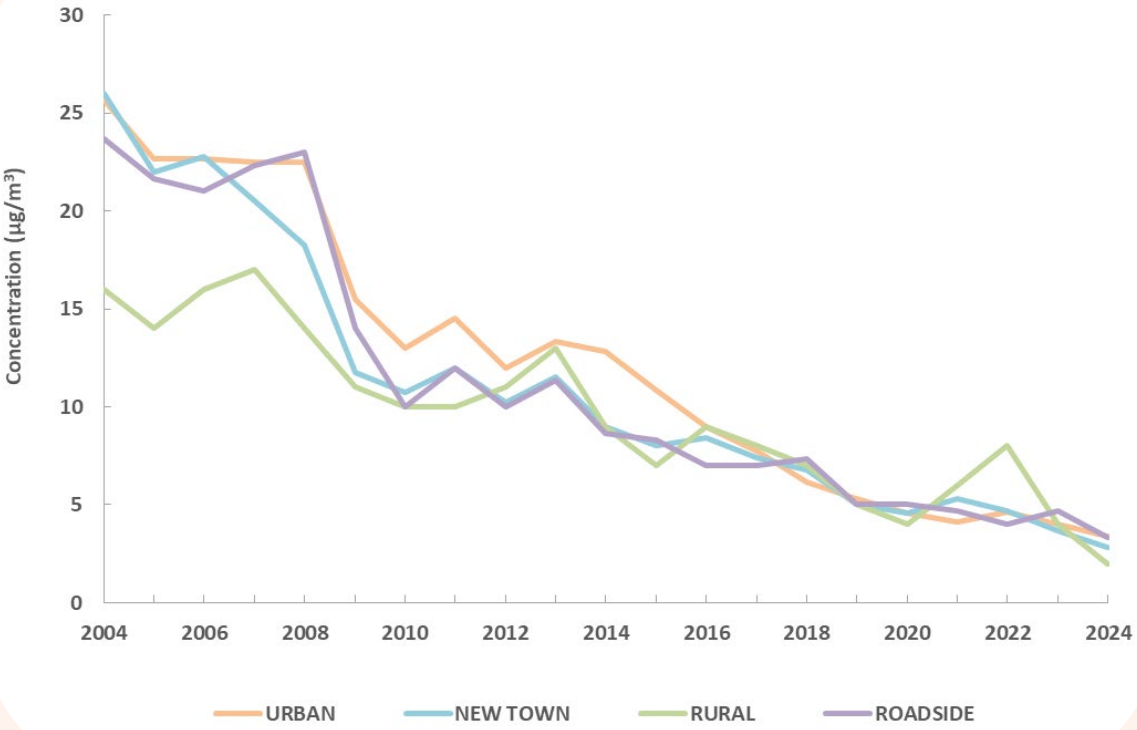
Land Use Type	Land Use Characteristics	Air Quality Monitoring Stations
Urban	Densely populated residential areas mixed with some commercial and/or industrial areas	· Central/Western · Southern · Eastern · Kwun Tong · Sham Shui Po · Kwai Chung · Tsuen Wan · Tseung Kwan O
New Town	Mainly residential areas	· Yuen Long · Tuen Mun · Tung Chung · Tai Po · Sha Tin · North
Rural	Rural areas	· Tap Mun □ (background station)
Roadside	Urban roadside in mixed residential/ commercial areas with heavy traffic and surrounded by many tall buildings	· Causeway Bay · Central · Mong Kok

Sulphur Dioxide (SO_2)

Long-term Trends in SO_2 Levels

SO_2 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_2 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^3.

Figure 10: Long-term Trends in SO_2 Levels



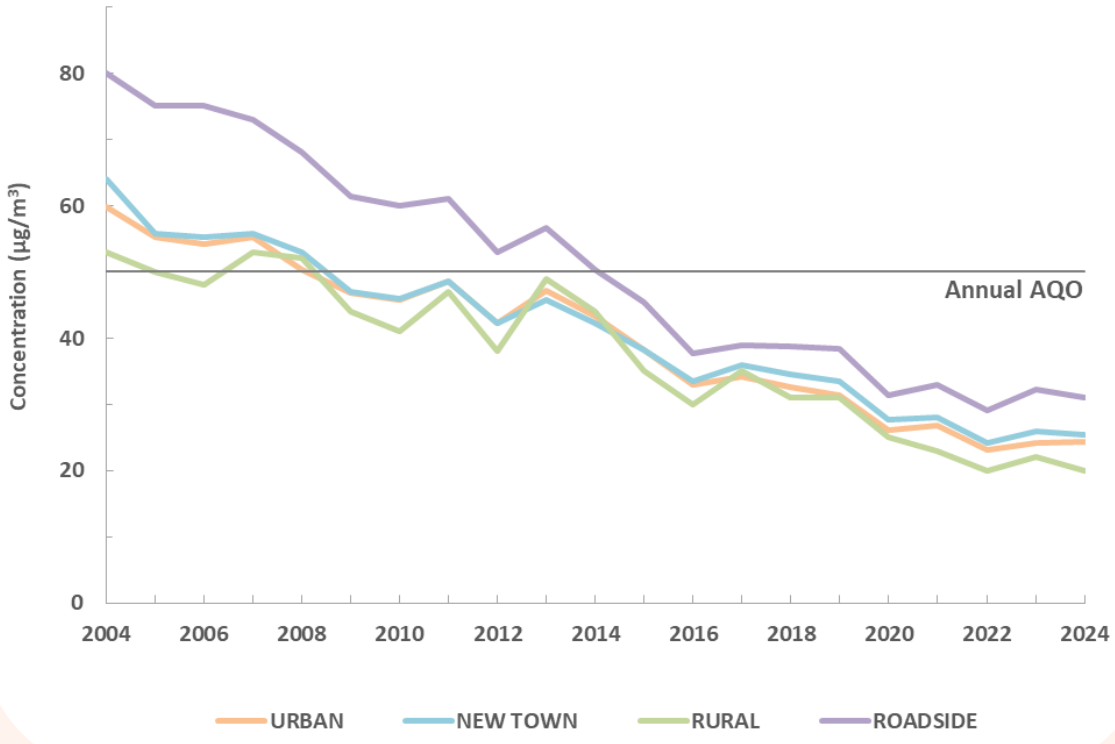
Respirable Suspended Particulates (PM_{10})

Long-term Trends in PM_{10} Levels

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

As a result of the implementation of various vehicle emission control measures over the past two decades, the annual average concentration of PM_{10} 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.

