

Committee: Port Health and Environmental Services	Date: 21 July 2020
Subject: Air Quality Annual Status Report	Public
Report of: Director of Markets and Consumer Protection	For information
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Summary

As part of its statutory duties for London Local Air Quality Management, the City of London Corporation is required to produce an Annual Status Report and submit the report to the Greater London Authority and the government. The report is designed to demonstrate progress with actions contained within the latest Air Quality Strategy and to present air quality monitoring data. A copy of the full report, which is produced using a prescribed template, is in the Members' Reading Room. A summary report containing the monitoring data, is attached to this report as Appendix 1.

The City Corporation runs what is probably the densest and most comprehensive network of air quality monitoring equipment in the country. Air quality data was collected in 2019 using three nitrogen dioxide automatic (continuous) analysers, three PM₁₀ analysers and two PM_{2.5} analysers. Nitrogen dioxide data was also collected at a further 110 sites using low cost diffusion tubes. The data for all sites, with a map of monitoring locations, is presented in the summary report attached.

This detailed air quality monitoring revealed a significant reduction in pollution in 2019 at nearly all sites. Air quality in the City has been improving year on year, but 2019 saw a particularly marked change in concentrations from the previous year. Roadside levels of nitrogen dioxide reduced by as much as 35% in some locations, and levels of fine particles (PM₁₀ and PM_{2.5}) also went down. The hourly average health-based limit for nitrogen dioxide was met at all locations for the first time since monitoring began. This downward trend in air pollution is set to continue with the wide range of action being taken by the City Corporation, as detailed in the latest Air Quality Strategy. The Strategy is supported by the City Corporation's new Transport Strategy.

Recommendation

Members are asked to:

- Note the content of the 2019 Air Quality Annual Status Report

Main Report

Background

1. The City of London Corporation has a statutory duty to assist the Mayor of London and the UK government in taking action to reduce levels of air pollution so that concentrations of pollutants meet health-based limits as soon as possible. The City Corporation also has a responsibility to protect public health.
2. The City Corporation's latest Air Quality Strategy 2019 – 2024 was adopted in September 2019. It outlines actions that will be taken to fulfil the City Corporation's statutory responsibility for Local Air Quality Management, and for reducing the health impact of air pollution on residents, workers and visitors to the Square Mile.
3. The City Corporation has a statutory obligation to submit an Annual Status Report to the Mayor of London and the government. The report must outline progress towards actions within the existing Air Quality Strategy and provide the results of air quality monitoring undertaken. A copy of the full Annual Status Report, which was submitted in May 2020, is in the Members' Reading Room. A summary report containing the air quality data is attached as Appendix 1.

Air Quality Data

4. The amount of air quality monitoring taking place in the City has increased in recent years. In 2019, data was collected using long-term continuous monitors at three nitrogen dioxide (NO₂) sites, three particulate PM₁₀ sites and two particulate PM_{2.5} sites. Nitrogen dioxide data was also collected at a further 110 sites using low cost diffusion tubes. The data for all sites is presented in both the full report and the summary report attached as Appendix 1.
5. Air quality monitoring locations are reviewed annually. The long-term continuous monitors mentioned above have been retained. There are also five long-term diffusion tube locations which are retained each year. Other sites are added or removed according to the needs of research projects, planned programmes and local investigations or concerns. The summary report in Appendix 1 contains a map of monitoring locations during 2019.
6. Nitrogen Dioxide (NO₂) is reducing across the City. At Walbrook Wharf levels in 2019 were 14µg/m³ (16%) lower than the previous year. In Beech Street, NO₂ concentrations reduced by 7µg/m³ (10%) during the same time period. At Sir John Cass's Foundation Primary School, the concentration stayed similar to the previous year, with an annual average NO₂ of 33µg/m³. This is well below the health-based objective of 40µg/m³. There is evidence from the numerous diffusion tube sites that concentrations of nitrogen dioxide are reducing at all roadside locations, some sites had a reduction of around 35% during 2019.
7. Annual average concentrations of particulate PM₁₀ across the City Corporation's monitoring network have been below the EU limit value since 2010. The exception was in Upper Thames Street in 2015, which was associated with local construction

activity and the installation of the cycle superhighway. PM₁₀ concentrations in 2019 reduced slightly at all sites, with the biggest improvement being seen in Upper Thames Street, where there was a reduction of 5µg/m³ (16%).

8. The concentration of PM_{2.5} in Farringdon Street and Sir John Cass's Foundation Primary School continue to be well below the annual average limit value, but above the guideline level set by the World Health Organisation. There was a slight reduction in PM_{2.5} in Farringdon Street during 2019, however the concentration at Sir John Cass's Foundation Primary School remained the same. The weather has a significant impact on levels of both PM₁₀ and PM_{2.5}.

Progress with Actions

9. The City Corporation published a new Air Quality Strategy in 2019. The strategy details actions that are being taken to improve air quality. The Air Quality Annual Status Report includes progress with each action. Examples of action taken during 2019 are outlined below:
 - Continued to increase the air quality monitoring network across the City, including monitoring at all schools and nurseries
 - Measured a significant reduction in nitrogen dioxide at St Barts Hospital site following work with the NHS Trust
 - The Emission Reduction (Local Authorities in London) Private Members Bill was introduced to the House of Lords by Lord Tope in October 2019, and again in January 2020. The Bill is supported by London Councils.
 - Awarded £500,000 from the Mayors Air Quality Fund to jointly lead the Pan-London Idling Action Project across 32 boroughs. Funding was also obtained for the Clean Air Thames project and the City Cluster Zero Emissions Zone.
 - Arranged and hosted an idling engines best practice workshop on enforcement for London Boroughs. Also arranged and hosted a general air quality best practice workshop for London Boroughs.
 - Worked with 60 businesses through the CityAir Programme, 33 of which pledged to become 'Air Quality Champions'
 - Developed plans for the first 24/7 Zero Emissions Street, which went live in March 2020.
 - Sponsored an evening air quality lecture at the Institution of Civil Engineers
 - Produced guidance on reducing emissions from solid fuel burning in food premises
 - Air Quality was a key consideration of the new Transport Strategy, adopted in 2019
 - Installed a taxi only rapid electric charge point on Noble Street to support the transition to electric taxis
 - Sponsored Air Quality Data Science for Social Good fellowship project at Imperial College London
 - Continued to promote air quality through a bi-monthly air quality e-newsletter and social media

Corporate & Strategic Implications

10. The work on air quality supports the following outcomes from the Corporate Plan 2018 to 2023.

- a. Outcome 2 'People enjoy good health and wellbeing'.
- b. Outcome 5 'Businesses are trusted and are socially and environmentally responsible' is supported through the CityAir business engagement work.
- c. Outcome 11 'We have clean air, land and water and a thriving and sustainable natural environment'.

Conclusion

11. The City Corporation has prepared and submitted its 2019 Air Quality Annual Status Report to the Mayor of London and government. This fulfils the City Corporation's statutory obligations for London Local Air Quality Management.

12. Detailed air quality monitoring is now undertaken across the Square Mile. The data reveals that air quality is improving. This is set to continue with the work being implemented by the City Corporation, through its new Air Quality Strategy which is supported by its new Transport Strategy.

Appendices

- Appendix 1 – Air Quality Annual Status Summary Report for 2019

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