Figure 11: Long-term Trends in PM_{10} Levels



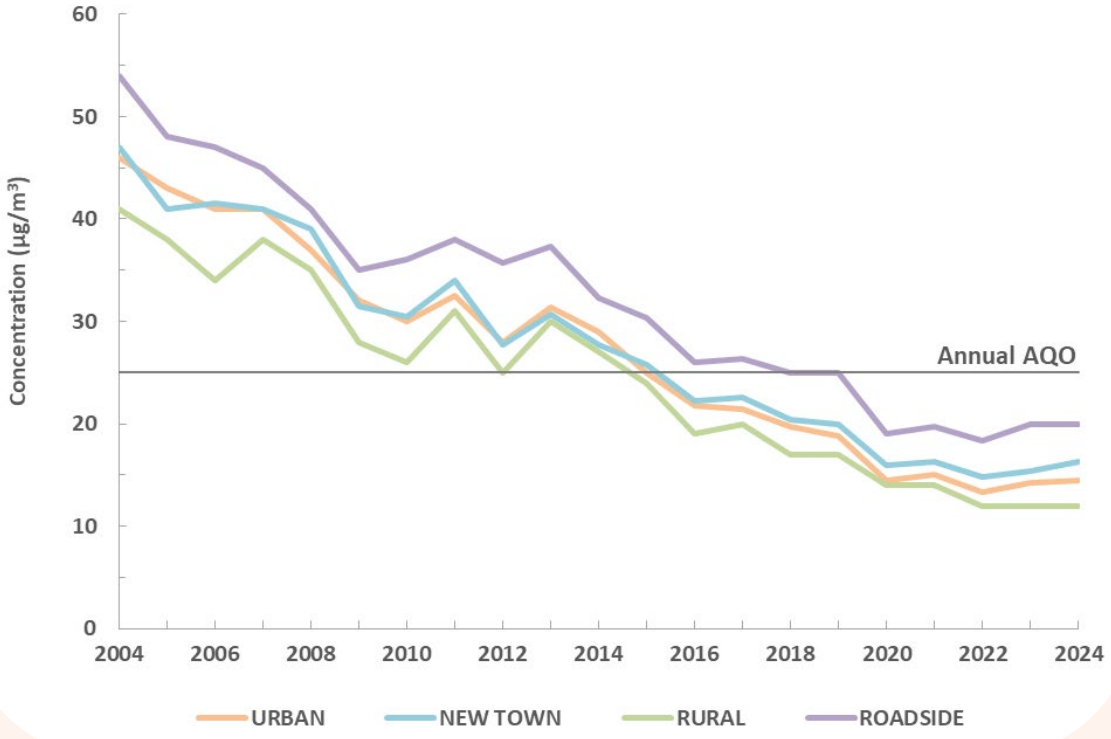
Fine Suspended Particulates ($PM_{2.5}$)

Long-term Trends in $PM_{2.5}$ Levels

Like PM_{10}, the annual average concentrations of $PM_{2.5}$ in the territory have shown a downward trend from 2004 to 2024, reflecting a continuous reduction in the regional background $PM_{2.5}$ levels.

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

Figure 12: Long-term Trends in $PM_{2.5}$ Levels

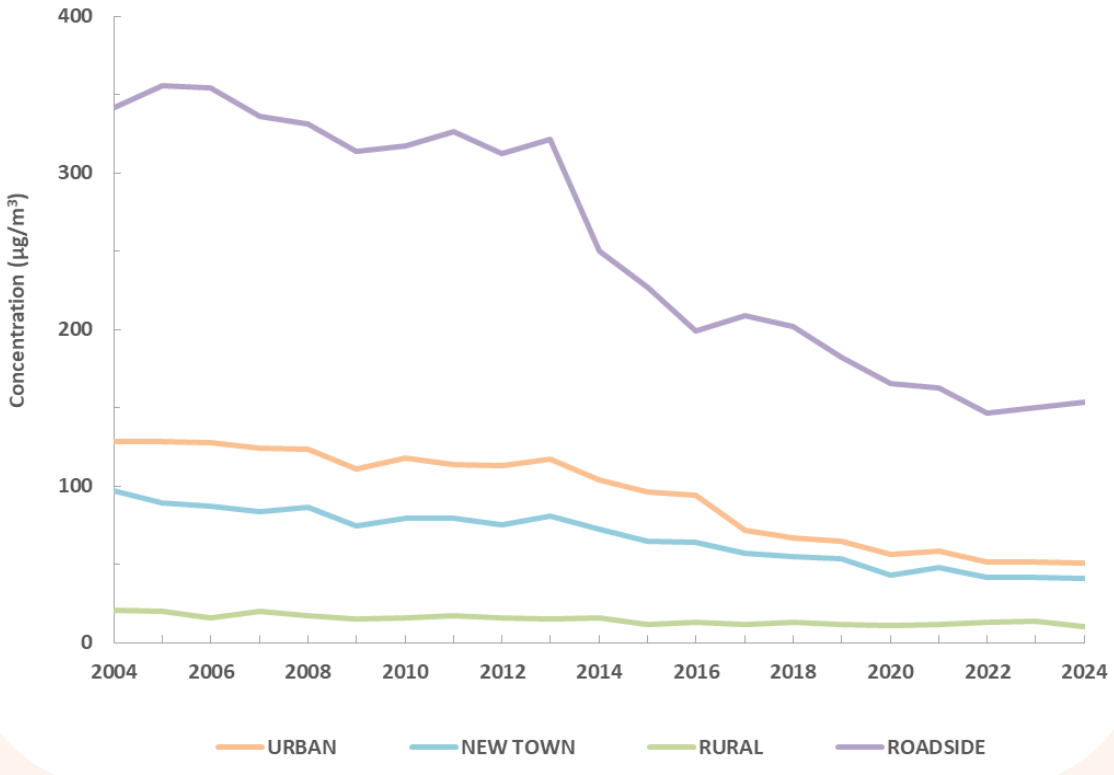


Nitrogen Oxides (NO_X) and Nitrogen Dioxide (NO_2)

Long-term Trends in NO_X Levels

While the background NO_X concentrations (i.e., rural area in Tap Mun) remained stable, the annual averages concentrations of ambient NO_X in urban areas and new towns exhibited moderate declining trends between 2004 and 2024. During the same period, the annual average NO_X 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_X concentration at the roadsides in 2024 was 55% lower than in 2004.

Figure 13: Long-term Trends in NO_X Levels

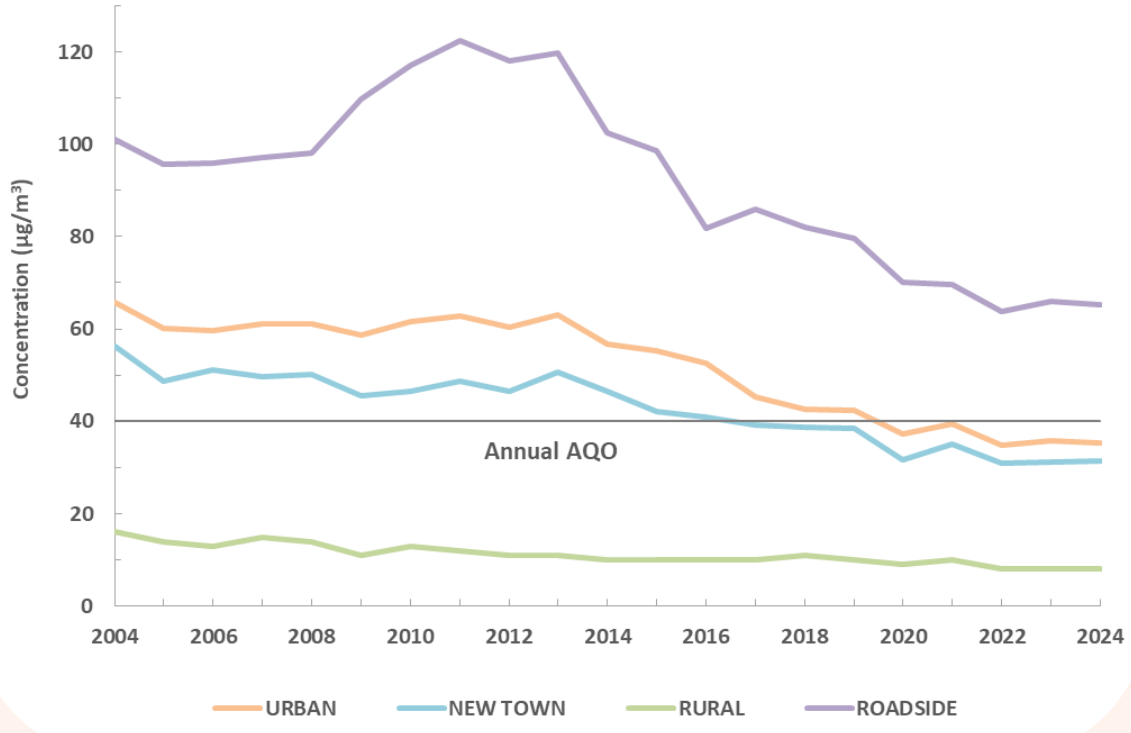


Long-term Trends in NO_2 Levels

NO_2, a major component of NO_X, is mainly formed from the oxidation of NO. The oxidation can be promoted by the presence of a large amount of O_3 and VOCs in ambient air. Between 2004 and 2024, the annual average concentrations of NO_2 in urban areas and new towns showed a moderate downward trend.

Roadside NO_2 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_2 emissions from motor vehicles and rise in regional background O_3 concentration promoting the conversion of NO emitted from motor vehicles to NO_2, was reversed and started to drop from its peak in 2011. The annual average NO_2 concentration at the roadsides recorded in 2024 reduced by 36% compared to the 2004 level.

Figure 14: Long-term Trends in NO_2 Levels



Ozone (O_3)

Brief of O_3 Formation Chemistry and Monitoring Background

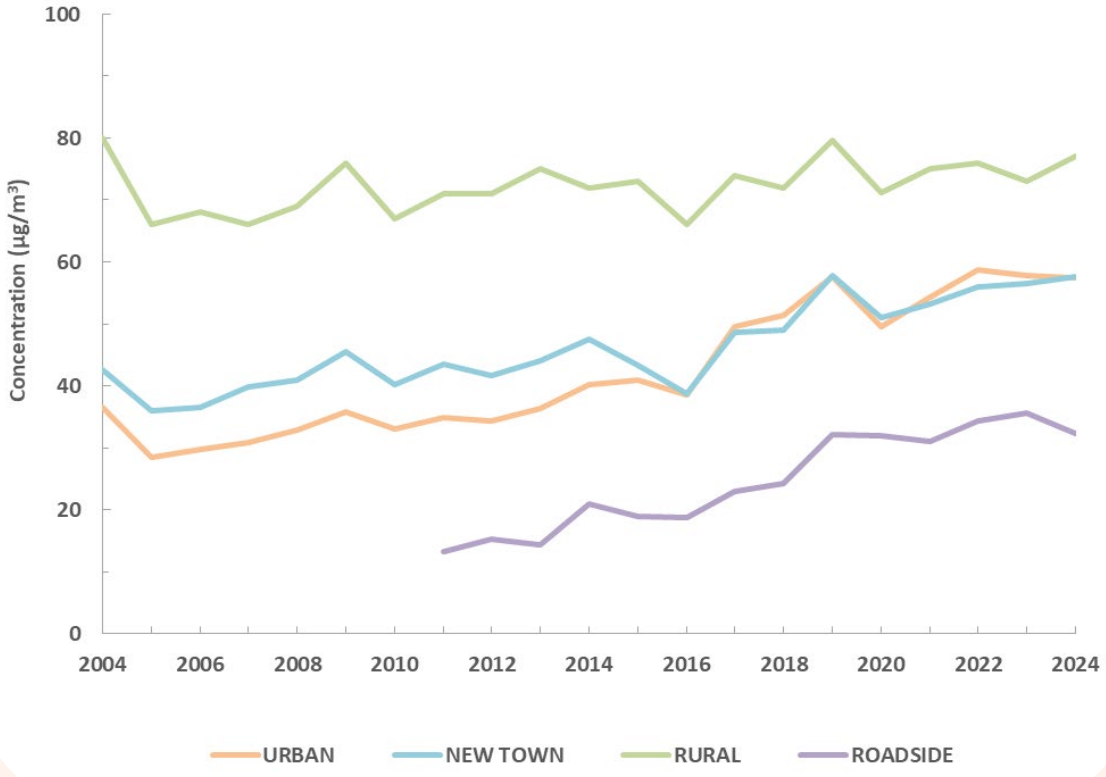
O_3 is a complex regional air pollution issue. It is formed when precursors such as NO_X and VOCs undergo complicated photochemical reactions under sunlight. O_3 can travel long distances and affect areas downwind. On the other hand, O_3 can react with some pollutants like NO emitted from combustion sources (such as motor vehicles) and be scavenged. Hence the O_3 concentrations measured at a particular location would depend on the regional O_3 background level, its local formation as well as the scavenging effect.

As NO emissions from motor vehicles can react with and remove O_3 in the air, areas with heavy traffic normally have lower O_3 levels than areas with light traffic. Tap Mun station started monitoring O_3 in 1998. As Tap Mun station is located in a remote rural area with virtually no local emission, the O_3 concentrations recorded could represent the regional background O_3 levels. This station has consistently recorded higher O_3 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_3 Levels

The rural annual average O_3 concentration showed a moderate upward trend from the early 2000s whereas the annual average O_3 concentrations in new towns and urban areas have exhibited relatively more distinct rising trends. The rising trend of O_3 levels in Hong Kong, especially those in new towns and urban areas, could be attributed to the moderate increase in the regional O_3 background as well as the reduction in local vehicle emissions, the latter leading to less NO in the air for reaction with O_3.

Figure 15: Long-term Trends in O_3 Levels



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.

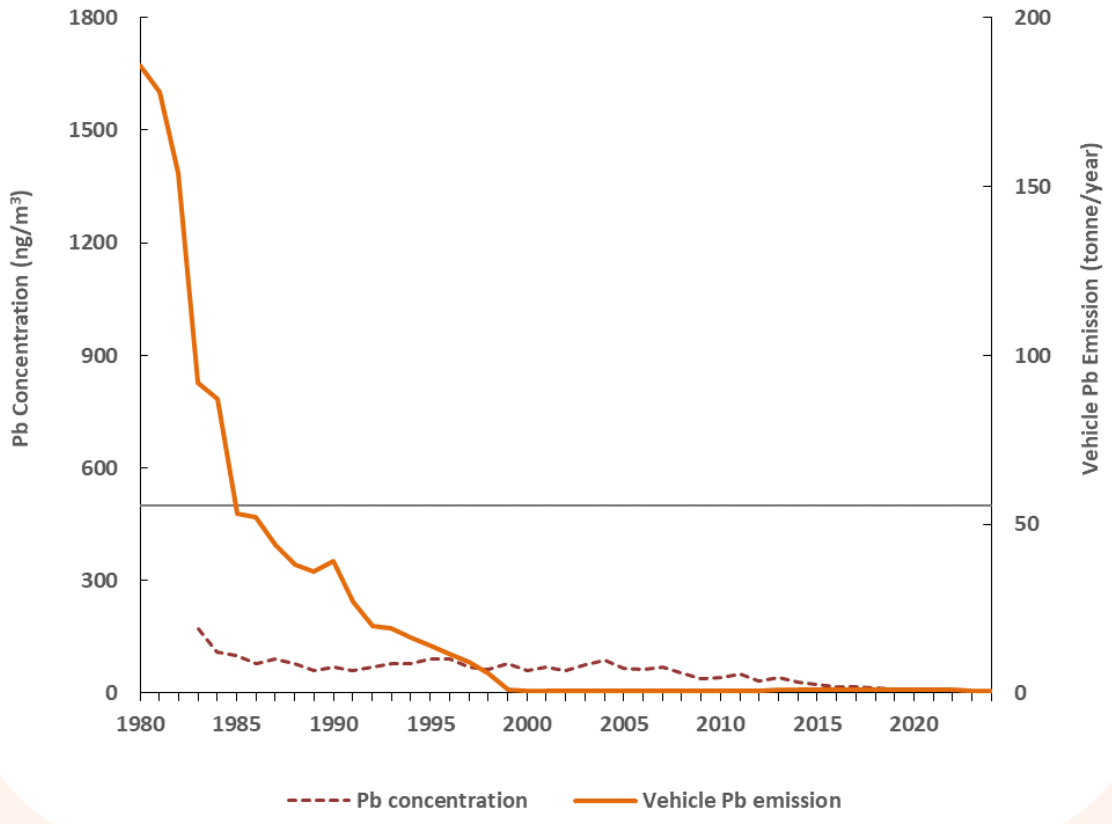
Figure 16: Long-term Trends in CO Levels

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

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_2	NO_X	NO	NO_2	CO	O_3	$PM_{2.5}$	PM_{10}		MET [3]
									Cont [1]	Hi-Vol [2]	
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_2	UV fluorescence	API T100, API T100U,
NO, NO_2, NO_x	Chemiluminescence	API 200A, API T200
O_3	UV absorption	API 400A, API T400
SO_2, NO_2, O_3	Differential Optical Absorption Spectroscopy	Opsis AR 500 System
CO	Non-dispersive infra-red absorption with gas filter correlation	API T300, API T300U
PM_{10}	a) Gravimetric b) Oscillating microbalance c) Beta Attenuation	Tisch PM10+, Thermo Scientific TEOM 1405-DF T-API 602 Beta Plus, Met One BAM 1020
$PM_{2.5}$	a) Oscillating microbalance b) Beta Attenuation	Thermo Scientific TEOM 1405-DF, 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^+, K^+, NH_4^+, NO_3^-, SO_4^{2-}, Cl^-, F^-, Ca^{2+}, Mg^{2+}, 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[A2], 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_2, NO_2, CO, O_3, PM_{10} and $PM_{2.5}$

Past Air Quality Monitoring Data

- Past 24-hour AQHI and concentrations of SO_2, NO_2, CO, O_3, PM_{10} and $PM_{2.5}$
- 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.

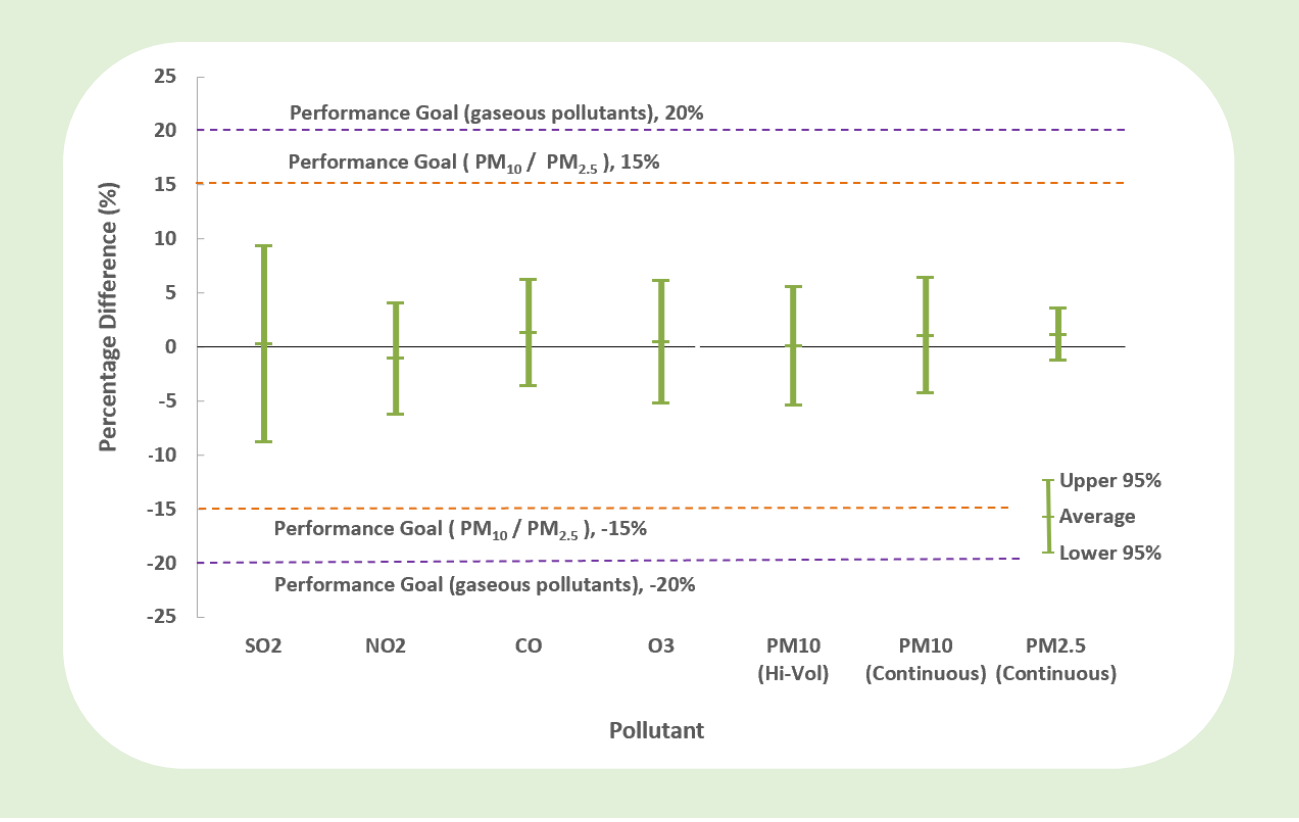
[A2] Real-time and past 24-hour air quality data are reported following preliminary limited validation

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 ±15% and ±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[A3]. All parameters were well within the corresponding performance goal as shown in **Figure A4**.

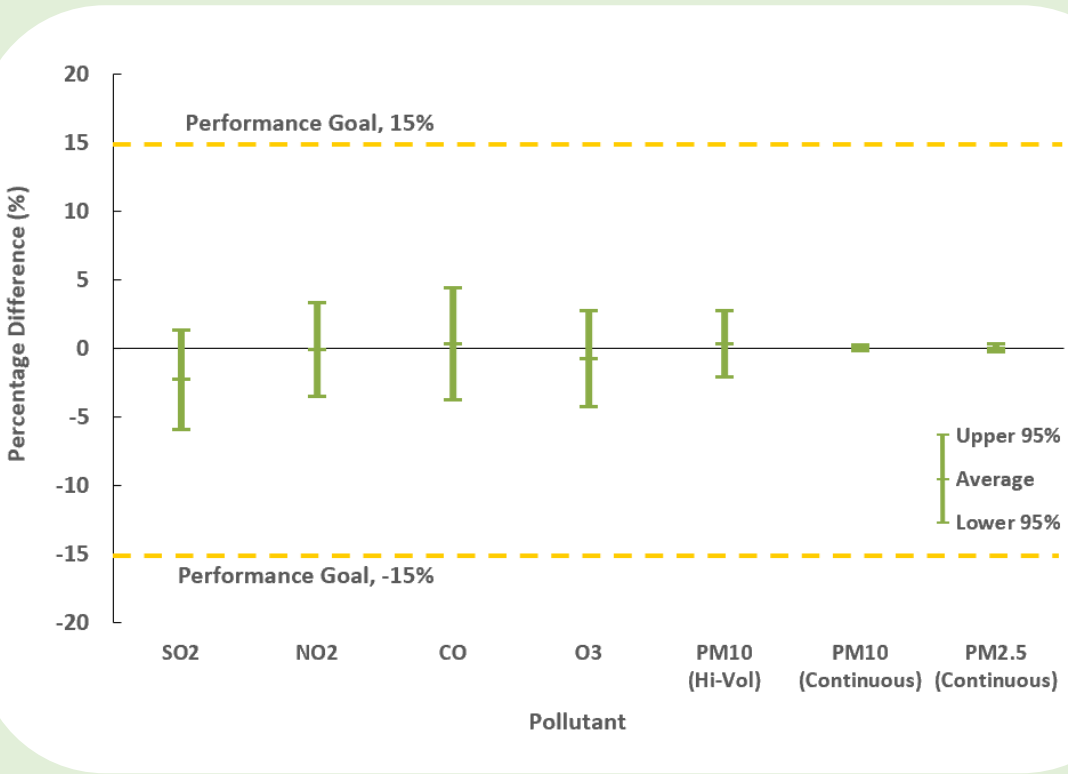
Figure A4: Accuracy of Air Quality Monitoring Network in 2024



[A3] 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 ±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 [i] ($\mu g/m^3$)	Number of exceedances of limit allowed
Sulphur dioxide (SO_2)	10-minute	500	3
	24-hour	50	3
Respirable suspended particulates (PM_{10})	24-hour	100	9
	Annual	50	Not applicable
Fine suspended particulates ($PM_{2.5}$)	24-hour	50	35
	Annual	25	Not applicable
Nitrogen dioxide (NO_2)	1-hour	200	18
	Annual	40	Not applicable
Ozone (O_3)	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_2, NO_2, O_3 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_{10}, $PM_{2.5}$, SO_2 and CO. 7 general stations and all 3 roadside stations adhered to the 8-hour AQO for O_3. 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_3. All AQMSs, except for the Causeway Bay roadside station, met the 1-hour AQO for NO_2.

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

Monitoring Station		O_3	NO_2	PM_{10}	$PM_{2.5}$	SO_2		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_2	PM_{10}	$PM_{2.5}$	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_{10} and $PM_{2.5}$. 12 general stations complied with the annual AQO for NO_2, 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_2. 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

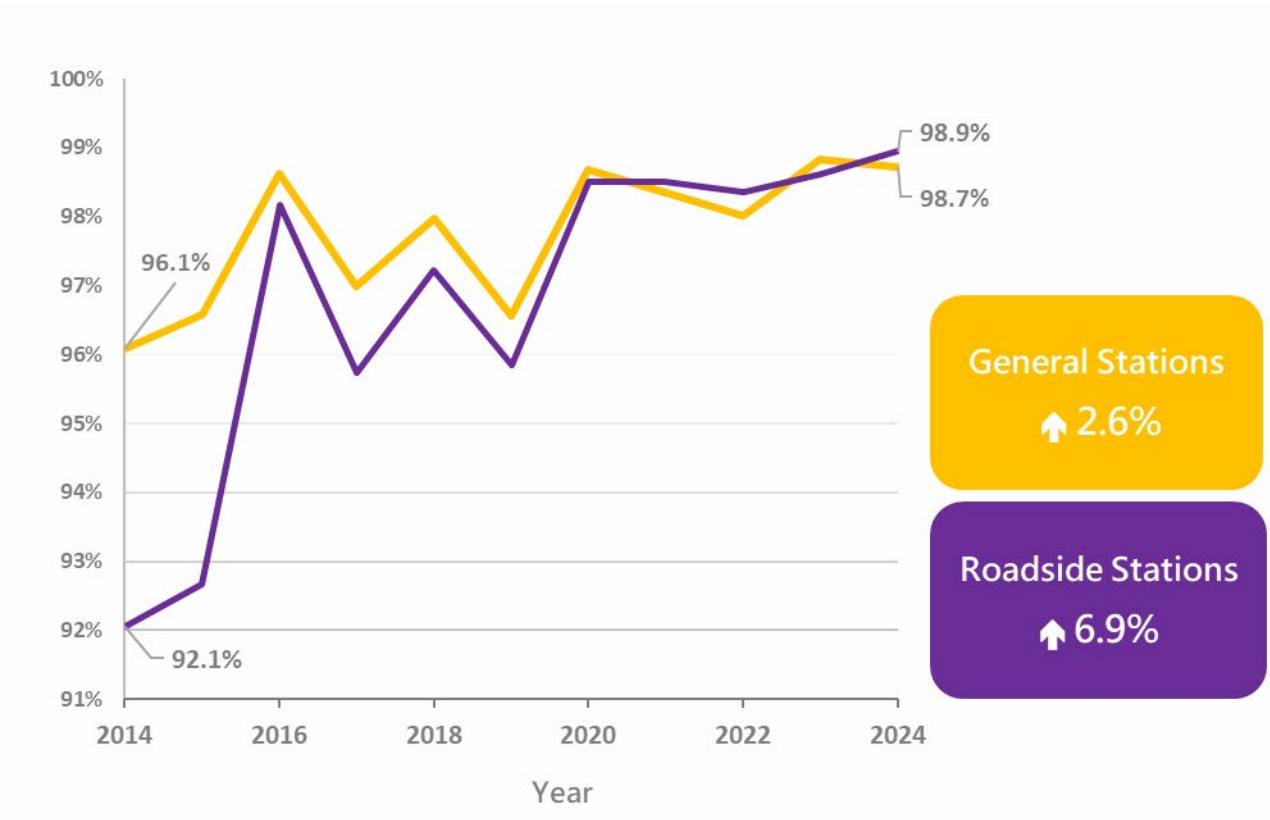
Health Risks of Air Quality

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**).

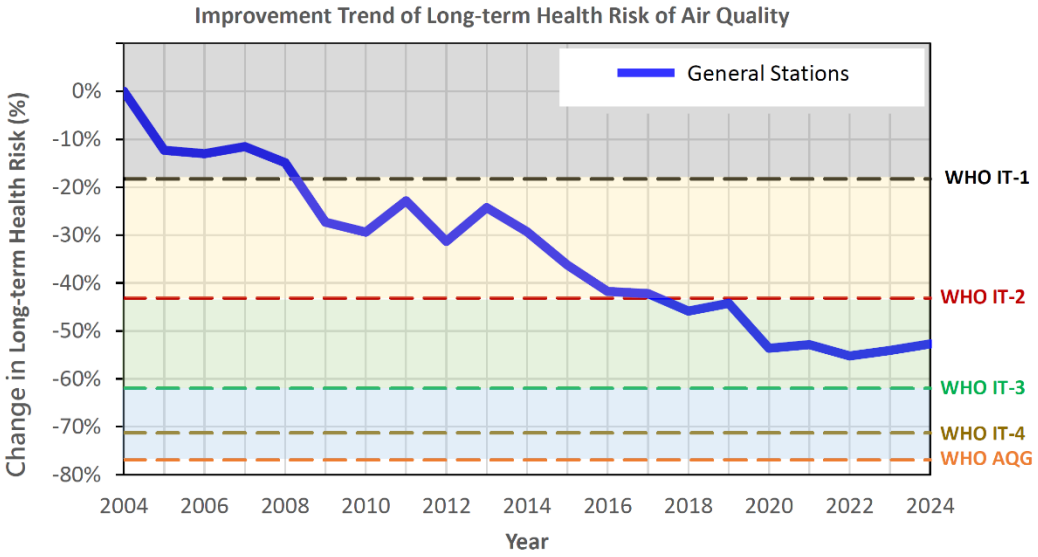
Figure C1: Percentage of Hourly AQHI Readings Below 7



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

List of Tables

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_2) 10-minute AQO

(limit value = 500 µg/m^3 ; allowable no. of exceedances of limit value = 3)

Monitoring Station	No. of exceedances of AQO	Highest 10-minute Average Concentration (µg/m^3)			
		1st	2nd	3rd	4th
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^3 ; permit for no exceedance of the limit value)

Monitoring Station	No. of exceedances of AQO	1-hour Average Concentration (µg/m^3)
		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_2) 24-hour AQO

(limit value = 50 µg/m^3 ; allowable no. of exceedances of limit value = 3)

Monitoring Station	No. of exceedances of AQO	Highest 24-hour Average Concentration (µg/m^3)			
		1st	2nd	3rd	4th
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^3 ; permit for no exceedance of the limit value)

Monitoring Station	No. of exceedances of AQO	Daily 8-hour Average Concentration (µg/m^3)
		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_3) 8-hour AQO

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

Monitoring Station	No. of exceedances of AQO	Highest Daily 8-hour Average Concentration (µg/m^3)									
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
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_{10}) 24-hour AQO

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

Monitoring Station	No. of exceedances of AQO	Highest 24-hour Average Concentration (µg/m^3)									
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
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_2) 1-hour AQO

(limit value = 200 µg/m^3 ; allowable no. of exceedances of limit value = 18)

Monitoring Station	No. of exceedances of AQO	Highest 1-hour Average Concentration (µg/m^3)																	
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	18th	19th
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	103	102	102	102	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	131	130	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 ($PM_{2.5}$) 24-hour AQO

(limit value = 50 µg/m^3 ; allowable no. of exceedances of limit value = 35)

Monitoring Station	No. of exceedances of AQO	Highest 24-hour Average Concentration (µg/m^3)																																					
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th	21st	22nd	23rd	24th	25th	26th	27th	28th	29th	30th	31st	32nd	33rd	34th	35th	36th
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	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	31	30	29	28	28	28	27	27	26	26	26	26	26	26	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	35	34	34	34	33	32	32	31	31	31	30	29	29	29	29	29	28	28	28	28	28	27
Kwun Tong	0	46	46	44	42	42	42	40	38	36	36	35	35	34	33	33	33	32	31	31	30	29	29	29	29	29	27	26	26	26	26	26	26	26	25	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
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	33	32	32	31	31	31	30	30	30	30	29	28	28	28	28	28
Tseung Kwan O	0	44	41	41	40	36	36	36	36	35	35	34	33	33	32	31	31	31	31	31	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	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	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	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	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	28	28	28	27
Sha Tin	0	47	41	39	39	38	38	38	37	37	37	37	36	36	36	33	32	32	32	31	31	30	29	29	29	29	28	28	28	27	26	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	27	26	26	26	26	26	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	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	43	42	42	41	40	39	39	39	39	38	38	38	38	38	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	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	30

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

Sulphur Dioxide (SO_2) Monthly and Annual Average Concentrations (μg/m^3)

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_X) Monthly and Annual Average Concentrations (μg/m^3)

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_2) Monthly and Annual Average Concentrations (μg/m^3)

(Annual AQO = 40 μg/m^3)

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^3)

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_3) Monthly and Annual Average Concentrations (µg/m^3)

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_{10}) Monthly and Annual Average Concentrations (µg/m^3)

(Annual AQO = 50 µg/m^3)

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 ($PM_{2.5}$) Monthly and Annual Average Concentrations (µg/m^3)

(Annual AQO = 25 µg/m^3)

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_2) Hourly Statistics

Monitoring Station	Total hours recorded	Data capture rate (%)	Hourly Average Concentration (µg/m³) <----------Percentiles----------> 10	25	50	75	90	95	97.5	99	99.8	Arithmetic mean	The highest
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	4	5	6	2	10
Kwun Tong	8,480	96.5	1	1	2	4	5	6	7	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_X) Hourly Statistics

Monitoring Station	Total hours recorded	Data capture rate (%)	Hourly Average Concentration (µg/m³) <----------Percentiles----------> 10	25	50	75	90	95	97.5	99	99.8	Arithmetic mean	The highest
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_2) Hourly Statistics

(1-hour AQO = 200 µg/m³; allowable no. of exceedances of limit value = 18. Annual AQO = 40 µg/m³)

Monitoring Station	Total hours recorded	Data capture rate (%)	Hourly Average Concentration (µg/m³) <----------Percentiles----------> 10	25	50	75	90	95	97.5	99	99.8	Arithmetic mean	The highest	No. of exceedances of 1-hr AQO
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/m³ ; permit for no exceedance of the limit value)

Monitoring Station	Total hours recorded	Data capture rate (%)	Hourly Average Concentration (µg/m³) <----------Percentiles----------> 10	25	50	75	90	95	97.5	99	99.8	Arithmetic mean	The highest	No. of exceedances of 1-hr AQO
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_3) Hourly Statistics

Monitoring Station	Total hours recorded	Data capture rate (%)	Hourly Average Concentration (μg/m³)										
			<----------Percentiles---------->									Arithmetic mean	The highest
			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_{10}) Hourly Statistics

(Annual AQO = 50 μg/m³)

Monitoring Station	Total hours recorded	Data capture rate (%)	Hourly Average Concentration (μg/m³)										
			<----------Percentiles---------->									Arithmetic mean	The highest
			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 ($PM_{2.5}$) Hourly Statistics

(Annual AQO = 25 μg/m³)

Monitoring Station	Total hours recorded	Data capture rate (%)	Hourly Average Concentration (μg/m³)										
			<----------Percentiles---------->									Arithmetic mean	The highest
			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_2) Levels Daily Variations (µg/m^3)

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	4	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	4	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	3	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	3	3	3	3

Nitrogen Oxides (NO_X) Levels Daily Variations (µg/m^3)

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	22	24	27	29	32	35	34	33	33	32
Yuen Long	39	33	28	26	27	31	53	69	63	54	50	46	43	47	47	50	56	59	61	61	57	54	52	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_2) Levels Daily Variations (µg/m^3)

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	7	8	9	9	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^3)

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	482	491	499	501	496	490	485	482	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	450	453	449	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	644	588	592
Central	466	440	402	385	370	387	409	465	510	520	538	591	569	571	568	556	546	595	623	644	651	622	532	495
Mong Kok	495	469	454	441	423	457	461	498	527	551	558	544	541	545	548	547	562	578	624	631	610	557	534	517

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

Ozone (O_3) Levels Daily Variations (μg/m^3)

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_{10}) Levels Daily Variations (μg/m^3)

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	27	26	25	24	23	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	25	26	26	26	27	28	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	27	26	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	27	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	20	19
Causeway Bay	33	29	26	26	25	25	28	33	35	38	40	40	40	42	45	45	45	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 ($PM_{2.5}$) Levels Daily Variations (μg/m^3)

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	15	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	15	14
Yuen Long	16	16	16	15	15	15	15	16	16	17	17	16	17	17	17	18	18	17	18	18	18	18	17	17
Tuen Mun	20	20	19	18	19	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	13	14	13	14	14	14	13	13
North	16	15	15	15	15	15	15	15	15	16	16	16	16	16	17	17	16	16	16	17	17	17	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	12	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

		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+])	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_4^+	5.71	7.96	5.87
	NO_3^-	18.55	26.40	15.23
	SO_4^{2-}	13.56	21.83	10.15
	Cl^-	21.63	31.09	8.28
	F^-	0.55	0.61	0.43
	Na^+	12.31	17.27	5.15
	K^+	5.41	6.03	4.16
	Formate	3.73	4.55	3.55
	Acetate	3.62	4.29	3.35
	Ca^{2+}	2.34	3.14	2.16
	Mg^{2+}	1.53	2.23	0.68

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

Dry Deposition

		Monitoring Station		
		Central / Western	Kwun Tong	Yuen Long
Number of Samples		22	22	22
Filtrate (kg/ha)	NH_4^+	0.17	0.23	0.10
	NO_3^-	7.67	7.07	7.71
	SO_4^{2-}	2.74	2.63	2.51
	Cl^-	8.26	6.86	3.64
	F^-	0.03	0.03	0.04
	Na^+	5.64	4.21	2.25
	K^+	0.53	0.41	0.30
	Formate	0.14	0.14	0.18
	Acetate	0.17	0.18	0.23
	Ca^{2+}	3.12	3.14	3.90
	Mg^{2+}	0.67	0.57	0.36

Table D6: Ambient Levels of Toxic Air Pollutants in 2024

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

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).

A Report on the Result from the

Air Quality Monitoring Network

2024

Report Number
EPD/TR 1/25

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